

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF HAWAII

In The Matter of the Application of )  
 )  
HAWAIIAN ELECTRIC COMPANY, INC., )  
HAWAII ELECTRIC LIGHT COMPANY, INC. )  
MAUI ELECTRIC COMPANY, LIMITED )  
 )  
For Approval to Establish a Rule to Implement )  
a Community-Based Renewable Energy Program, )  
and Other Related Matters. )  
\_\_\_\_\_ )

DOCKET NO. 2015-0389

**THE HAWAIIAN ELECTRIC COMPANIES'**

**SUBMISSION OF CBRE PHASE 2 FINAL DRAFT RFPS AND  
SUPPORTING DOCUMENTS FOR MOLOKAI AND LANAI**

**Book 1 of 5**

**Filed November 4, 2021**



November 4, 2021

The Honorable Chair and Members  
of the Hawai'i Public Utilities Commission  
Kekuanao'a Building, First Floor  
465 South King Street  
Honolulu, Hawai'i 96813

Dear Commissioners:

Subject: Docket No. 2015-0389 – Community-Based Renewable Energy Program  
Submission of CBRE Phase 2 Final Draft RFPs and Supporting Documents  
for Moloka'i and Lāna'i

In accordance with Ordering Paragraph No. 2<sup>1</sup> of Order No. 38038 (“Order No. 38038”), issued on October 25, 2021 in the subject proceeding, the Hawaiian Electric Companies<sup>2</sup> respectfully submit draft Request for Proposals (“RFP”) and supporting documents for Community-Based Renewable Energy (“CBRE”), also known as Shared Solar, for Moloka'i and Lāna'i.

The Companies submit the following exhibits with this transmittal:

- Exhibit 1: Draft Maui Electric Rule 29 Tariff
- Exhibit 2: Draft RFP for CBRE Projects for Moloka'i<sup>3</sup>
- Exhibit 3: Draft CBRE Mid-Tier Standard Form Contract for Renewable Dispatchable Generation (PV + BESS)
- Exhibit 4: Draft RFP for Variable Renewable Dispatchable Generation Paired with Energy Storage and CBRE for the Island of Lāna'i<sup>4</sup>
- Exhibit 5: Draft Model Power Purchase Agreement for Renewable Dispatchable Generation (PV + BESS) with CBRE Component for the Island of Lāna'i

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<sup>1</sup> Ordering Paragraph No. 2 states that “Hawaiian Electric shall file its final RFPs and supporting documents for Molokai and Lanai no later than November 4, 2021.”

<sup>2</sup> Hawaiian Electric Company, Inc. (“Hawaiian Electric”), Hawai'i Electric Light Company, Inc. (“Hawai'i Electric Light”), and Maui Electric Company, Limited (“Maui Electric”) are collectively referred to as the “Hawaiian Electric Companies” or “Companies”.

<sup>3</sup> Appendix J – Rule 29 Tariff is provided in this filing as Exhibit 1. Appendix K – Model PV Mid-Tier Standard Form Contract for Renewable Dispatchable Generation is provided in this filing as Exhibit 3.

<sup>4</sup> Appendix J – Rule 29 Tariff is provided in this filing as Exhibit 1. Appendix L – Model Power Purchase Agreement for Renewable Dispatchable Generation (PV + BESS) with CBRE Component is provided in this filing as Exhibit 5.

Exhibit 6: Redlines of Changed Sections of the CBRE RFP for Moloka'i from August 31, 2021 version<sup>5</sup>

Exhibit 7: Redlines of Changed Sections of the CBRE RFP for Lāna'i from August 25, 2021 version<sup>6</sup>

Exhibit 8: Redlines of Changed Sections of the Lāna'i RDG PPA<sup>7</sup>

The Companies respectfully request that the Maui Electric Tariff Rule 29 (“Rule 29”) be approved as final with this filing, with the proviso that none of the phase two provisions for Maui island are applicable until further order from the Commission. The Companies appreciate the Commission’s desire to accelerate the Moloka’i and Lāna’i RFPs and are supportive of such efforts, which will benefit the Moloka’i and Lāna’i communities. However, to facilitate a robust proposer participation in the RFPs, Rule 29 needs to be established prior to opening these RFPs to bidders. Rule 29 is part of the RFPs and is necessary to inform bidders of the rules and requirements associated with CBRE. The RFPs state that the Proposals must meet the requirements identified in Part II and/or III of Rule 29 as attached in Appendix J of the RFPs. Without finalizing Rule 29, proposers will not have all the necessary information required to formulate a proposal and set associated pricing. If the Companies run the RFPs prior to the issuing of a final Rule 29, developers may not have enough information to submit viable bids, which could result in requests for opportunities after the fact to revise proposals or withdraw from the RFPs once Rule 29 is finalized and approved. This would add to the time needed to run the RFPs and run counter to the purpose of an early start to the RFPs. Worse, this uncertainty may lead developers to choose not to participate in the RFPs at all. The Companies recognize that the Commission is currently engaged in public outreach regarding the CBRE program on the islands of O’ahu, Hawai’i and Maui and that such engagement may necessitate changes to the CBRE program on such islands. However, a limited Rule 29 can be approved for Maui Electric now to allow the Moloka’i and Lāna’i RFPs to proceed expeditiously and can be amended at a later time to incorporate any modifications, with respect to RFPs on the island of Maui. In addition, to further address potential uncertainty, Rule 29 has been amended to note that it only opens Phase 2 for the islands of Moloka’i and Lāna’i, and the opening of Phase 2 for the island of Maui will occur upon subsequent Commission order, as only the Moloka’i and Lāna’i RFPs are proceeding at this time.

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<sup>5</sup> RFP sections that changed materially from the RFP draft filed on August 31, 2021 are identified in Exhibit 6. For MSWord documents, redline track changes are provided to identify the specific changes. For other documents that cannot easily produce redline track changes, the new version of the RFP section is duplicated in Exhibit 6.

<sup>6</sup> RFP sections that changed materially from the RFP draft filed on August 25, 2021 are identified in Exhibit 7. For MSWord documents, redline track changes are provided to identify the specific changes. For other documents that cannot easily produce redline track changes, the new version of the RFP section is duplicated in Exhibit 7.

<sup>7</sup> PPA sections that changed materially from the RFP draft filed on August 25, 2021 are identified in Exhibit 8. Redline track changes are provided to identify the specific changes.

The Companies would like to note that the Moloka'i RFP has been updated to more clearly show that the Company will not be submitting a Self-Build Proposal to that RFP. Beyond that update, the RFPs and supporting documents did not undergo any significant changes, yet some modifications were made to correct inconsistencies, provide clarity, correct typographical errors, and provide the most up to date requirements. First, inconsistencies were identified regarding the interconnection data deliverables and timing for both the Moloka'i and Lāna'i RFPs. Section 2.3 and Section 5.1 of the RFP and Section 2.1 and Section 2.11 of Appendix B to the RFPs provided different timing requirements for when developers must submit required interconnection data and deliverables. Both the main body and Appendix B of the RFPs were modified to correct the inconsistencies and clearly state the intended requirements associated with timing of interconnection data deliverables. Secondly, in the Lāna'i RFP, the Companies have made updates to clarify and correct information regarding the interconnection requirements at the Miki Basin power plant. Section 1.2.6 of the RFP was updated to provide clarity regarding the interconnection requirements. Appendix H, including its attachments, were also updated to provide clarity as well as to accurately reflect a potential interconnection scenario. Thirdly, the Project Interconnection Data Request worksheets, included as Appendix B, Attachment 2 of both the Moloka'i and Lāna'i RFPs, were replaced with the most up-to-date version which requests additional information regarding BESS inverters and collector systems, if applicable. Additionally, language was added to Appendix F to clarify that site reports that were done for the 2019 Lanai Variable RFP, which was located at a different, nearby location, will also be made available as a part of this RFP. Finally, updates to the Power Purchase Agreements were made to clarify requirements for Grid Forming Mode in the Lāna'i RDG PPA, and to update NERC-CIP references in the Lāna'i RDG PPA and the Moloka'i Standard Form Contract.

The revised RFPs, supporting documents, and redlines of the filing will be made available to the public on Hawaiian Electric's website at <https://www.hawaiianelectric.com/sharedsolar> no later than Thursday, November 11, 2021.

The Companies hereby respectfully submit the proposed final versions of the limited Maui Electric Rule 29 Tariff, the Moloka'i and Lāna'i RFPs, and associated contracts, and look forward to the successful execution of Phase 2 of the CBRE Program on Moloka'i and Lāna'i.

Sincerely,

/s/ Rebecca Dayhuff Matsushima

Rebecca Dayhuff Matsushima  
Director  
Renewable Acquisition

Attachments

cc: Service List (with Attachments)

# EXHIBIT 1

Draft Maui Electric Company, Limited  
Rule 29 Tariff

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

**Currently only open to the islands of Moloka‘i and Lāna‘i for RFPs only<sup>1</sup>  
(No CBRE Small Projects for Moloka‘i and Lāna‘i)  
Opening of Phase 2 for island of Maui will occur upon subsequent Commission order.**

PART I: For Projects Sized Less Than 250kW AC

A. AVAILABILITY

Phase 2 (“Phase 2”) of the Company’s Community-Based Renewable Energy (“CBRE”) program (“Program”) for CBRE Small Projects (as defined below) is available to residential and commercial customers of the Company<sup>2</sup> (“Customers”) as follows:

1. Capacity: Forty-five (45) megawatts (MW) of available capacity (“CBRE Small Projects Phase 2 Capacity”) shall be apportioned across the islands of Hawai‘i, Maui and O‘ahu as follows:
  - a. Tranche 1:
    - Hawai‘i: 7.5 MW
    - Maui: 7.5 MW + 0.975 MW transferred from CBRE Phase 1
    - O‘ahu: 30 MW
  - b. Tranche 2<sup>3</sup>:
    - Hawai‘i: 0 MW
    - Maui: 0 MW
    - O‘ahu: 0 MW
2. Eligibility shall be limited to photovoltaic generation project sizes greater than 4 kW AC and less than 250 kW AC with battery storage strongly recommended, but not required. If battery storage is included in the project, the storage capacity and duration of the output shall be at the discretion of the Subscriber Organization but subject always to the

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<sup>1</sup> See Order 38038, Clarifying Order No. 37954, filed October 25, 2021, in Docket No. 2015-0389.

<sup>2</sup> The “Company” refers to Hawaiian Electric Company, Inc., Maui Electric Company, Ltd., or Hawaii Electric Light Company, Inc., in their role as “Administrator” of the CBRE Program for the island in which such Company provides electric service to its Customers.

<sup>3</sup> See Order 37879, *Approving the March 30 CBRE Filings, With Modifications*, filed July 27, 2021, by the Commission in Dkt. 2015-0389, which moved all capacity proposed for Tranche 2 into Tranche 1.

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

limitations, terms, and obligations of applicable tariff rules. A CBRE project proceeding under this Tariff Rule No. 29 for Phase 2 shall be referred to as a “CBRE Small Project.”

3. Interconnection of CBRE Small Projects, including projects with energy storage, shall be subject to the requirements of Rule No. 14H.
4. CBRE Small Projects may participate in future grid services programs. Such participation shall be subject to the terms, conditions and eligibility requirements of future rulemaking by the State of Hawai‘i Public Utilities Commission (“Commission”).
5. CBRE Small Projects may participate in future non-wires alternatives opportunities in locations that help defer or obviate investments in transmission and distribution infrastructure, and/or that are located in facilities that provide community resilience benefits. Such participation shall be subject to the terms, conditions and eligibility requirements of future rulemaking by the Commission.

B. CUSTOMER PARTICIPATION AND ELIGIBILITY

A Customer who subscribes to a CBRE Phase 2 facility (“Facility”), defined as and herein referred to as a “Subscriber,” shall meet the following participation and eligibility requirements:

1. Eligible Customers shall be allowed to acquire, lease, or subscribe to, an interest (an “interest” or “subscription”) in the energy output (contract capacity) of any eligible CBRE Small Project on the same island as their service address that is allocated CBRE Phase 2 Program capacity to offset their energy consumption.
2. Eligibility:

Customer has a current electricity account with the Company and has received service at the same location for which they are requesting participation for at least 3 months at the time of enrollment; and

Customer is not currently enrolled or participating in Schedule Q, Net Energy Metering, Feed-in Tariff, Standard Interconnection Agreement, Customer Grid Supply, Customer Grid Supply Plus, Smart Export, or Customer Self-Supply tariff program, or similar customer program at the same service location where CBRE participation is requested; and

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

Customer is not currently a Subscriber for another CBRE Phase 1 or Phase 2 Facility.

For the purpose of satisfying a CBRE Facility's Residential Customer Requirement per Part I, Section C.11 below, a Subscriber shall be considered a residential customer if the Subscriber is served under any of the following Company rate schedules: Schedule R, TOU-R, TOU-RI, TOU EV, or any other residential rate option.

3. Customers shall be required to enter into an appropriate CBRE Subscriber Agreement ("Subscriber Agreement") with a CBRE subscriber organization ("Subscriber Organization"). The Subscriber Agreement shall contain standard information and provisions that ensure transparency and proper consumer protection. The Subscriber Agreement shall include or be supplemented by, at minimum, the following elements:
  - a. CBRE Phase 2 Facility and Subscriber Organization information
    - i. CBRE Phase 2 Facility name and address;
    - ii. CBRE Subscriber Organization and/or owner name, address, website URL, phone number, and email address;
    - iii. Subscriber name, address, phone number, and email address; and
    - iv. Subscriber's utility name and account number;
  - b. Financial Information:
    - i. Credit rate ("Credit Rate") and calculation;
    - ii. Bill credit mechanism and timing;
    - iii. Tax and securities implications;
    - iv. Any fees, charges or payments to be made by the participant to enroll or over the life of the contract;
    - v. Use of escrow account, if required, or other alternative proposed by Subscriber Organization and approved by the Independent Observer to hold or segregate any pre-development enrollment fees or deposits from Subscribers (with appropriate mechanisms to refund such fees/deposits to Subscribers should the Subscriber Organization not complete its Facility), which shall be released to Subscriber Organization upon commercial operation of the Facility; and
    - vi. Transfer, cancellation, termination and/or exit terms and any applicable fees;
  - c. The Subscriber Agency Agreement and Consent Form attached hereto as Appendix I, which each Subscriber Organization shall complete with each Subscriber acquiring,

MAUI ELECTRIC COMPANY, LIMITED



Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

leasing, or subscribing to, an interest in such Subscriber Organization's CBRE Facility, permitting the sharing of:

- i. Subscriber's account and energy usage data as required to verify eligibility, determine the appropriate subscription size, and shall not include interval data from advanced metering;
  - ii. Subscription information;
  - iii. Aggregated CBRE Project data and anonymized Subscriber data in response to information requests from the Commission or the State of Hawai'i Department of Commerce and Consumer Affairs, Division of Consumer Advocacy ("CA"); and
  - iv. Subscriber data in response to information requests from the Commission or the CA.
- d. The standard form disclosure checklist ("Disclosure Checklist") is attached hereto as Appendix II, which each Subscriber Organization shall complete with each Subscriber acquiring an interest in such Subscriber Organization's CBRE Facility.
4. Interested Customers shall (a) obtain confirmation of eligibility and appropriate subscription size and (b) apply to enroll into the CBRE Program through the Company's online portal for the CBRE Program (the "CBRE Portal"). Through the CBRE Portal, Company shall facilitate completion of these tasks, but final approval and enrollment of the Customer into a Subscriber Organization's CBRE Phase 2 Facility shall rest with such Subscriber Organization.
  5. Subscriber's effective kilowatt ("kW") alternating current ("AC") interest in the CBRE Phase 2 Facility shall be calculated based on the Subscriber's portion of the renewable energy output (contract capacity) of the CBRE Phase 2 Facility multiplied by the total energy output (contract capacity) of the CBRE Phase 2 Facility in kW AC.
  6. Subscribers shall be required to acquire a minimum of 1 kW AC. A lower minimum requirement has been set for Low- and Moderate-Income ("LMI") Subscribers as specified in Part III, Section C.7 herein.
  7. Subscribers shall be permitted to acquire a CBRE Program interest equivalent to an expected production of no more than 100% of their historic energy consumption as shown from the Subscriber's previous 3 to 12 months of prior usage.

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

- a. Company shall use the Subscriber's average 3 to 12 months of prior usage measured immediately prior to application submission to determine the Subscriber's previous 3 to 12 months of energy consumption.
  - b. If Subscriber does not have a 3 month billing history prior to application submission, and there is not 3 months of billing history, including billing history of another customer associated with the Subscriber's premises, the Company shall use the available monthly average consumption multiplied over 12 months in order to generate a proxy average annual consumption. If a Subscriber's available prior usage does not reasonably reflect the Subscriber's predicted usage, the Company will use the most recent usage figures to arrive at a reasonable estimated usage amount.
  - c. Company and/or Subscriber Organization may adjust, no more than once annually, a Subscriber's CBRE interest in the event that Subscriber's interest is not reasonably correlated to Subscriber's current electricity usage.
8. Subscriber shall maintain, for the duration of their participation in the CBRE Program, an electricity account and service address on the same island as the CBRE Phase 2 Facility in which they are participating.
9. Subscriber may change the premises to which the CBRE Phase 2 Facility generation shall be attributed, as long it is on the same island and meets the eligibility requirements set forth herein. No transfer fee shall be applied.
10. For CBRE Phase 2 Projects using a Pay-As-You-Go model for Subscriber interests:
- a. If a Subscriber wishes to terminate their interest in a CBRE Phase 2 Facility, the Subscriber shall either cancel or terminate their subscription with the Subscriber Organization in accordance with the provisions of the Subscriber Agreement.
  - b. If a Subscriber requests to transfer their interest to another Customer, the Subscriber Organization shall confirm that Customer's eligibility as set forth herein. Any transfer of a Subscriber's Pay-As-You-Go interest in a CBRE Phase 2 Facility must be for at least 50% of such Subscriber's interest. Any payment for the transfer shall be in accordance with the preset repurchase/resale price schedule outlined in the Subscriber Agreement.
    - i. There shall be no transfer charge/fee if the meter associated with the account remains unchanged.

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

- ii. Any transfer will not be effective until the Subscriber Organization notifies the Administrator of the transfer. For any notice of transfer on or prior to the twentieth (20<sup>th</sup>) day of any month, such transfer will be effective as of the first (1<sup>st</sup>) day of that month. For any notice of transfer after the twentieth (20<sup>th</sup>) day of a month, the transfer will be effective as of the first (1<sup>st</sup>) day of the next month.

A “Pay-As-You-Go” model refers to any lease or subscription interest in a CBRE project or its energy output in which a Subscriber does not make any up-front payment (except for fixed administrative or other costs not based on the level of Subscriber’s interest) to the Subscriber Organization for Subscriber’s interest and instead makes periodic, e.g., monthly, payments to the Subscriber Organization for Subscriber’s interest, with such payment to be commensurate with the extent of the Subscriber’s interest in the CBRE project.

11. For CBRE Phase 2 Projects using a Pay-Up-Front model for Subscriber interests:

- a. If a Subscriber requests to transfer their interest to another Customer, the Subscriber Organization shall confirm that Customer’s eligibility as set forth herein. Any payment for the transfer shall be in accordance with the preset repurchase/resale price schedule outlined in the Subscriber Agreement.
  - i. There shall be no transfer charge/fee if the meter associated with the account remains unchanged.
  - ii. A transfer shall be for no less than fifty percent (50%) of the selling Subscriber’s interest.
  - iii. Any transfer will not be effective until the Subscriber Organization notifies the Administrator of the transfer. For any notice of transfer on or prior to the twentieth (20<sup>th</sup>) day of any month, such transfer will be effective as of the first (1<sup>st</sup>) day of that month. For any notice of transfer after the twentieth (20<sup>th</sup>) day of a month, the transfer will be effective as of the first (1<sup>st</sup>) day of the next month.
- b. If Subscriber requests to sell all or any portion of their Subscription back to the Subscriber Organization, Subscriber Organization shall buy back the interest in accordance with the preset repurchase/resale price schedule outlined in the Subscriber Agreement.

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

- i. Subscriber Organization shall complete the buy-back of the Subscriber's interest within 30 days of the Subscriber's request.
- ii. Upon completion of a subscription buy-back, the Subscriber Organization shall notify the Company by the last day of the month the transaction was completed. The Company shall confirm such buy-back in the Subscriber database and cease CBRE bill credits effective as communicated by the Subscriber Organization on the first day of the month of notification if such transaction was completed on or prior to the twentieth (20<sup>th</sup>) day of the month. Transactions completed after the twentieth (20<sup>th</sup>) day of the month will be effective as of the first (1<sup>st</sup>) day of the next month.

A "Pay-Up-Front" model refers to any asset-type interest in a CBRE project or its energy output where the Subscriber is required to make an up-front payment to the Subscriber Organization for Subscriber's interest and thereafter is not required to make further periodic payments to the Subscriber Organization for Subscriber's interest in the CBRE project.

The descriptions for the Pay-As-You-Go and Pay-Up-Front models are limited to payment models for the interest in the CBRE project offered by the Subscriber Organization and do not include other payments that may be necessary from a Subscriber to the Subscriber Organization, such as operations and maintenance, insurance and other cost items that may be specified in the Subscriber Agreement between Subscriber and Subscriber Organization for a particular CBRE project.

12. Subscriber Organization shall determine the eligibility and permitted size of any transferee's subscription interest by inquiry to the Company electronically through the CBRE Online Portal.
13. Nothing in the Subscriber Agreement shall be deemed to alter or modify any rate schedule, charge, or condition of service established from time to time by the Commission for electric service provided by the Company. All such rates and charges from the Customer's applicable rate schedule shall apply and remain subject to change in accordance with Commission rules.

C. CREDIT RATE

1. Subscribers to a CBRE Program interest shall continue to receive electric service from the Company and shall be billed in accordance with the Company's Rule No. 8, the applicable rate schedule and Company rules filed with the Commission. All rates, terms,

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

and conditions from the applicable rate schedules and Company rules shall continue to apply, except for the adjustments described below.

2. Subscribers shall receive CBRE bill credits applied to their electric bill in accordance with the applicable credit rates (“Credit Rates”) for CBRE Phase 2 subscriptions purchased or leased by Subscribers for each rate schedule as follows:

Energy Credit Rates for Each Applicable Rate Schedule:

Schedule R, TOU-RI, TOU-R, TOU-EV	16.50 cents per kWh daily
Schedule G, TOU-G	16.50 cents per kWh daily
Schedule J, TOU-J, U, SS, EV-F	16.50 cents per kWh daily
Schedule P	16.50 cents per kWh daily
Schedule DS	16.50 cents per kWh daily
Schedule F	16.50 cents per kWh daily

Credit Rates shall be fixed at the above levels for the term of the Subscriber Agreement unless a Competitive Credit Rate Procurement (“CCRP”) is triggered.

The CCRP mechanism will be used when CBRE Phase 2 applications, over a four-month application window, exceed the Tranche 1 capacity or Tranche 2 capacity for each particular island specified in Part I Section A.1 above, in which case, the Tranche 1 credit rate will be dictated by the procurement and the credit rates for Phase 2 Tranche 1 will be capped at Phase 1 credit rates or at the lowest credit rate determined through the CCRP from Tranche 1. Thereafter, the applicable energy credit rates shall be subject to modification by the Commission. The CCRP process is further described in Part I, Section E.5 below.

3. The monthly CBRE bill credit for each Subscriber shall begin to accrue on the first day of the month in which Subscriber completes the purchase or lease of Subscriber’s subscription into a CBRE Phase 2 Facility, provided that Subscriber Organization notifies the Administrator of Subscriber’s subscription no later than the last calendar day of the month in which Subscriber subscribed into the CBRE Phase 2 Facility. Subscriber’s monthly CBRE bill credit shall begin accruing on the first (1<sup>st</sup>) day of the next month if the purchase or transfer of all or any portion of a Subscriber’s Allocation is made after the twentieth (20<sup>th</sup>) day of the month. The amount of the Subscriber’s monthly CBRE bill credit shall be equal to the Subscriber’s interest in the energy output of the Facility, multiplied by the Facility’s actual energy output, multiplied by the applicable Credit Rate per kilowatt-hour (“kWh”).

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

4. A Subscriber's monthly CBRE bill credit shall be applied to offset eligible charges on the Subscriber's electric bill no earlier than the 15<sup>th</sup> day of the following month but no later than two billing cycles. Subscribers will see eligible credits on a future bill depending on the day their meter is read. Eligible charges on the Subscriber's electric bill shall be all light and power charges.
5. The Subscriber's electric bill cannot be reduced below the sum of the customer charge, the Green Infrastructure Fee, and any other per-customer charge for the customer's applicable rate schedule or the minimum bill applicable in the underlying tariff, whichever is greater.
6. If the Subscriber's monthly CBRE bill credit exceeds the eligible charges, the value of excess credits shall be carried over to the next billing period(s) within the current 12-month period, as a CBRE bill credit and applied to the Subscriber's electric bill(s) subject to Part I Sections C.4 and C.5 above.
7. Reconciliation will be made at the end of every 12-month period by applying the Subscriber's remaining CBRE bill credit to the Subscriber's remaining eligible charges within the 12-month period. Any CBRE bill credit that remains unused at the end of each 12-month period shall be extinguished.
8. If the Subscriber terminates its CBRE service prior to the end of any 12-month period, the Company shall reconcile the remaining CBRE bill credit to remaining eligible charges at the end of the monthly billing period when service was terminated, similar to the reconciliation that would have been performed at the end of the normal 12-month period. Any CBRE bill credit that remains unused shall be extinguished.
9. Compensation for Unsubscribed Energy:
  - a. "Unsubscribed Energy" is CBRE Phase 2 Facility output that is not associated with any Subscriber subscription and therefore not allocated to a Subscriber. The designated Subscriber Organization under the Standard Form Contract ("SFC") with the Company shall be compensated for Unsubscribed Energy at the same Credit Rate for Subscribers as described in the SFC except as specified in Part I, Section C.9.b below.
  - b. The following shall be effective 6 months from the date of initial commercial operations. Compensation for Unsubscribed Energy shall be as follows:

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

For any Facility with more than 15% Unsubscribed Energy, the Credit Rate for compensation for the Unsubscribed Energy for that month shall be discounted by the percentage of energy that is unsubscribed.

Unsubscribed capacity shall be calculated at the end of the month and applied retroactively to the CBRE Facility when calculating that month's prior Unsubscribed Energy payment.

Table 1 below illustrates the effect of this Unsubscribed Energy provision as applied to a 100kW CBRE Facility eligible for a 15.00 cents/kWh Credit Rate, assuming varying levels of unsubscribed capacity.

Table 1: Illustrative Treatment of Unsubscribed Energy for CBRE Small Projects

<b>Example CBRE Facility Characteristics</b>			
Credit Rate (cents/kWh)		15.00	
Facility Capacity (kW)		100	
<b>Billing Month</b>	<b>Subscribed Capacity (kW)</b>	<b>Unsubscribed Capacity</b>	<b>Unsubscribed Energy Credit Rate (cents/kWh)</b>
1	25	75%	15.00
2	25	75%	15.00
3	45	55%	15.00
4	65	35%	15.00
5	80	20%	15.00
6	90	10%	15.00
7*	90	10%	15.00
8	90	10%	15.00
9	80	20%	12.00
10	65	35%	9.75
11	75	25%	11.25
12	85	15%	15.00

\*Unsubscribed Energy provision becomes applicable

- A Subscriber Organization shall be required to have a minimum of 4 individual Subscribers per CBRE Facility at all times after the 6-month grace period described below. For a period of 6 months following initial commercial operations, the Subscriber Organization shall incur no payment reduction if it does not have or falls below this minimum number of Subscribers. Effective after 6 months of commercial operations,

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

the following shall be placed into effect for the remainder of the term of the CBRE Facility:

- a. For any CBRE Facility which does not have the minimum 4 individual Subscribers, for any month during the term of its SFC, the unmet percentage of Subscribers to the minimum number of 4 required Subscribers shall reduce the Subscriber Organization's Credit Rate used for compensation for Unsubscribed Energy delivered by such percentage. For example, if a CBRE Small Project has only 3 Subscribers for any given month, the unmet number of Subscribers is 1 and the percentage to the 4 minimum Subscribers required will be 25% and the Subscriber Organization's Credit Rate will be reduced by 25%.
- b. If the Subscriber Organization's Unsubscribed Energy for that CBRE Facility is also greater than 15% in such month, the Credit Rate for compensation for Unsubscribed Energy shall be reduced by the sum of the percentage determined from sub-part a. above plus the percentage of Unsubscribed Energy for that month. If the amount of Unsubscribed Energy is less than 5% in any month, any payment reduction shall be calculated as if such Unsubscribed Energy was 5% for such month and if the Subscriber Organization's payment for Unsubscribed Energy is insufficient to offset the calculated payment reduction, the Subscriber Organization shall pay the difference upon demand.
- c. If the Subscriber Organization does not have a minimum of 4 individual Subscribers but does not have any Unsubscribed Energy, the Subscriber Organization shall be subject to equivalent liquidated damages as specified below. Continued failure to meet the 4 individual Subscriber threshold under these circumstances by any Subscriber Organization for more than one year shall be construed as an intent to disregard the requirements of this Rule No. 29 and could result in termination and removal from the CBRE Program in accordance with Part I, Section K.3.

Damages for Failure to Maintain Minimum Number of Subscribers: The percentage determined in sub-part a. shall be multiplied by the applicable kWh delivered in such month attributable to 5% Unsubscribed Energy and such amount shall be multiplied by the applicable Credit Rate (the sub-part a. percentage \* 15.00 cents/kWh or applicable CCRP rate) to equal a dollar amount liquidated damages for the Subscriber Organization's failure to maintain the requisite number of Subscribers for any given month.

11. Residential Customer Requirement: In Phase 2, 40% of the CBRE Facility's contract capacity shall be reserved for individual subscriptions for residential Customers. For a

MAUI ELECTRIC COMPANY, LIMITED



Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

period of 6 months following initial commercial operations, the Subscriber Organization shall incur no payment reduction if it does not have or falls below this minimum percentage of residential Subscribers. Effective after 6 months of commercial operations, the following shall be placed into effect for the remainder of the term of the CBRE Facility:

- a. For any CBRE Facility which does not have the minimum 40% residential Subscribers for any month during the term of its SFC, the difference in percentage between the project's actual residential Subscriber percentage and the 40% minimum shall reduce the Subscriber Organization's Credit Rate for compensation for Unsubscribed Energy delivered by a factor equal to one-fourth (0.25) of such percentage difference. For example, if a project's residential Subscriber percentage is 30%, the difference, 10%, from the 40% minimum requirement, shall be multiplied by 0.25 ( $10\% * 0.25 = 2.5\%$ ). The 2.5% result shall reduce the Credit Rate for Unsubscribed Energy for that month by such percentage.
- b. If the Subscriber Organization's Unsubscribed Energy for that CBRE Facility is also greater than 15% in such month, the compensation for Unsubscribed Energy delivered in that month shall be reduced by the sum of the percentage payment reduction for the unmet residential Subscriber percentage plus the percentage of Unsubscribed Energy for that month. If the amount of Unsubscribed Energy is less than 5% in any month, any payment reduction shall be calculated as if such Unsubscribed Energy was 5% for such month and if the Subscriber Organization's payment for Unsubscribed Energy is insufficient to offset the calculated payment reduction, the Subscriber Organization shall pay the difference upon demand.
- c. If the Subscriber Organization does not have the required minimum percentage of Residential Subscribers but does not have any Unsubscribed Energy, the Subscriber Organization shall be subject to equivalent liquidated damages as specified below. Continued failure to meet the Residential Subscriber minimum requirement under these circumstances by any Subscriber Organization for more than one year shall be construed as an intent to disregard the requirements of this Rule No. 29 and could result in termination and removal from the CBRE Program in accordance with Part I, Section K.3.

Damages for Failure to Maintain Minimum Percentage of Residential Subscribers: The percentage determined in sub-part a. shall be multiplied by the applicable kWh delivered in such month attributable to 5% Unsubscribed Energy and such amount shall be multiplied by the applicable Credit Rate (the sub-part a. percentage \* 15.00 cents/kWh or applicable CCRP rate) to equal a dollar amount liquidated damages for

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

the Subscriber Organization's failure to maintain the requisite percentage of residential Subscribers for any given month.

12. Payment reductions from Subscriber Organization's compensation for Unsubscribed Energy under Part I, Sections C.10 and C.11 above shall be cumulative in effect. In any given month after the first 6 months of commercial operations, if the Subscriber Organization fails to meet multiple minimum requirements or exceeds maximum thresholds, the percentage reductions in Subscriber's compensation specified above will be added and the aggregate sum of such percentages shall be used to reduce the Subscriber's compensation for Unsubscribed Energy in any given month.

D. SUBSCRIBER ORGANIZATION ELIGIBILITY

1. Eligibility to be awarded a CBRE Small Project shall be open to all ownership types, including independent power producers, the Companies, and any of their affiliates.
2. For utility self-build projects, the Commission will not require the utility to submit an additional application pursuant to General Order No. 7, but the Commission will hold the bidding utility to the terms of its application, similar to independent power producers.
3. For affiliate and affiliate-related projects, the Commission will not require an additional review pursuant to the Affiliate Transaction Requirements adopted in Docket No. 2018-0065, but the Commission will hold the bidding utility to the terms of their application.

E. SUBSCRIBER ORGANIZATION PARTICIPATION FOR CBRE SMALL PROJECTS

1. A CBRE Small Project may be developed by an approved Subscriber Organization. An applicant seeking to become an approved Subscriber Organization shall be referred to as an "Applicant" until approved.

A CBRE Small Project must be a new facility not otherwise subject to a power purchase agreement with the Company. The CBRE Small Project may participate in such other future grid services and/or non-wires alternative projects as described in Part I, Section A above. A "new" facility shall be defined as a facility completed no earlier than one (1) year prior to the effective date of this tariff, is not otherwise in contract with the utility for the purchase and sale of energy that would prevent it from participating as a CBRE Small Project, and otherwise meets all other qualifications for a CBRE Small Project under this tariff, including all technical and performance requirements.

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

2. Demonstrating transparency and a willingness to engage in early communication with communities is an important part of a Project's viability and success. A community outreach and communications plan ("Community Outreach Plan") is an essential roadmap that guides a Subscriber Organization as they work with various communities and stakeholders to raise awareness and collect input for a project. A Subscriber Organization for a project between 100 kW and 249 kW should have a Community Outreach Plan to provide nearby community members information. The Community Outreach Plan should identify efforts the Subscriber Organization will make to provide the community within a one (1) mile radius of the project boundaries with information regarding the project, including, but not limited to the following information: Project description, Project benefits, government approvals, and development process (including Project schedule). Community outreach requirements for projects that are 250 kW and larger will be detailed in the request for proposals and associated contract documents for such projects.
3. Applications during Tranche 1 of CBRE Phase 2 shall be accepted beginning on the effective date of this Rule No. 29 and continue for 4 months from such date, upon which time the application period shall close. If the application period closes and any capacity allocation for any island is not completely filled, the Company, in consultation with the IO may consider and accept later applications for remaining available capacity that meets the requirements of this Rule No. 29.
4. Prior to developing a Facility, an Applicant shall submit a completed application to the Company, which shall provide the following in order to be considered a complete application:
  - a. A one-time, non-refundable application processing fee of \$250 per application;
  - b. Applicant company name, contact information, and address, and indicate their role (e.g., Subscriber Organization, owner, or operator);
  - c. Applicant contact person name, contact information, and address;
  - d. Entity name, contact information, address, and identity role of the Subscriber Organization if approved; if entities other than the Subscriber Organization will act as either owner or operator of the CBRE Facility, name, role identification, contact information, and address shall be provided for those other entities;
  - e. Proposed CBRE Phase 2 Facility name, address, and estimated completion date;

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

- f. CBRE Phase 2 Facility system nameplate direct current (DC) capacity, AC output (inverter nameplate), mount location, tracker type, azimuth, and tilt;
- g. CBRE Phase 2 Facility system description of storage operations, total units, total size per unit (kW), max capacity per unit (kWh), charge/discharge per unit (kW);
- h. A Certificate of Good Standing for the Applicant obtained from the State of Hawai'i Department of Commerce and Consumer Affairs dated no earlier than 30 days prior to submittal by the Applicant. If the Applicant is a foreign entity, confirmation from the State of Hawai'i Department of Commerce and Consumer Affairs that the Applicant is currently authorized to do business in the State of Hawai'i as of the date of submittal;
- i. Maximum Discounted Credit Bid that the Applicant is willing to accept for its CBRE project for CCRP auction purposes. For example, if an Applicant is willing to accept a maximum discounted Credit Rate of 12 cents/kWh (from the established Credit Rate of 15 cents/kWh), the Applicant shall specify the lowest Discounted Credit Rate for its application at 12 cents/kWh;
- j. Demonstrate project viability by providing site plan with proposed interconnection point, construction plan and commissioning timeline, details of major equipment, and subscriber marketing and outreach timeline and plan, specifically including LMI ratepayers;
- k. Establish a minimum production guarantee (e.g., 85% of projected generation output);
- l. Demonstrate/establish financial creditworthiness through posting of a surety bond, a financial guarantee, a letter of credit, or other sufficient evidence of financial ability to develop the project, provided however that Applicant's satisfactory submittal of the following shall suffice as evidence of financial ability to develop the project: (1) Applicant possesses an investment grade (i.e., BBB- or higher) credit rating from Moody's, Standard & Poor's, or Fitch Ratings, (2) Edison Electric Institute master agreement already in place between Applicant and Hawaiian Electric, (3) demonstration of successful project financing for at least two solar projects of comparable size, (4) showing the Applicant's parent corporation's investment grade credit rating from Moody's, Standard & Poor's, or Fitch Ratings.;
- m. Provide a refundable deposit of \$75/kW AC, through check, wire transfer or credit card, for the installed capacity made available for CBRE. The Independent Observer

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

(“IO”) has the authority to lower or waive this deposit requirement for these CBRE Small Projects and/or non-profit subscription organizations. Deposits will be held in an escrow account and refunded within 30 calendar days after the Date of Commercial Operation or upon auction results in which a CBRE Subscriber Organization is not selected. If the CBRE Subscriber Organization informs the Administrator that it will no longer continue to pursue completion of the CBRE Project, or if the Date of Commercial Operation does not occur within the specified timeline (including day-for-day extensions) detailed in the SFC, the Company shall not return to the CBRE Subscriber Organization the deposit paid;

- n. Applicant must also submit with its application all requirements necessary for Company to complete the Rule No. 14H completeness review. See Rule No. 14H at Sheets 34D-2 through 34D-3 for these requirements. While applicants shall receive a timestamp for completed applications that comply with this Part I, Section E.4 requirements, such application shall not be deemed complete until Applicant’s Rule No. 14H completeness review is deemed complete. Time frames to review and for Applicant to provide requested information shall be as specified in Rule No. 14H;
- o. Demonstrating Site Control for the Site required for the successful implementation of a specific Facility must include all Interconnection Facilities required for the Facility. The need for a firm commitment is necessary to ensure that applications are realistic and shovel-ready so that there is a high likelihood that the proposed project will be developed to completion. In addition, developmental requirements and restrictions such as zoning of the Site and the status of easements must be identified and will be considered in determining whether the application meets the Site Control requirement.

The project “Site” shall be the (1) real property or (2) area upon a structure upon which the CBRE project shall be situated, inclusive of the generating facilities, control facilities and project-owned interconnection facilities for project.

To meet this “Site Control” requirement, Applicant must complete one of the following:

- i. Provide documentation confirming (1) that the Applicant has an existing legally enforceable right to use and control the Site, either in fee simple or under leasehold for a term at least equal to the term of the SFC as specified in the application and (2) the applicable zoning for the Site and that such zoning does not prohibit the development of the Site consistent with the application;  
or

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

- ii. Provide documentation confirming, at a minimum, (1) that the Applicant has an executed binding letter of intent, memorandum of understanding, option agreement, or similar document, with the land owner (a “binding commitment”) which sets forth the general terms of a transaction that would grant the Applicant the required Site Control, and (2) the applicable zoning for the Site and that such zoning does not prohibit the development of the Site consistent with the application. The binding commitment does not need to be exclusive to the Applicant at the time the application is submitted and may be contingent upon approval of the application and awarding of a project in Phase 2. If multiple applications are provided a binding commitment for the same Site, the documents granting the binding commitments must not prevent the Company from moving forward with the application that otherwise would have been selected.
- iii. Government/Public Lands Only: The above two points may not be feasible where government or publicly owned lands are part of the Site or are required for the successful implementation of the application. In such a case, at a minimum the Applicant must provide a credible and viable plan, including evidence of any steps taken to date, to secure all necessary Site Control for the application, including but not limited to evidence of sufficient progress toward approval by the government agency or other body vested with the authority to grant such approval (as demonstrated by records of the agency). The Applicant will be required, however, to demonstrate Site Control as required in the applicable SFC.
- p. If an Applicant submits an application that does not contain all the required items listed in this Part I, Section E.4 above, the application shall be deemed incomplete and the timestamp for the completed application shall be when the last item(s) is/are received from the Applicant that renders the application complete under Part I, Section E.4 , with the exception of (1) Part I, Section E.4.a, regarding application processing fee payment and (2) Part I, Section E.4.m regarding the refundable deposit. If the (1) application fee and/or (2) refundable deposit are the only missing items and are received within 15 calendar days from the date of submission, the timestamp will be the date the application was submitted electronically. Partially completed applications will be deemed abandoned if all required items are not submitted so as to render the application complete after 60 calendar days.
- q. Demonstration of capability to deliver. Applicant, its affiliated companies, partners, and/or contractors and consultants on the Applicant’s team, shall provide written

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

documentation that demonstrates experience in the development and operation of at least one renewable energy generation facility similar in size, scope, and structure to the Facility being proposed. The IO may waive this provision for Applicants proposing systems under 250 kW AC, that meet specific criteria, such as 501(c)(3) organizations, Customers choosing to collectively develop systems for their own benefit as Subscribers, organizations focused on delivering services to LMI ratepayers, or others, as determined appropriate by the IO.

Applications deemed complete (providing all information required under Part I, Section E.4 above and completing Rule No. 14H completeness review) shall receive a timestamp which shall serve as the date of the Applicant's application for award and queue purposes.

5. So long as CBRE Small Project applications do not exceed the CBRE Program capacity available under that classification in Phase 2, CBRE Program capacity shall be awarded to qualified applicants on a first-come, first-served basis and the Credit Rate for all applications awarded capacity shall be as specified in Part I, Section C above.

However, if the CBRE Program capacity requested by Facility applications, at the close of the four-month application window, exceeds the available CBRE Program capacity for CBRE Facilities starting in Phase 2, a CCRP mechanism shall be triggered as a means to award CBRE Program capacity for CBRE Small Projects and to set the applicable Credit Rate for such projects.

Table 2: Awarding CBRE Program Capacity

Awarding CBRE Program Capacity
<ul style="list-style-type: none"><li>• If applications do not exceed the CBRE Program capacity available under the active Phase, then capacity is awarded on a first-come, first-served basis.</li><li>• If applications do exceed the available CBRE Program capacity, then a CCRP mechanism will be employed to award capacity.</li><li>• As part of their application, all Subscriber Organizations must submit the lowest Discounted Credit Rate Bid that they would accept (in increments of 0.1 cents per kW, for example 14.7 cents or 14.6, but not in between).</li><li>• CCRP ranks bidders by the lowest Discounted Credit Rate Bids and assigns capacity from lowest Discounted Credit Rate to highest until all available capacity is exhausted.</li><li>• If there is a tie, the project with the earliest timestamp showing either when the application is received (if the application is complete) or when it is deemed complete (if the original submission was incomplete). See Part I, Section E.3.p</li></ul>

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

above. All awarded program capacity will be compensated at the highest accepted Discounted Credit Rate Bid for administrative ease.

Table 3: Example: Competitive Credit Rate Procurement (5 MW of available capacity)

	Discounted Credit Rate Bid (cents/kWh)	Capacity Requested (MW)	Rank	Bid Accepted	Awarded Credit Rate (cents/kWh)	Total Capacity Awarded
Project 1	13.5	3	3	Yes	13.5	5
Project 2	13.3	0.5	2	Yes		
Project 3	12.8	1.5	1	Yes		
Project 4	14	3	4	No		
Project 5	14.2	2	5	No		

6. In the event that the last application to be tentatively accepted to fill the remaining CBRE capacity does not exactly fill the amount of available CBRE Program capacity, the Applicant will be provided the opportunity to secure the remaining capacity at the highest accepted credit rate bid but only for the capacity remaining. For example, in Table 3 suppose 6 MW of capacity had been available rather than 5 MW. After Projects 1, 2 and 3 had been awarded capacity based on their winning credit rate bids, 1 MW of capacity would remain available, but the next lowest bidder (Project 4) had proposed a 3 MW project. Under the CBRE Program rules, that bidder would be offered the 1 MW of remainder capacity at its discounted credit rate bid, and, if they refused, then the next lowest bidder would be offered the same and so forth until the capacity was successfully awarded. If the remainder capacity remains unawarded at the end of this described process, the capacity will be allocated to the next active capacity release cycle.
7. Completed Phase 2 applications for CBRE Small Projects that have been allocated Tranche 1 (or Tranche 2, after it is opened) program capacity (“Selected Projects”) shall be accepted into Phase 2 of the CBRE Program. Upon notification by the Administrator, successful Applicants must accept the awarded capacity and the applicable Credit Rate within 10 business days of notification. Selected Projects accepting program capacity shall proceed to Initial Technical Review under Rule No. 14H.
8. Where program capacity was allocated on a first-come, first-serve basis, Selected Projects which drop out or are terminated will not be replaced because there will not be

MAUI ELECTRIC COMPANY, LIMITED



Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

any queue from which to select another application. However, if a subsequent application is received, such application may be considered as described in Part I, Section E.3 of this Rule No. 29. Excess capacity not allocated in Tranche 1 will be added to Tranche 2 when it is opened.

If, however, a CCRP mechanism is used to allocate program capacity and there is a queue of applications which were not selected, after Selected Projects are notified of their selection, a queue process will be in effect to replace allocated capacity should a Selected Project drop out or is terminated after selection. The queue process will remain active until the latter to occur of either (1) the next tranche of a phase commences, or the next phase of the CBRE Program commences, (i.e., when applications or proposals begin to be accepted); or (2) or two years after CBRE Phase 2, Tranche 1, commences (i.e., the date Rule 29 is effective), at which time, no new submissions may be added to the queue. Upon such occurrence during the queue process, the allocation for such Selected Project shall be added back to the capacity allocation for the respective island and the first completed application for a CBRE Small Project in the queue for that island shall be offered the opportunity to become a Selected Project subject to such Applicant agreeing to (1) accept the remaining capacity allocation (up to its original application proposal) and (2) accept the current Credit Rate established from the CCRP mechanism. If the first Applicant in the queue refuses the allocation, the next Applicant will be offered the allocation under the same terms and the process will continue until the program capacity is filled or there are no remaining Applicants in the queue. If unallocated capacity remains unawarded at the end of this described process, the capacity will be allocated to Tranche 2 when it is opened or to the next active capacity release cycle.

If there is no active queue of available applications, or after the applicable queue process for each respective phase or tranche has expired, as applicable, any subsequent failure of a CBRE Small Project in Tranche 1 or Tranche 2 of Phase 2 shall not be replaced.

If a project from Phase 2, Tranche 1 fails, and there is no active queue for Phase 2, Tranche 1, an application in the active queue of Phase 2, Tranche 2 (if it is still active), will not be offered the allocated project space vacated by the failed project.

9. Phase 2 Tranche 1 will terminate upon the commencement of Phase 2 Tranche 2. Phase 2 Tranche 2 will terminate upon direction by the Commission. If, at the conclusion of Phase 2, there remains excess capacity and no Applicants in the queue desiring to use such capacity, the remaining unused capacity shall be extinguished or added to the next available capacity release, as directed by the Commission.

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

10. Additional fees and deposit required from Subscriber Organizations in addition to the application processing fee shall include:
- a. Any applicable interconnection fees, costs, and expenses necessary to interconnect the CBRE Phase 2 Facility to the system grid; and
  - b. A \$5/kW AC Program Administration Fee assessed annually commencing on the first day of the month immediately succeeding the date of initial commercial operations for any CBRE Phase 2 Facility. For CBRE Small Projects, this fee will not exceed \$1,000 annually. For CBRE Mid-Tier Projects, this fee will not exceed \$5,000 annually. For CBRE Large Projects, this fee will not exceed \$10,000 annually. For CBRE LMI Projects the Program Administration Fee will be waived.

F. CO-LOCATION LIMITATIONS

If more than one Facility is located on a single parcel of land (i.e., Tax Map Key) and sharing a single point of interconnection is being considered for participation in the CBRE Program, they shall be considered as a single Facility for the purpose of determining whether the cumulative size of the facilities fall within the project size limitations set forth in Part I, Section A. The IO will monitor and review interconnection/program applications to guard against co-location.

G. COMMUNICATIONS AND CONTROLLABILITY

1. The Facility shall include a telemetry and control interface which allows the Company to remotely measure, monitor, evaluate and verify technical compliance, CBRE Facility performance, and power quality and, if necessary, control the CBRE Facility (“Communication and Controls”). The acceptable method(s) of implementing the Communication and Controls requirements will be specified by the Company and may be modified after technical review. Such Communication and Controls will be securely achieved through available cellular networks or comparable technology. Monitoring will be performed by system dispatchers or operators at the Company’s control center.
2. Current Communication and Controls through cellular or comparable technology shall require a telemetry and control interface capable of monitoring of the following data points. In addition, the cellular or comparable technology control will allow the utility to trip and/or curtail the interrupting device.

Telemetry:

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

- a) Facility Online/Offline Status
- b) Facility output (kW) that is being exported to the Company System
- c) Facility's confirmation of a Company Control being received and the value of that control as implemented (control echo from Facility controller)
- d) If applicable: Status of Facility's distribution/generation tie breaker CB-A (HECO# XXXX)

Control:

- a) Export limit to the Company System, to be specified as a setpoint and/or discrete on/off control [i.e. may be an active power output control setpoint in a percentage of maximum capacity]
- b) If applicable: Customer's distribution/generation tie breaker CB-A (HECO# XXXX)

The CBRE Facility's Communication and Controls must be capable of supporting, at a future date, the monitoring of additional telemetry data as may be requested by the Company. The Company may request in writing to the Subscriber Organization that the Communications and Control provide some or all of the following data points, as applicable:

- a. Distribution line amps (3 phase), distribution voltage (3 phase L-N), frequency, NET kW, NET kVAR, and NET power factor at point of interconnection. Power factor to be a calculated value;
- b. PV kW and kVAR output;
- c. BESS kW and kVAR output/charge;
- d. Received kWh accumulator, sent kWh accumulator, received kVARh accumulator, Sent kVARh accumulator;
- e. Plane of Array Solar Irradiance in Watts/m<sup>2</sup>;
- f. kW output for each inverter;
- g. Status for each inverter;
- h. Facility Net Power Possible (kW);
- i. Volt-Var curve and deadband settings;
- j. Volt-Var Enabled/Disabled Status;
- k. Volt-Watt curve and deadband settings;
- l. Volt-Watt Enabled/Disabled Status;
- m. Frequency-Watt curve and deadband settings;
- n. BESS State of Charge (%);
- o. BESS Energy remaining (kWh);
- p. kW set point for each inverter.

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

The Subscriber Organization shall make the requested data points available to the Company within 90 days of Company's written request and at no additional cost to the Company. If the data points are not made available to the Company within 90 days, or not to the Company's satisfaction, the Company may take corrective action including reducing the Facility's export or disconnecting the Facility from the system until the points are provided to the Company's satisfaction.

H. INTERCONNECTION

1. All CBRE Phase 2 Facilities shall be designed to interconnect and operate in parallel with the Company's system without adversely affecting the operations of its customers and without presenting safety hazards to the Company's or other customers' personnel. Such Facilities and the interconnection systems shall be in compliance with all applicable safety and performance standards of the National Electric Code (NEC), the Institute of Electrical and Electronics Engineers (IEEE), the Company's interconnection standards and procedures provided in Rule No. 14H, and Rule No. 19, as amended from time to time, and also subject to any other requirements as may be specified in the Interconnection Agreement or the SFC, attached hereto as Appendix IV.
2. CBRE Phase 2 Facilities interconnected at the Distribution Level<sup>4</sup> that are selected shall follow the applicable Rule No. 14H interconnection process at the time of interconnection with an added provision of an expedited review. An expedited review of a CBRE Phase 2 Facility shall be applied as follows:
  - If an interconnection requirements study (IRS) is required, the IRS shall be completed within 90 calendar days after all information required to commence and complete the IRS is provided by the Subscriber Organization. If an IRS is required, the scope and cost will be limited to that of a "Simplified IRS." A Simplified IRS will be more limited in scope compared to a standard IRS. The scope is limited to thermal and voltage steady state analyses at the secondary and primary distribution systems, including the service transformer, refer to the scope of the Simplified IRS in Appendix IIV for CBRE Small Projects. The cost will be capped at a value determined by the Company, which if necessary, will be reviewed annually. Any increase in cost for the Simplified IRS will be subject to concurrence by the IO.

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<sup>4</sup> Distribution system (Level) is defined as interconnection to electrical wires, equipment, and other facilities at the distribution voltage levels (such as 25kV (Hawaiian Electric only), 12kV, or 4kV) owned or provided by the Company, through which the utility provides electrical service to its customers.

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

- If the Facility is served by a dedicated service transformer, or new transformer installed specifically for the Facility, and on a circuit with available hosting capacity an IRS shall not be required. Any necessary mitigation required for an applicable facility to interconnect shall be determined within the standard initial technical or supplemental review timeframe.

Exceptions from the expedited review that would still need to be subject to the standard timelines in Rule 14H:

- CBRE systems on 4kV and 2.4 kV circuits
  - CBRE systems on Moloka'i and Lāna'i
3. CBRE Phase 2 Facilities interconnecting at the Sub-Transmission level shall follow the interconnection process applicable to their Facilities at the time of interconnection.
  4. Each CBRE Phase 2 Facility shall have one interconnection point and suitable metering equipment to measure the energy output and data required for calculation of Curtailment (as defined in the SFC) of the Facility.

I. SUBSCRIBER ORGANIZATION AGREEMENTS

1. Successful Subscriber Organizations (completed application process and is offered CBRE Program capacity) shall execute the SFC and Interconnection Agreement for CBRE Small Projects with the Company after successful completion of the Rule No. 14H technical review. Prior to executing the SFC and Interconnection Agreement, but only after the Subscriber Organization has been awarded CBRE Phase 2 program capacity, Subscriber Organizations may announce the availability, market, and solicit Subscribers provided that they disclose the project is not yet final. Subscriber Organizations may also accept deposits for interests in such Subscriber Organization's CBRE Facility provided that the Subscriber Organization has established an IO-approved escrow account. Subscriber Organizations shall not be permitted to formally complete subscriptions with Subscribers until the Subscriber Organization has executed and delivered to the Company the applicable SFC and Interconnection Agreement or PPA and all other required documents and agreements with Company necessary for the Subscriber Organization to commence development and construction of its CBRE Facility.
2. The SFC and Interconnection Agreement shall remain in effect for the Term set forth therein.

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

3. Subscriber Organizations shall pay fees as described in Part I, Sections E.4 and Part I, Section E.10 above. Hawaiian Electric may require a Subscriber Organization to provide its current financial statements for Hawaiian Electric's review prior to determining whether to extend unsecured credit to the Subscriber Organization for any reason.
4. Subscriber Organizations shall ensure CBRE Facilities are built within the specific number of months as specified in the SFC, provided however that all CBRE Facilities shall have a Commercial Operations Date Deadline no later than December 1, 2024, except for Subscriber Organization applications accepted from the active queue. The Company and Subscriber Organization shall mutually agree upon a commercially reasonable Commercial Operations Date Deadline for such CBRE Facilities upon their acceptance of available capacity in the appropriate tranche of Phase 2.
5. Subscriber Organizations are responsible for their own operation and maintenance of their Facility to ensure the Facility meets agreed performance warranties, pursuant to the terms and conditions set forth in the applicable SFC, Interconnection Agreement and/or Rule No. 14H.
6. Electric energy delivered to the Subscriber Organization by the Company shall be billed under the Company's applicable rate schedule. Electric energy delivered to the Subscriber Organization by the Company shall be metered separately from the electric energy delivered by the Subscriber Organization to the Company, either by use of multiple meters or a meter capable of separately recording the inflow and outflow of electricity. Electric energy generated by the CBRE Small Project shall not be used to offset electric energy needs of the Facility itself so as to maximize the output of the Facility and the corresponding bill credits of the Subscribers to such Facility.
7. Subscriber Organization will calculate and will be responsible for the accuracy of the Subscriber's monthly credit. The Subscriber's monthly credit will be provided by the Subscriber Organization to the Company in dollars, per Part I, Section C above and the SFC, no later than ten days after the end of each calendar month.
8. Subscriber Organization's notification of a Subscriber's acquisition of a subscription shall be Subscriber Organization's representation and warranty that the Subscriber Organization has executed a Subscriber Agreement with the Subscriber and provided a completed Disclosure Checklist executed by the Subscriber that is attached to the Subscriber Agreement for such Subscriber. The Administrator, IO for the CBRE Program, or the Commission may request copies of all Subscriber Agreements and/or Disclosure Checklists completed by the Subscriber Organization with its Subscribers at any time during the term of the Subscriber Organization's Facility.

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

9. The Company may, but shall not be required to, confirm that the Subscribers submitted by the Subscriber Organization are qualified pursuant to Part I, Section B above for participation in the CBRE Phase 2 Program. If any Subscribers are not qualified or are not purchasing an interest within the allowed limits set out in Part I, Section B above, then the Subscribers shall not be accepted into Phase 2 of the CBRE Program, and the Company shall notify the Subscriber Organization of all disqualified Subscribers and remove them from the roster of that Subscriber Organization's list of Subscribers.
10. Generator/Equipment Certification By Subscriber Organization: The Subscriber Organization shall ensure that the CBRE Projects utilize inverter technology compliant with Institute of Electrical and Electronics Engineers IEEE Std 1547-2018, Underwriters Laboratories and the Company's Source Requirement Document Version 2.0 (though not preferred, the Company will accept compliance with the Company's Source Requirement Document Version 1.1 for CBRE Projects with an executed Interconnection Agreement and SFC prior to or on June 30, 2021). The Subscriber Organization shall certify that the installed generating equipment will meet the appropriate preceding requirement(s) and can supply documentation that confirms compliance, including a certification of the same from the Installing Electrical Contractor upon request by the Company.

J. ALLOWED CBRE FACILITY DEVELOPMENT TIMEFRAME

1. Pre-Execution Requirements: Prior to execution of the SFC and Interconnection Agreement, CBRE Facilities must comply with the requirements of this CBRE Rule No. 29 and prove that the CBRE Facility is "shovel-ready" and actively progressing towards completion. Company shall issue a written notice to the Subscriber Organization that will list all documentation that is required from the Subscriber Organization and/or any action that must be taken by the Subscriber Organization in order to comply with the CBRE Rule No. 29. Unless otherwise expressly specified in an existing tariff, the Subscriber Organization shall have 15 calendar days from the date of such notice to submit the required documentation and/or provide evidence that the required action has been completed.
2. Project Development Updates: Once the SFC and Interconnection Agreement are executed the Subscriber Organization agrees to provide the Company informational updates related to the development of the CBRE Facility upon request. Unless otherwise expressly specified in an existing tariff, the Subscriber Organization shall have 15 calendar days from the date of such notice to submit the required documentation and/or provide evidence that the required action has been completed. These updates can include but are not limited to:

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

- Construction Milestones
  - Financing
  - Governmental Approvals for Development
  - Site Control
  - Land Rights for Company-Owned Interconnection Facilities
  - Design and Engineering
  - Major Procurement
  - Construction
  - Interconnection
  - Startup Testing and Commissioning
3. Commercial Operations Date: CBRE Phase 2 Facilities must be placed into operation within the timeframe specified in the SFC and measured from the Execution Date of the SFC. After completion of required testing by the Company, a Subscriber Organization will be permitted to commence commercial operations as of the first (1<sup>st</sup>) day of the month immediately following the Company's acceptance of the CBRE Phase 2 Facility.

K. REMOVAL OF CBRE FACILITY FROM CBRE PROGRAM AND TERMINATION:

1. Failure to Meet Pre-Execution Requirements or Post-Execution Requirements: Should a Subscriber Organization fail to comply with pre-execution (before execution of the Interconnection Agreement or SFC) requirements, the Subscriber Organization's Facility shall be subject to removal from the CBRE Program. Should a Subscriber Organization fail to meet post-execution requirements specified in this Rule No.29, the SFC or the Interconnection Agreement, the SFC and the Interconnection Agreement shall be subject to termination in accordance with the terms of the SFC, the Interconnection Agreement (as applicable) and this Rule No. 29. Company, with concurrence of the IO, shall notify the Subscriber Organization when a requirement has been missed or defaulted upon (after any applicable cure period) in accordance with the notice provisions under the SFC or the Interconnection Agreement. The Subscriber Organization shall have 5 business days to provide proof that the Company and IO's determination was in error. If no response is received or if the proof is deemed insufficient by the Company and IO, the Subscriber Organization's Facility in question may be removed from the CBRE Program or the SFC and Interconnection Agreement may be terminated, as may be applicable, with notice to the Subscriber Organization, which termination shall be effective no earlier than 30 days after such notice. Company shall provide a copy of such notice of termination to all Subscribers of such Facility, the IO, and the Commission. Concurrence of both the Company and the IO shall be required before a CBRE Facility can be removed from the CBRE Program or an SFC and Interconnection Agreement can be terminated. Upon removal of a CBRE Facility from the CBRE Program or termination of an SFC and

MAUI ELECTRIC COMPANY, LIMITED



Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

Interconnection Agreement, any fees and security deposits paid to the Company by the Subscriber Organization for such Facility shall be forfeited.

2. Failure to Meet Commercial Operations Date: Should a Subscriber Organization fail to place a CBRE Phase 2 Facility into operation within the timeframe specified in the SFC, the SFC (and Interconnection Agreement) may be terminated and any fees and security deposits paid to the Company by the Subscriber Organization will be forfeited all as specified in the SFC. If terminated by the Company, Subscriber Organization shall not retain its capacity and/or queue space in the CBRE Program once terminated. If the Subscriber Organization subsequently wishes to complete its CBRE Phase 2 Facility, the Subscriber Organization will be required to re-apply to be a Subscriber Organization under these tariff rules, subject to all requirements herein, including capacity limitations and payment of fees.
3. Failure to Comply with CBRE Program Tariff: Should a Subscriber Organization fail to abide by any of the CBRE Program rules of this Rule No. 29, the Subscriber Organization's CBRE Facility may be subject to termination and removal from the CBRE Program. If the IO is still overseeing the CBRE Program, the Company shall obtain concurrence from the IO before any termination of a CBRE Facility may occur. No termination may occur prior to 30 days after notice of termination is provided by the Company to the Subscriber Organization.
4. IO Oversight: The IO will monitor the CBRE Small Projects to ensure an impartial and fair process. The IO's oversight over CBRE Small Projects shall continue until projects reach commercial operations, subject to direction and oversight by the Commission.

L. EXTENSIONS FOR GOOD CAUSE

When extraordinary circumstances exist that may cause a Subscriber Organization to miss a pre-execution requirement, post-execution milestone or delay the completion of a CBRE Facility within the allowed Facility development timeframe, the Subscriber Organization may request an extension, not to exceed 90 days, of the applicable deadline. All requests for extensions must be made at the time of the event that necessitated the need for an extension. The Company and the IO may each unilaterally approve a request for an extension. A request for an extension may only be rejected by the joint approval of the Company and IO. To the extent that any delays are caused by the Company, a day-for-day extension of time for the period of the delay shall be granted to the affected CBRE Facility to comply with the applicable deadline.

M. COMMISSION OVERSIGHT

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

The Commission shall have ultimate oversight over the CBRE Program. Material disputes unresolved after consultation with the IO may be presented to the Commission for review and the Commission may issue guidance and/or orders to resolve such disputes consistent with this Rule No. 29. Contractual disputes between Subscribers and Subscriber Organizations and/or between Subscriber Organizations and Company shall be resolved in accordance with the applicable contract between the parties. The IO, pursuant to the Framework, may act as a mediator in any dispute between Subscriber Organizations and the Company.

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

PART II: For CBRE Project Sizes 250kW and Above

A. AVAILABILITY AND PROGRAM CHARACTERISTICS

1. Availability and Capacity

- a. Phase 2 of the Company's CBRE Program is available to Customers.
- b. Capacity: Two hundred (200) megawatts (MW) of available capacity shall be apportioned across the islands of Hawai'i, Maui and O'ahu as follows:

Tranche 1:

Hawai'i: 12.5 MW  
Maui: 12.5 MW  
O'ahu: 75 MW

Tranche 2:

Hawai'i: 12.5 MW  
Maui: 12.5 MW  
O'ahu: 75 MW

Moloka'i: 2.75 MW (combined for Tranches 1 and 2)  
Lāna'i: 3 MW (combined for Tranches 1 and 2)

2. Project Classes: Eligibility shall be limited to photovoltaic generation projects. Projects greater than or equal to 250kW up to 5 MW (O'ahu) and 2.5 MW (Hawai'i and Maui) are referred to hereafter as "CBRE Mid-Tier Projects". All projects proposed with sizes above the CBRE Mid-Tier Projects are referred to hereafter as "CBRE Large Projects".
3. Project selection for the allocated Capacities specified above shall be accomplished by a request for proposals ("RFP") conducted under the applicable competitive bidding framework rules issued by the Commission.<sup>5</sup> All capacity available for Moloka'i and Lāna'i will be available in a single procurement in Tranche 1. CBRE project procurement for Lāna'i shall be combined with the Company's Variable Renewable Dispatchable Generation Paired With Energy Storage RFP. Details for all RFPs will be available when such RFPs are issued following Commission direction and order.

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<sup>5</sup> Currently, the Framework for Competitive Bidding or the "Framework" dated December 8, 2006, adopted by the Commission in Docket No. 03-0372.

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

- a. Interconnection of CBRE Mid-Tier Projects shall be specified in the Power Purchase Agreement for Renewable Dispatchable Generation for CBRE Mid-Tier Projects (the “Mid-Tier RDG PPA”) and applicable rules and requirements under Rule No. 14H.
- b. Interconnection of CBRE Large Projects shall be specified in the Power Purchase Agreement for Renewable Dispatchable Generation for CBRE Large Projects (the “Large RDG PPA”)
- c. Battery storage requirements shall be specified in the applicable Mid-Tier RDG PPA or Large RDG PPA (references to “RDG PPA” herein shall mean the Mid-Tier RDG PPA or the Large RDG PPA, as applicable).
- d. Independent RFP solicitations will be conducted by the applicable Company for the islands of Hawai‘i, O‘ahu and Maui for CBRE projects dedicated to LMI customers (“CBRE LMI Projects”). There will be no cap on the size of any CBRE LMI Project subject to system limitations, including limitations on line capacity (to be determined by IRS), and a minimum project size of 250 kW. The form of contract used, either the Mid-Tier RDG PPA or the Large RDG PPA, including provisions regarding interconnection and battery storage, will be predicated on project size and subject to system limitations established by the Company. See Part III below.

B. CUSTOMER PARTICIPATION AND ELIGIBILITY

The Customer participation and eligibility requirements of Part I, Section B of this Rule No. 29 shall apply to Customer participation in CBRE Mid-Tier Projects and CBRE Large Projects.

C. CREDIT RATE

1. Subscribers who subscribe to a CBRE Program interest shall continue to receive electric energy from the Company in accordance with Rule No. 8, the applicable rate schedule and Company rules filed with the Commission. All rates, terms, and conditions from the applicable rule, rate schedules and Company rules shall continue to apply.
2. For CBRE Mid-Tier Projects and CBRE Large Projects the Subscriber’s bill credit will be equal to the Subscriber’s interest in the availability of the CBRE Facility’s energy output, expressed as a percentage of the Facility’s Contract Capacity multiplied by the Lump Sum Payment specified in the applicable RDG PPA, which shall result in a dollar amount CBRE bill credit per month. Applicants responding to any CBRE RFP shall be required to bid a proposed Lump Sum Payment as required under the applicable RFP in

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

order to determine the Lump Sum Payment. A Subscriber's bill credit may be reduced pursuant to the applicable RDG PPA so long as such circumstances are disclosed by the Subscriber Organization in the Disclosure Checklist.

3. The applicable RFP for each island shall determine the CBRE Mid-Tier Project(s) and/or CBRE Large Projects in the Final Award Group. Each Final Award Group Project's bid-specified Lump Sum Payment shall determine the corresponding CBRE bill credit for a Subscriber's interest in such project.
4. The monthly CBRE bill credit will not begin to accrue until commercial operations is achieved. The monthly CBRE bill credit for each Subscriber shall then begin to accrue on the first (1<sup>st</sup>) day of the month in which Subscriber completes the acquisition of Subscriber's subscription into a CBRE Phase 2 Facility, provided that Subscriber Organization promptly notifies the Administrator of Subscriber's subscription no later than the last calendar day of the month in which Subscriber subscribed into the CBRE Phase 2 Facility. Subscriber's monthly CBRE bill credit shall begin accruing on the first (1<sup>st</sup>) day of the next month if the purchase or transfer of all or any portion of a Subscriber's Allocation is made after the twentieth (20<sup>th</sup>) day of the month. The amount of the Subscriber's monthly CBRE bill credit shall be equal to the Subscriber's interest in the Facility's contract capacity (measured as a percentage) multiplied by the Facility's Lump Sum Payment.
5. A Subscriber's monthly CBRE bill credit shall be applied to offset eligible charges on the Subscriber's electric bill no earlier than the 15<sup>th</sup> day of the following month but no later than two billing cycles. Subscribers will see eligible credits on a future bill depending on the day their meter is read. Eligible charges on the Subscriber's electric bill shall be all light and power charges.
6. The Subscriber's electric bill cannot be reduced below the sum of the customer charge, the Green Infrastructure Fee, and any other per-customer charge for the customer's applicable rate schedule or the minimum bill applicable in the underlying tariff, whichever is greater.
7. If the Subscriber's monthly CBRE bill credit exceeds the eligible charges, the value of excess credits shall be carried over to the next billing period(s) within the current 12-month period, as a CBRE bill credit and applied to the Subscriber's electric bill(s) subject to Part II, Sections C.5 and C.6 above. Reconciliation will be made at the end of every 12-month period by applying the Subscriber's remaining CBRE bill credit to the Subscriber's remaining eligible charges within the 12-month period. Any CBRE bill credit that remains unused at the end of each 12-month period shall be extinguished.

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

8. If the Subscriber terminates its CBRE participation prior to the end of any 12-month period, the Company shall reconcile the remaining CBRE bill credit to remaining eligible charges at the end of the monthly billing period when service was terminated, similar to the reconciliation that would have been performed at the end of the normal 12-month period. Any CBRE bill credit that remains unused shall be extinguished.
9. Compensation for Unsubscribed RDG Availability.
- a. “Unsubscribed RDG” is CBRE Phase 2 Facility Contract Capacity availability that is not associated with any Subscriber subscription and therefore not allocated to a Subscriber. The designated Subscriber Organization under the RDG PPA with the Company shall be compensated for this Unsubscribed RDG as a proportion of the Facility’s Lump Sum Payment equal to the percentage of the unallocated portion of the Facility’s contract capacity to the total contract capacity multiplied by the Lump Sum Payment, except as specified in sub-part 9.b below.
- b. The following shall be effective 6 months from the date of initial commercial operations. Compensation for Unsubscribed RDG shall be as follows:

For any Facility with more than 15% Unsubscribed RDG, the compensation for the Unsubscribed RDG availability for that month shall be discounted by the percentage of Unsubscribed RDG.

Unsubscribed capacity shall be calculated at the end of the month and applied retroactively to the CBRE Facility when calculating that month’s Unsubscribed RDG payment.

Table 4 below illustrates the effect of this Unsubscribed RDG provision as applies to a CBRE Facility with a contract capacity of 1MW (1000kW), assuming varying levels of unsubscribed capacity.

Table 4: Treatment of Unsubscribed RDG for CBRE Mid-Tier and Large Projects

<b>Example CBRE Facility Characteristics</b>	
Lump Sum Payment (\$)	1000.00
Facility Capacity (kW)	1000

<b>Billing Month</b>	<b>Subscribed</b>	<b>Unsubscribed Capacity (%)</b>	<b>Lump Sum Payment</b>	<b>Lump Sum Payment with</b>
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MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

	Capacity (kW)		Attributable to SO (\$)	Unsubscribed RDG % Reduction (\$)
1	250	75%	750	750.00
2	250	75%	750	750.00
3	450	55%	550	550.00
4	650	35%	350	350.00
5	800	20%	200	200.00
6	900	10%	100	100.00
7*	900	10%	100	100.00
8	900	10%	100	100.00
9	800	20%	200	200-20% = 160.00
10	650	35%	350	350-35% = 227.50
11	750	25%	250	250-25% = 187.50
12	850	15%	150	150-0% = 150.00

\*Unsubscribed RDG provision becomes applicable

10. A Subscriber Organization shall be required to have a minimum of 4 individual Subscribers per CBRE Facility at all times after the six-month grace period described below. For a period of 6 months following initial commercial operations, the Subscriber Organization shall incur no payment reduction if it does not have or falls below this minimum number of Subscribers. Effective after 6 months of commercial operations, the following shall be placed into effect for the remainder of the term of the CBRE Facility:
- a. For any CBRE Facility which does not have the minimum 4 individual Subscribers for any month during the term of its PPA, the unmet percentage of Subscribers to the minimum number of 4 required Subscribers shall reduce the Subscriber Organization's allocation of Unsubscribed RDG delivered in such month by such percentage. For example, if a CBRE Mid-Tier or CBRE Large Project has only 3 Subscribers for any given month, the unmet number of Subscribers is 1 and the percentage to the 4 minimum Subscribers required will be 25%. The Subscriber Organization's allocation of the Lump Sum Payment for Unsubscribed RDG will be reduced by 25%.
  - b. If the Subscriber Organization's Unsubscribed RDG for that CBRE Facility is also greater than 15% in such month, the Subscriber Organization's allocation of the Lump Sum Payment for Unsubscribed RDG delivered in that month shall be reduced

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

by a percentage equal to the sum of (1) the percentage determined in sub-part a. above and (2) the percentage of Unsubscribed RDG for that month. If the amount of Unsubscribed RDG is less than 5% in any month, any payment reduction shall be calculated as if such Unsubscribed RDG was 5% for such month and if the Subscriber Organization's allocation of the Lump Sum Payment for Unsubscribed RDG is insufficient to offset the calculated payment reduction, the Subscriber Organization shall pay the difference upon demand.

- c. If the Subscriber Organization does not have the required minimum of 4 individual Subscribers but otherwise has no Unsubscribed RDG, the Subscriber Organization shall be subject to liquidated damages as specified below. Continued failure to meet the 4 individual Subscriber threshold under these circumstances by any Subscriber Organization for more than one year shall be construed as an intent to disregard the requirements of this Rule 29 and could result in termination and removal from the CBRE Program in accordance with Part I, Section K.3.

Damages for Failure to Maintain Minimum Number of Subscribers. The percentage determined in sub-part a. shall be multiplied by the amount equal to 5% of the applicable monthly Lump Sum Payment and the resulting dollar amount shall be the liquidated damages for the Subscriber Organization's failure to maintain the minimum number of Subscribers for any given month.

11. Residential Customer Requirement. In Phase 2, 40% of the Facility's CBRE capacity shall be reserved for individual subscriptions for residential Customers after the grace period described below. For a period of 6 months following initial commercial operations, the Subscriber Organization shall incur no payment reduction if it does not have or falls below this minimum percentage of residential Subscribers (either the 40% minimum or the higher percentage proposed by a Subscriber Organization). Effective after 6 months of commercial operations, the following shall be placed into effect for the remainder of the term of the CBRE Facility:

- a. For any CBRE Facility which does not have the minimum 40% of the Facility's CBRE capacity allocated to residential Subscribers for any month during the term of its PPA, the difference in percentage between the project's actual residential Subscriber percentage and the 40% minimum shall reduce the Subscriber Organization's allocation of the Lump Sum Payment allocated to Unsubscribed RDG. The Subscriber Organization's allocation of the Lump Sum Payment delivered shall be reduced by a factor equal to one-fourth (0.25) of such percentage difference. For example, if a project's residential Subscriber percentage is 30%, the difference, 10%, from the 40% minimum requirement, shall be multiplied by 0.25 ( $10\% * 0.25 =$

MAUI ELECTRIC COMPANY, LIMITED



Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

- 2.5%). The 2.5% result shall be used to reduce the Subscriber Organization's allocation of the Lump Sum Payment by such percentage.
- b. For CBRE Mid-Tier Projects and CBRE Large Projects which propose in its bid proposal a higher residential Subscriber goal than the 40% minimum, e.g., 50%, such Subscriber Organization shall be required to meet such goal and will be subject to a reduction in its allocation of the Lump Sum Payment for failing the 40% minimum but at a lower rate. A failure to reach the Subscriber's pledged goal for residential Subscribers above the 40% shall be subject to a reduction in the Subscriber Organization's allocation of the Lump Sum Payment for Unsubscribed RDG delivered in the net month by a factor equal to one-tenth (0.10) of the percentage difference between the Subscriber Organization's pledged percentage greater than the 40% minimum percentage and the actual percentage above the 40% minimum. For example, if a Subscriber Organization pledges a 50% minimum residential Subscriber percentage and, for a given month, only has 45% residential Subscribers, the shortfall from its goal and the actual percentage above 40% is 5%. The Subscriber Organization's resulting payment reduction shall be  $0.10 * 5\% = 0.5\%$ . If the Subscriber Organization instead had only 20% residential Subscribers, the Subscriber Organization would be subject to a reduced allocation of the sum of  $(0.25 * 20\%)$  plus  $(0.10 * 10\%) = 5\% + 1\% = 6\%$ .
- c. If the Subscriber Organization's Unsubscribed RDG for that CBRE Facility is also greater than 15% in such month, the allocation of the Lump Sum Payment for Unsubscribed RDG in that month shall be reduced by the sum of the percentage payment reduction for the unmet residential Subscriber plus the percentage of Unsubscribed RDG for that month. If the amount of Unsubscribed RDG is less than 5% in any month, any payment reduction shall be calculated as if such Unsubscribed RDG was 5% for such month and if the Subscriber Organization's allocation of the Lump Sum Payment for Unsubscribed RDG is insufficient to offset the calculated payment reduction, the Subscriber Organization shall pay the difference upon demand.
- d. If the Subscriber Organization does not have the required minimum percentage of residential Subscribers but does not have any Unsubscribed RDG, the Subscriber Organization shall be subject to equivalent liquidated damages as specified below. Continued failure to meet the Residential Subscriber minimum requirement under these circumstances by any Subscriber Organization for more than one year shall be construed as an intent to disregard the requirements of this Rule No. 29 and could result in termination and removal from the CBRE Program in accordance with Part I, Section K.3.

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

Damages for Failure to Maintain Minimum Percentage of Residential Subscribers. The percentage determined in sub-part a. shall be multiplied by amount equal to 5% of the applicable monthly Lump Sum Payment and the resulting dollar amount shall be the liquidated damages for the Subscriber Organization's failure to maintain the required percentage of residential Subscribers for any given month.

12. Payment reductions from Subscriber Organization's allocation for Unsubscribed RDG under Part II, Sections C.10 and C.11 above shall be cumulative in effect. In any given month after the first 6 months of commercial operations, if the Subscriber Organization fails to meet multiple minimum requirements or exceeds maximum thresholds, the percentage reductions in Subscriber's allocation specified above will be added and the aggregate sum of such percentages shall be used to reduce the Subscriber's allocation for Unsubscribed RDG in any given month.

D. SELECTION PROCESS TO AWARD CBRE PROGRAM CAPACITY FOR PROJECTS GREATER THAN 249KW

1. A Competitive Bidding (RFP) Process developed by Company with oversight by the IO shall be utilized to select eligible Subscriber Organizations to participate in the CBRE Program other than the allocation for CBRE Small Projects (See Part I of this Rule No. 29). The Company shall adhere to the Framework to administer the RFP Process.
2. Price and Non-Price Criteria as designated in the RFP shall be the primary evaluated criteria reviewed by the Company, which criteria shall be more particularly described in the RFP.
3. IO Oversight. The IO will monitor the RFPs to ensure an impartial and fair process. The IO's oversight shall continue through, (1) selection and execution of the Mid-Tier RDG PPA and (2) selection and negotiation of the Large RDG PPA. IO oversight and involvement shall be specified in the RFP but subject always to direction and oversight by the Commission.

E. SUBSCRIBER ORGANIZATION ELIGIBILITY

1. Except where further defined in an individual RFP, eligibility to bid into the RFPs for Phase 2 of the CBRE Program for projects 250kW and greater shall be open to all bidders, including independent power producers, the Companies (except for the CBRE LMI RFPs), and any of their affiliates.

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

2. For utility self-build projects with name plate capacities up to 5MW on O‘ahu and up to 2.5MW on Maui and Hawai‘i Island, the Commission will not require the utility to submit an additional application pursuant to General Order No. 7, but the Commission will hold the bidding utility to the terms of its bid, similar to independent power producers.
  3. For affiliate and affiliate-related bids on projects with name plate capacities up to 5MW on O‘ahu and up to 2.5MW on Maui and Hawai‘i Island, the Commission will not require an additional review pursuant to the Affiliate Transaction Requirements adopted in Docket No. 2018-0065, but the Commission will hold these bidders to the terms of their bids.
  4. All independent power producers, including affiliates and affiliate-related entities shall also meet the eligibility requirements specified in the RFP.
- F. APPROVAL PROCESS FOR PROJECTS SELECTED TO THE CBRE PHASE 2 FINAL AWARD GROUP
1. CBRE Mid-Tier Projects
    - a. Shall be permitted to proceed toward development and construction of its project with no further approval required by the Commission.
    - b. After the technical review has been completed the Subscriber Organization shall be required to execute and deliver the pre-approved CBRE Mid-Tier RDG PPA before proceeding to develop its project.
  2. CBRE Large Projects
    - a. Shall negotiate the terms and conditions of the Large RDG PPA that will govern the terms of the project with the Company.
    - b. The Large RDG PPA between the Subscriber Organization and the Company for each CBRE Large Project shall be subject to Commission review and approval before proceeding to develop its project.
  3. CBRE LMI Projects
    - a. For CBRE LMI Projects that fall within the CBRE Mid-Tier Project size, the provisions of Part II, Section F.1 shall apply.

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

- b. For CBRE LMI Projects that fall within the CBRE Large Project size, the provisions of Part II, Section F.2 shall apply.
4. Development timeframes, milestones, and potential extensions shall be governed by the applicable RDG PPA and/or this Rule No. 29.

G. CO-LOCATION LIMITATIONS

If more than one Facility is located on a single parcel of land (i.e., Tax Map Key) and sharing a single point of interconnection is being considered for participation in the CBRE Program, they shall be considered as a single Facility for the purpose of determining whether the cumulative size of the facilities fall within the project size limitations set forth in Part II, Section A above. The IO will monitor and review interconnection/program applications to guard against co-location.

H. COMMUNICATIONS AND CONTROLABILITY

The CBRE Mid-Tier Projects and CBRE Large Projects shall require additional communications and control systems to ensure the appropriate level of company dispatch as specified in the applicable RDG PPA.

I. COMMISSION OVERSIGHT

The Commission shall have ultimate oversight over the CBRE Program. Material disputes regarding the CBRE Program unresolved after consultation with the IO may be presented to the Commission for review and the Commission may issue guidance and/or orders to resolve such disputes consistent with this Rule No. 29. Contractual disputes between Subscribers and Subscriber Organizations and/or between Subscriber Organizations and Company shall be resolved in accordance with the applicable contract between the parties. The IO, pursuant to the Framework, may act as a mediator in any dispute between Subscriber Organizations and the Company.

J. SUBSCRIBER ORGANIZATION AGREEMENTS

1. Subscriber Organizations selected in the Final Award Group for any CBRE RFP that have accepted the Company's offer to proceed with its project shall negotiate the appropriate PPA for its project size as specified in Part II, Section F above. Prior to executing the PPA, but only after the Subscriber Organization has been awarded CBRE Phase 2 program capacity, Subscriber Organizations may announce the availability, market, and

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

solicit Subscribers provided that they disclose the project is not yet final. Subscriber Organizations may also accept deposits for interests in such Subscriber Organization's CBRE Facility provided that the Subscriber Organization has established an IO-approved escrow account. IO may reduce or waive the deposit and escrow account requirement for CBRE Small Projects, non-profit Subscriber Organizations, and pay-as-you-go projects (where no upfront deposit is required). Subscriber Organizations shall not be permitted to formally complete subscriptions with Subscribers until the Subscriber Organization (a) has executed and delivered to the Company the applicable PPA, (b) for CBRE Large Projects, has obtained approval from the Commission of the Subscriber Organization's project, and (c) has completed all other required documents and agreements with Company necessary for the Subscriber Organization to commence development and construction of its CBRE Facility.

2. The PPA shall remain in effect for the Term set forth therein.
3. Subscriber Organizations shall pay fees as described in the applicable RFP and in Part I, Section E.10 above. Hawaiian Electric may require a Subscriber Organization to provide its current financial statements for Hawaiian Electric's review prior to determining whether to extend unsecured credit to the Subscriber Organization for any reason.
4. Subscriber Organizations shall ensure CBRE Mid-Tier Projects and CBRE Large Projects are built and achieve commercial operations within the specific number of months as specified in the applicable PPA.
5. Subscriber Organizations are responsible for interconnection, operation and maintenance of their Facility to ensure the Facility meets agreed performance warranties, pursuant to the terms and conditions set forth in the applicable PPA and, as applicable for CBRE Mid-Tier Project, Rule No. 14H and Part I, Section H.
6. Electric energy delivered to the Subscriber Organization by the Company shall be billed under the Company's applicable rate schedule. Electric energy delivered to the Subscriber Organization by the Company shall be metered separately from the electric energy delivered by the Subscriber Organization to the Company, either by use of multiple meters or a meter capable of separately recording the inflow and outflow of electricity. Electric energy generated by the CBRE Mid-Tier Project or CBRE Large Project shall not be used to offset electric energy needs of the Facility itself so as to maximize the output of the Facility and the corresponding bill credits of the Subscribers to such Facility.

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

7. Subscriber Organization will calculate and will be responsible for the accuracy of the Subscriber's monthly credit. The Subscriber's monthly credit will be provided by the Subscriber Organization to the Company in dollars, per the requirements of the PPA, no later than ten days after the end of each calendar month.
8. Subscriber Organization's notification of a Subscriber's acquisition of a subscription shall be Subscriber Organization's representation and warranty that the Subscriber Organization has executed a Subscriber Agreement with the Subscriber and provided a completed Disclosure Checklist executed by the Subscriber that is attached to the Subscriber Agreement for such Subscriber. The Administrator, IO for the CBRE Program, or the Commission may request copies of all Subscriber Agreements and/or Disclosure Checklists completed by the Subscriber Organization with its Subscribers at any time during the term of the Subscriber Organization's Facility.
9. The Company may, but shall not be required to, confirm that the Subscribers submitted by the Subscriber Organization are qualified pursuant to Part I, Section B above for participation in the CBRE Phase 2 Program. If any Subscribers are not qualified or are not purchasing an interest within the allowed limits set out in Part I, Section B above, then the Subscribers shall not be accepted into Phase 2 of the CBRE Program and the Company shall notify the Subscriber Organization of all disqualified Subscribers and remove them from the roster of that Subscriber Organization's list of Subscribers.

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

PART III: Specific LMI Provisions

A. AVAILABILITY AND CAPACITY

Bidding will open for a minimum of one dedicated LMI project (“CBRE LMI Project”) on each island of O‘ahu, Hawai‘i Island, and Maui. CBRE LMI Projects shall be limited to Subscribers who are LMI Customers and LMI Anchor Tenants, as defined in Part III, Section B below.

CBRE LMI Project capacity shall not be capped and will not count against the 235MW capacity allocated for CBRE Phase 2. There will be no maximum project size for CBRE LMI Projects, and bidders may propose any project size based on market demand and project cost.

The Commission set a minimum threshold of one project per island but the Company may select, and the Commission may approve additional projects if there are more bids with compelling customer benefits.

If there are no successful competitive bids for a CBRE LMI Project on one island or more, a utility self-build option may be considered by the Commission for that island. Any utility self-build application shall be consistent with Section VI of the Framework.

B. LMI DEFINITION

An individual Customer may be deemed to be a LMI Customer, eligible to be a Subscriber in a CBRE LMI Project (an “LMI Subscriber”) if such Customer meets one of the following criteria:

1. A member of a household with a household income confirmed via self-certification as equal to or less than the applicable income limits established by the U.S. Department of Housing and Urban Development (“HUD”) for a LMI Household. To qualify, a household’s income must be equal to or less than the income limit established by HUD for the customer’s household size in the appropriate county. Refer to the HUD website to obtain the income limits; or
2. A participant in any one or more of the following programs:
  - a. Low Income Home Energy Assistance Program (LIHEAP);
  - b. Supplemental Nutrition Assistance Program (SNAP);
  - c. Housing Choice Voucher Program (Section 8);

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

- d. Hawaii MedQuest Program;
  - e. Weatherization Assistance Program (WAP);
  - f. Lifeline Support for Affordable Communications (Federal);
  - g. Lifeline Support for Affordable Communications (State);
  - h. Child Care Connection Hawaii;
  - i. Preschool Open Doors;
  - j. National School Lunch Program (NSLP);
  - k. Community Eligibility Provision (CEP) of the NSLP;
  - l. Hawaii Head Start;
  - m. Early Head Start;
  - n. Supplemental Security Income (SSI);
  - o. Children's Health Insurance Program (CHIP);
  - p. Women, Infants and Children (WIC);
  - q. Temporary Assistance for Needy Families (TANF);
  - r. Temporary Assistance for Other Needy Families (TAONF);
  - s. Hawaii Energy Affordability and Accessibility Program;
  - t. Spectrum Internet Assist Program
  - u. Hawaiian Telcom Internet Kokua Program
  - v. Any verified government (Hawaii State or Federal) program providing services to LMI persons or households;
  - w. Any verified government (Hawaii State or Federal) or Hawaii non-profit program serving Asset Limited Income Constrained Employed (ALICE)<sup>6</sup> persons or households; or
3. A person residing in any zip code identified by Hawaii Energy as qualifying for LMI status (as such eligibility is defined by Hawaii Energy, which definition may be revised from time to time, provided, however, that prior eligibility shall not be rescinded as a result of any such revisions unless so designated by Hawaii Energy).

The following business or organization Customers may be deemed to be a “LMI Anchor Tenant” and eligible to be a LMI Subscriber only for CBRE LMI Projects if such Customer meets one of the following criteria:

- 1. A city, county, state or federal governmental agency; or
- 2. An IRC Section 501(c)(3) organization; or

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<sup>6</sup> Aloha United Way designation for employed but asset limited or income constrained persons. Certain AUW sponsored or supported programs may target or provide eligibility for participation in programs designed for ALICE designees.



Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

3. A participant in the Energy Advantage program within the Affordability and Accessibility program established by Hawaii Energy reserved for certain small businesses and restaurants (as such eligibility is defined by Hawaii Energy, which definition may be revised from time to time, provided, however, that prior eligibility shall not be rescinded as a result of any such revisions unless so designated by Hawaii Energy).

An LMI Subscriber shall be either (1) a LMI Customer or (2) a LMI Anchor Tenant. No more than 40% of the available Subscriber Allocations in any CBRE LMI Project shall be allocated to LMI Anchor Tenants. The remainder of all Subscriber Allocations in such CBRE LMI Project shall be allocated to LMI Customers.

C. LMI SUBSCRIBER ELIGIBILITY VERIFICATION AND APPLICATION  
REQUIREMENTS

1. Subscriber Organizations developing a CBRE LMI Project will provide to and obtain from each LMI Customer and LMI Anchor Tenant the applicable executed CBRE Program-approved certification (“LMI Subscriber Certification”), attached hereto as Appendix VI and Appendix VII, respectively, certifying that the LMI Customer or LMI Anchor Tenant is eligible to be classified as an LMI Subscriber under the applicable eligibility requirements referred to in Part III, Section B above.
2. Subscriber Organizations are required to collect the completed LMI Subscriber Certification from each LMI Customer and each LMI Anchor Tenant at the time each applies to subscribe in a CBRE LMI Project. So long as the Subscriber Organization collects the applicable completed LMI Subscriber Certification from each of its LMI Subscribers, no separate verification at the time of subscription by the Subscriber Organization is required.
3. Subscriber Organization’s enrollment of the LMI Subscriber shall be Subscriber Organization’s representation that it has collected the LMI Subscriber Certification from such LMI Subscriber.
4. Once a LMI Customer’s eligibility is confirmed by submittal of a completed LMI Subscriber Certification, subsequent income changes will not disqualify the LMI Customer’s eligibility.
5. LMI Subscribers shall be required to acquire a minimum subscription of 0.5 kW AC.

D. LMI SUBSCRIBER ANNUAL VERIFICATION DURING TERM

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

1. Annually the Company at its discretion will complete spot checks of up to 10% of Subscribers designated as LMI Subscribers, from primarily, but not limited to, new LMI Subscribers admitted within the last 2 years, to confirm the Subscriber Organization has collected the completed the LMI Subscriber Certification for such LMI Subscriber.
2. If the Subscriber Organization is unable to provide the requested LMI Subscriber Certifications within 30 days, the Subscriber Organization will obtain the Certification from each LMI Subscriber within 15 business days.
3. If a threshold of 25% or more of the random sample fails the initial confirmation that the Subscriber Organization has collected the completed LMI Subscriber Certification, the Company at its discretion may perform a second sample test upon Subscriber Organization's request. The Subscriber Organization shall bear all costs of performing any subsequent verification of a second sample of 10% of all LMI subscribers.
4. If the combined sample concludes that 25% or more of the LMI Subscribers which were tested reveals that the Subscriber Organization did not collect and/or retain the required LMI Subscriber Certification from the sampled LMI Subscribers, Subscriber Organization's allocation of the Lump Sum Payment for Unsubscribed RDG will be recalculated by designating the percentage of missing LMI Subscribers verifications from the combined sample shall be added to the percentage of Unsubscribed RDG and will be subject to the payment reductions for Unsubscribed RDG as specified below.
5. For CBRE LMI Projects, any unqualified LMI Subscribers, identified through the confirmation process in Part III, Section D, or otherwise identified, may be removed as LMI Subscribers and, if in the reasonable determination of the Company, and concurred by the IO, it is determined that the LMI Subscriber intentionally provided a LMI Subscriber Certification that was incorrect in order to qualify as a LMI Subscriber, such disqualified LMI Subscriber shall prohibited from re-applying for any CBRE Project for 3 years In this situation where a LMI Subscriber is subject to losing such status, any affected CBRE LMI Project shall have six (6) months to replace the LMI Subscriber with another LMI Subscriber (either LMI Customer or LMI Anchor Tenant, as applicable) and the disqualified LMI Subscriber may remain a LMI Subscriber until it can be replaced. No liquidated damages shall be assessed against the Subscriber Organization during this six (6) month correction period.

E. PAYMENT REDUCTIONS AND LIQUIDATED DAMAGES

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

A Subscriber Organization that does not meet the 100% LMI requirement for CBRE LMI Projects shall be subject to applicable payment reductions or liquidated damages after 6 months of commercial operations as specified below.

1. Effective after 6 months of commercial operations for a CBRE LMI Project, the following shall be placed into effect for the six-month period (months 7-12) following initial commercial operations:
  - a. A CBRE LMI Project must have at least 60% of the required 100% LMI Subscriber percentage for any month between month 7 and month 12, inclusive, following initial commercial operations (the “Interim LMI Subscriber Percentage”). The difference in percentage between the project’s actual LMI Subscriber percentage and 60% shall be used to potentially reduce the Subscriber Organization’s allocation of the Lump Sum Payment allocated to Unsubscribed RDG for the month of such shortfall. For illustrative purposes, if a CBRE LMI Project only has 50% LMI Subscribers, the Subscriber Organization is 10% short of the 60% minimum required during months 7-12 after initial commercial operations. This percentage shall be used to assess potential payment reduction or liquidated damages pursuant to sub-parts b. and sub-part c. immediately below.
  - b. If the sum of the percentage determined in sub-part a. above plus the percentage deemed to be non-LMI under Part III, Section D.4. (the “Interim LMI Shortfall Percentage”), is greater than 15% for any month between month 7 and month 12, inclusive, after initial commercial operations, then the Subscriber Organization’s allocation of the Lump Sum Payment for Unsubscribed RDG delivered in that month shall be reduced by such Interim LMI Shortfall Percentage. If the amount of Unsubscribed RDG is less than 5% in any month, any payment reduction shall be calculated as if such Unsubscribed RDG was 5% for such month and if the Subscriber Organization’s allocation of the Lump Sum Payment for Unsubscribed RDG is insufficient to offset the calculated payment reduction, the Subscriber Organization shall pay the difference upon demand.
  - c. If the Interim LMI Shortfall Percentage exceeds 15% for any month between month 7 and month 12, inclusive, after initial commercial operations, but the CBRE LMI Project otherwise has no Unsubscribed RDG, the Subscriber Organization shall be subject to equivalent liquidated damages as specified below.

Damages for Failure to Achieve Interim LMI Subscriber Percentage. The Interim LMI Shortfall Percentage shall be multiplied by the amount equal to 5% of the applicable monthly Lump Sum Payment and the resulting dollar amount shall be the

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

liquidated damages for the Subscriber Organization's failure to maintain the Interim LMI Subscriber Percentage in any month between month 7 and month 12, inclusive, after initial commercial operations of the CBRE LMI Project.

2. Effective after 12 months of commercial operations for a CBRE LMI Project, the following shall be placed into effect for the remainder of the term of the CBRE LMI Project.
  - a. For any CBRE LMI Project which does not have a 100% LMI Subscriber percentage for any month during the term of the LMI RDG PPA, the difference in percentage between the project's actual LMI Subscriber percentage and 100% shall be used to potentially reduce the Subscriber Organization's allocation of the Lump Sum Payment allocated to Unsubscribed RDG for the month of such shortfall. For example, if a CBRE LMI Project only had 90% LMI Subscribers, the Subscriber Organization is 10% short of the 100% minimum required during the term of the LMI RDG PPA. This percentage shall be used to assess potential payment reduction or liquidated damages pursuant to sub-parts b. and sub-part c. immediately below.
  - b. If the sum of the percentage determined in sub-part a. above plus the percentage deemed to be non-LMI under Part III, Section D.4. (the "LMI Shortfall Percentage"), is greater than 15% for any month during the term of the LMI RDG PPA, then the Subscriber Organization's allocation of the Lump Sum Payment for Unsubscribed RDG delivered in that month shall be reduced by such LMI Shortfall Percentage. If the amount of Unsubscribed RDG is less than 5% in any month, any payment reduction shall be calculated as if such Unsubscribed RDG was 5% for such month and if the Subscriber Organization's allocation of the Lump Sum Payment for Unsubscribed RDG is insufficient to offset the calculated payment reduction, the Subscriber Organization shall pay the difference upon demand.
  - c. If the LMI Shortfall Percentage exceeds 15% for any month during the term of the LMI RDG PPA but otherwise has no Unsubscribed RDG, the Subscriber Organization shall be subject to equivalent liquidated damages as specified below. Continued failure to meet the 100% LMI percentage under these circumstances by the Subscriber Organization for more than one year shall be construed as an intent to disregard the requirements of this Rule 29 and could result in termination and removal from the CBRE Program in accordance with Part I, Section K.3.

Damages for Failure to Achieve the 100% LMI Subscriber Percentage. The LMI Shortfall Percentage shall be multiplied by the amount equal to 5% of the applicable monthly Lump Sum Payment and the resulting dollar amount shall be the liquidated

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

damages for the Subscriber Organization's failure to maintain the 100% LMI Subscriber Percentage in any month during the term of the LMI RDG PPA.

3. A Subscriber Organization that does not meet its committed-to LMI percentage specified in its bid proposal ("Committed LMI Percentage") for any CBRE Mid-Tier Project or CBRE Large Project, shall be subject to the following applicable payment reductions or liquidated damages as specified below.
4. For a period of 6 months following initial commercial operations, the Subscriber Organization shall incur no payment reduction if it should fall below its Committed LMI Percentage. Effective after 6 months of commercial operations, the following shall be placed into effect for the six-month period (months 7 -12) following initial commercial operations:
  - a. If a CBRE Mid-Tier or Large Project fails to maintain at least 60% of its Committed LMI Percentage for its project for any month between month 7 and month 12, inclusive, following initial commercial operations (the "Interim Committed LMI Percentage"). The difference in percentage between the project's actual LMI Subscriber percentage and the Interim Committed LMI Percentage, multiplied by a factor of 0.10, shall be used to potentially reduce the Subscriber Organization's allocation of the Lump Sum Payment allocated to Unsubscribed RDG for the month of such shortfall. For illustrative purposes, if a CBRE Mid-Tier or Large Project has a Committed LMI Percentage of 30%, the Interim Committed LMI Percentage is 60% of 30% or 18%. If the project has only 15% LMI Subscribers in any month between months 7-12 after initial commercial operations, the Subscriber Organization is  $3\% * 0.10 = 0.3\%$  short of the Interim Committed LMI Percentage for that month. This percentage (0.3%) shall be used to assess potential payment reduction or liquidated damages pursuant to sub-parts b. and sub-part c. immediately below.
  - b. If the sum of the percentage determined in sub-part a. above plus the percentage deemed to be non-LMI under Part III, Section D.4. (the "Interim Committed LMI Shortfall Percentage"), is greater than 15% for any month between month 7 and month 12, inclusive, after initial commercial operations, then the Subscriber Organization's allocation of the Lump Sum Payment for Unsubscribed RDG delivered in that month shall be reduced by such Interim Committed LMI Shortfall Percentage. If the amount of Unsubscribed RDG is less than 5% in any month, any payment reduction shall be calculated as if such Unsubscribed RDG was 5% for such month and if the Subscriber Organization's allocation of the Lump Sum Payment for Unsubscribed RDG is insufficient to offset the calculated payment reduction, the Subscriber Organization shall pay the difference upon demand.

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

- c. If the Interim Committed LMI Shortfall Percentage exceeds 15% for any month between month 7 and month 12, inclusive, after initial commercial operations, but the CBRE LMI Project otherwise has no Unsubscribed RDG, the Subscriber Organization shall be subject to equivalent liquidated damages as specified below.

Damages for Failure to Achieve Interim Committed LMI Percentage. The Interim Committed LMI Shortfall Percentage shall be multiplied by the amount equal to 5% of the applicable monthly Lump Sum Payment and the resulting dollar amount shall be the liquidated damages for the Subscriber Organization's failure to maintain the Interim Committed LMI Percentage in any month between month 7 and month 12, inclusive, after initial commercial operations of the CBRE Mid-Tier or Large Project.

5. Effective after 12 months of commercial operations for a CBRE Mid-Tier or Large Project with a Committed LMI Percentage, the following shall be placed into effect for the remainder of the term of the project's applicable RDG PPA.
- a. If a CBRE Mid-Tier or Large Project has not achieved its Committed LMI Percentage for any month during the term of its RDG PPA, the difference in percentage between the project's actual LMI Subscriber percentage and the Committed LMI Percentage, multiplied by a factor of 0.10, shall be used to potentially reduce the Subscriber Organization's allocation of the Lump Sum Payment allocated to Unsubscribed RDG for the month of such shortfall. For example, if a CBRE Mid-Tier or Large Project has a Committed LMI Percentage of 50% but only has 40% LMI Subscribers, the Subscriber Organization is  $10\% * 0.10 = 1.0\%$  short of its Committed LMI Percentage for that month. This percentage (1.0%) shall be used to assess potential payment reduction or liquidated damages pursuant to sub-parts b. and sub-part c. immediately below.
- b. If the sum of the percentage determined in sub-part a. above plus the percentage deemed to be non-LMI under Part III, Section D.4. (the "Committed LMI Shortfall Percentage"), is greater than 15% for any month during the term of the applicable RDG PPA, then the Subscriber Organization's allocation of the Lump Sum Payment for Unsubscribed RDG delivered in that month shall be reduced by such Committed LMI Shortfall Percentage. If the amount of Unsubscribed RDG is less than 5% in any month, any payment reduction shall be calculated as if such Unsubscribed RDG was 5% for such month and if the Subscriber Organization's allocation of the Lump Sum Payment for Unsubscribed RDG is insufficient to offset the calculated payment reduction, the Subscriber Organization shall pay the difference upon demand.

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

- c. If the Committed LMI Shortfall Percentage exceeds 15% for any month during the term of the applicable RDG PPA but otherwise has no Unsubscribed RDG, the Subscriber Organization shall be subject to equivalent liquidated damages as specified below. Continued failure to meet the Committed LMI Percentage under these circumstances by any Subscriber Organization for more than one year shall be construed as an intent to disregard the requirements of this Rule 29 and could result in termination and removal from the CBRE Program in accordance with Part I, Section K.3.

Damages for Failure to Achieve the Committed LMI Percentage. The Committed LMI Shortfall Percentage shall be multiplied by the amount equal to 5% of the applicable monthly Lump Sum Payment and the resulting dollar amount shall be the liquidated damages for the Subscriber Organization's failure to maintain the Committed LMI Shortfall Percentage in any month during the term of the applicable RDG PPA.

6. Payment reductions from Subscriber Organization's allocation for Unsubscribed RDG under this Part III, Section E above shall be cumulative in effect. In any given month after the first six months of commercial operations, if the Subscriber Organization fails to meet multiple minimum requirements or exceeds maximum thresholds, the percentage reductions in Subscriber's allocation specified above will be added and the aggregate sum of such percentages shall be used to reduce the Subscriber's allocation for Unsubscribed RDG in any given month.
7. Residential LMI Customer Requirement. For CBRE LMI Projects only, Subscriber Organizations shall reserve at least 60% of the total output of a Facility's CBRE capacity to residential LMI Customers and the aggregate percentage of LMI Anchor Tenants to the total output of the Facility shall not exceed 40%.
  - a. The CBRE LMI Projects shall remain subject to payment reductions and/or damages specified for CBRE Mid-Tier and CBRE Large Projects under Part II, Sections C.9, C.10 and C.11 and under Part III, Sections E.1 and E.2 above amended only to reflect the revised percentages specified above for CBRE LMI Projects.
  - b. If the Subscriber Organization maintains a percentage mix of LMI Subscribers that does not have the required minimum percentage of residential LMI Customers or its LMI Anchor Tenant(s) exceed the aggregate 40% limitation and there is no Unsubscribed RDG for more than one year, such continued failure to meet the residential LMI Customer minimum requirement or exceeding the LMI Anchor Tenant percentage ceiling under these circumstances shall be construed as an intent to

MAUI ELECTRIC COMPANY, LIMITED

Rule No. 29  
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM  
PHASE 2

disregard the requirements of this Rule No. 29 and could result in termination and removal from the CBRE Program in accordance with Part I, Section K.3.

MAUI ELECTRIC COMPANY, LIMITED



**APPENDIX I**

**SUBSCRIBER AGENCY AGREEMENT  
AND  
CONSENT FORM**

The undersigned ("Subscriber") has a Subscription to the following CBRE Phase 2 Project:

**CBRE Project Name:**

\_\_\_\_\_

**CBRE Project Address:**

\_\_\_\_\_  
\_\_\_\_\_

**Subscriber Organization:**

\_\_\_\_\_

**CBRE Project contact information for Subscriber  
questions and complaints:**

**Address (if different from above):**

\_\_\_\_\_  
\_\_\_\_\_

Telephone number: \_\_\_\_\_

Email address: \_\_\_\_\_

Website URL: \_\_\_\_\_

Fax: \_\_\_\_\_

**Subscriber Service Address where receiving  
electrical service from Hawaiian Electric Companies:**

**Subscriber Name:**

\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

**Subscriber's Account Number with Hawaiian  
Electric Companies:**

\_\_\_\_\_

**Subscriber Mailing Address (if different from above):**

\_\_\_\_\_  
\_\_\_\_\_

By signing this Subscriber Agency Agreement and Consent Form, the Subscriber agrees to all of the following:

1. Assignment of Energy and Capacity, Environmental Credits. The Subscriber agrees that the Subscriber Organization has authority to assign all energy produced and capacity associated with the renewable energy system at the CBRE Project to Hawaiian Electric Company, Maui Electric Company, Limited or Hawai'i Electric Light Company, Inc., as applicable (the "Company"), and the Subscriber agrees that all energy produced, and capacity associated with the Subscriber's share of the renewable energy system at the CBRE Project shall belong to Company. The Subscriber also agrees that the Subscriber Organization has authority to assign all Environmental

MAUI ELECTRIC COMPANY, LIMITED

Credits<sup>1</sup> associated with the renewable energy system at the CBRE Project to Company, and that if the CBRE Project or a person or entity on its behalf has assigned the Environmental Credits to Company, then all Environmental Credits associated with the Subscriber's share of the renewable energy system at the CBRE Project shall belong to Company.

2. Tax Implications. The Subscriber Organization has provided the Subscriber with a statement that Company makes no representations concerning the taxable consequences to the Subscriber with respect to its Bill Credits to the Subscriber or other tax issues relating to participation in the CBRE Project.
3. Subscriber recognizes that not all production risk factors, such as grid-failure events or atypically cloudy weather, are within the Subscriber Organization's control.
4. Information Sharing. Participating in the CBRE Program will require sharing Subscriber's Account Information (name, account number, service address, telephone number, email address, website URL, information on Subscriber participation in other distributed generation serving the premises of the Subscriber, Subscriber specific Bill Credit(s)) and Subscriber's Energy Usage Data (data collected from the utility Subscriber meters that reflects the quantity, quality, or timing of the Subscriber's electric usage or electricity production for the service address and account number identified for participation in the CBRE Project). The following outlines the type of information that will be shared, and how that information will be used.
  - a. Subscriber's Account Information and Subscriber Energy Usage Data. The Subscriber authorizes Company to provide the Subscriber Organization (and the Subscriber Organization's designated subcontractors and agents) with the Subscriber's Account Information and Subscriber's Energy Usage Data as described in Section 4 above. This information is needed to allow the Subscriber Organization to determine the extent to which the Subscriber is entitled to participate in the CBRE Project, and to validate the amount of the Bill Credits to be provided by Company to the Subscriber. The current data privacy commitments of Company applicable to its CBRE Program provided to the Subscriber by the Subscriber Organization are attached as Exhibit 1 of this Subscriber Agency Agreement and Consent Form. These privacy commitments include definitions of "Subscriber's Account Information" and "Subscriber's Energy Usage Data."
  - b. Subscriber's Subscription Information. The Subscriber authorizes the Subscriber Organization to provide information to Company identifying the Subscriber (with the Subscriber's name, service address, and account number), low-to-moderate income ("LMI") status (if applicable) and detailing the Subscriber's proportional interest in kilowatts for Small Projects or percentage of the Facility's Contract Capacity for Mid-Tier and Large Projects, and to provide additional updates of this information to Company as circumstances change. This information is needed to allow the Company to properly apply Bill Credits for the energy generated by the CBRE Small Projects or availability for a CBRE Mid-Tier and Large projects. Also, this information is needed to allow Company to send to the Subscriber notices or other correspondence pertaining to their involvement in the CBRE Program.
  - c. Aggregated Information. Aggregated information concerning production at the CBRE Project may be publicly disclosed to support regulatory oversight of the CBRE Program. This includes annual reports available to the public related to specific CBRE Projects, including but not limited to production from the CBRE Projects; size, location and the type of CBRE Project subscriber groups including LMI; reporting on known complaints and the resolution of these complaints; lessons learned and any potential changes to the CBRE Program; reporting on Bill Credits earned and paid; and reporting on the application process. Aggregated information will not identify individual Subscribers nor provide Subscriber-Specific Account

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<sup>1</sup> "Environmental Credits" means any environmental credit, offset, or other benefit allocated, assigned or otherwise awarded by any city, state or federal governmental agency or court, international agency, or non-governmental renewable energy certificate accounting and verification organization to Company or Subscriber Organization based in whole or in part on the fact that the PV System is a non-fossil fuel facility.

Information, Subscriber-Specific Energy Usage Data or Subscriber-specific Bill Credits unless a Subscriber provides explicit informed consent. Depending on the nature of the aggregated information, however, it may still be possible to infer the amount of production attributed to individual Subscribers to the CBRE Project. The Subscriber agrees to the inclusion of its production information in the creation of the aggregated information. The policies of the Company related to sharing aggregated information are part of the data privacy commitments contained in the attached Exhibit 1 of this CBRE Subscriber Agency Agreement and Consent Form.

- d. Information Requests from the PUC or CA or other governmental agencies. The Subscriber agrees that the Subscriber Organization and the Company are authorized to provide any information they possess related to the Subscriber or the Subscriber's participation in the CBRE Project to:
- (i) the Hawaii Public Utilities Commission (PUC) or the State of Hawaii Division of Consumer Advocacy (CA), provided that if such disclosure includes personally identifiable information of the Subscriber, such disclosure shall be made under an applicable protective order to maintain the confidentiality of such information (This information is needed to allow proper regulatory oversight of the Company and of the CBRE Program); and
  - (ii) Other governmental agencies under exigent circumstances provided for in the Company privacy policy.
- e. Liability Release. While the Company requires the Subscriber Organization to implement appropriate data security measures, the Company shall not be responsible for monitoring or taking any steps to ensure that the Subscriber Organization maintains the confidentiality of the Subscriber's Account Information, the Subscriber's Energy Usage or the Bill Credits received pertaining to the Subscriber's participation in the CBRE Project. However, the Company shall remain liable for its own inappropriate release of Subscriber's Account Information and Subscriber's Energy Use Data in accordance with existing tariff rules.
- f. Duration of Consent. The Subscriber's consent to this information sharing shall be ongoing for the Term of the Contract between the Subscriber Organization and Company, or until the Subscriber no longer has a Subscription to the CBRE Project and the Subscriber Organization notifies Company of this fact. Provided, however, the Subscriber's consent shall also apply thereafter to all such information of the Subscriber pertaining to that period of time during which the Subscriber had a Subscription to the CBRE Project.
- g. Successor or Assigns. This Subscriber Agency Agreement and Consent Form shall apply fully to and inure to the benefit of Subscriber Organization and all subsequent successors or assigns, and to the Company and all of its subsequent successors or assigns, without the need for Subscriber's consent.
- h. Modification. The above provisions addressing data privacy and in Exhibit 1 shall remain in place until and unless other requirements are adopted by the Company and/or the PUC. Company shall file necessary revisions to its tariffs and contracts within a reasonable time after such Order.

5. Subscriber Disclosures.

- a. Customer data can provide insight into activities within the premise receiving utility service. Company may not disclose customer data except (1) if you authorize the disclosure, (2) to contracted agents that perform services on behalf of the utility, or (3) as otherwise permitted or required by regulations. Any such permitted disclosure shall be in accordance with policies relating to the sharing of customer data which may be found in the Company's privacy policy.
- b. Not authorizing disclosure will not affect utility service but will impact a proposed Subscriber's ability to participate in the CBRE program.
- c. Subscribers may access their standard customer data from Company without any additional charge.

MAUI ELECTRIC COMPANY, LIMITED

- d. Company will have no control over the data disclosed pursuant to this consent and will not be responsible for monitoring or taking any steps to ensure that the data recipient maintains the confidentiality of the data or uses the data as authorized by you. Please be advised that you may not be able to control the use or misuse of your data once it has been released.
- e. In addition to the Subscriber data described above, the data recipient may also receive the following from Company: your name; account number; service number; meter number; utility type; service address; premise number; premise description; meter read date(s); number of days in the billing period; utility invoice date; base rate bill amount; other charges including base rate and non-base rate adjustments; taxes; and invoice total amount. Company will not provide any other information, including information such as LMI designation, your Social Security Number or any financial account number to the data recipient through this consent form.
- f. For additional information, including the Company privacy policy that applies to Company, visit: [www.hawaiielectric.com](http://www.hawaiielectric.com).

The Subscriber, by executing below, hereby agrees to the terms of this Subscriber Agency Agreement and Consent Form as of the date filled in below.

Subscriber's Name: \_\_\_\_\_

Subscriber's Signature: \_\_\_\_\_

Print or Type name and  
Title of signatory if  
Subscriber is a corporation  
or unit of government: \_\_\_\_\_

Date: \_\_\_\_\_

MAUI ELECTRIC COMPANY, LIMITED

**EXHIBIT 1**

**TO**

**SUBSCRIBER AGENCY AGREEMENT AND CONSENT FORM**

**Data Privacy Commitments of Hawaiian Electric Companies Pertaining to  
the CBRE Program**

The following data privacy commitments of the Hawaiian Electric Companies pertaining to the CBRE Program are as follows and may be changed from time to time by the Company:

**Definitions**

Unless indicated otherwise, the same definition and meaning of terms in this document are the same as contained in the Standard Form Contract for CBRE "Small Projects" or the RDG PPA for "Mid-Tier" and "Large Projects". For ease of reference, here are some of the specific definitions:

"CBRE Project" means, individually and/or collectively, CBRE Phase 2 Small Projects, Mid-Tier Projects and/or Large Projects.

"Company" or "Hawaiian Electric Companies" means, individually or collectively, as applicable, Hawaiian Electric Company, Maui Electric Company, Ltd., Hawaii Electric Light Corporation, Inc., each a Hawaii corporation, and its affiliates and agents.

"Large Project" means any project greater than or equal to 5MW AC on Oahu; or greater than or equal to 2.5MW on all Maui, Hawai'i Island, Moloka'i or Lāna'i.

"Mid-Tier Project" means any project greater than 250 kW, and less than 5 MW on Oahu; or less than 2.5 MW on Maui, Hawai'i Island, Moloka'i or Lāna'i.

"Small Project" means any project under 250 kW AC in output capacity.

"Subscribed Energy" means electricity generated by the CBRE Phase 2 Small Project attributable to the Subscribers' Subscriptions and delivered to the Company at the Production Meter on or after the Commercial Operations Date.

"Subscribed RDG" means the CBRE Phase 2 Mid-Tier or Large Project Facility Contract Capacity availability that is associated with a Subscriber's Subscription and is allocated to the Subscriber.

"Subscriber" means a retail customer of the Company who owns a Subscription of a CBRE Project interconnected with the Company.

"Subscriber Organization" means the organization whose purpose is to operate or otherwise manage the CBRE Project for its Subscribers.

"Subscriber's Account Information" consists of the Subscriber's name, account number, service address, telephone number, email address, website URL, information on Subscriber participation in other distributed generation serving the premises of the Subscriber, and Subscriber specific Bill Credit(s).

"Subscriber's Energy Usage Data" means data collected from the utility Subscriber meters that reflects the quantity, quality, or timing of the Subscriber's electric usage or electricity production for the service address and account number identified for participation in the CBRE Project.

MAUI ELECTRIC COMPANY, LIMITED

### Overview

This section addresses how Subscriber's Account Information and Subscriber's Energy Usage Data will be collected, used and shared as part of participation in the CBRE Program.

#### 1. How Subscriber's Account Information and Energy Usage Data Will Be Exchanged

##### a. Subscriber Specific Information

Once a Subscriber has executed a Subscriber Agency Agreement and Consent Form, an ongoing data exchange will occur between the Company and a Subscriber Organization (and their designated subcontractors and agents):

- (i) The Company will disclose the following Subscriber-specific information to the Subscriber Organization:
  - Subscriber's Account Information
  - Subscriber's Energy Usage Data
  - Bill credits
- (ii) The Subscriber Organization will disclose to the Company the following Subscriber-specific information:
  - Subscriber's Account Information
  - Subscriber Allocation for each Subscriber's Subscription stated in kW or percentage of the name plate capacity of the Small Project; or percentage of Facility Contract Capacity for Mid-Tier or Large Projects.
  - Production data related to the PV System
  - Monthly Subscription Information

##### b. Aggregated and Anonymized Subscriber Information

Aggregated Subscriber information will be reported as part of Permitted Public Reporting, outlined in Section 2(b) below.

To be considered "aggregated" the reported information must include information attributable to all Subscribers participating in a specific CBRE Project, which based on program requirements will contain a minimum of five Subscribers. Depending on the nature of the aggregated information, however, from this information alone or in combination with other publicly available information it may still be possible to infer the amount of production attributed to individual Subscribers to the CBRE Project.

Company may also disclose anonymized data relating to the CBRE Program as specified in the Company privacy policy.

#### 2. How Subscriber's Information Will Be Used

The following outlines how the Subscriber's Account Information and Subscriber Energy Usage Data will be used as part of the CBRE Program.

##### a. Program Management

MAUI ELECTRIC COMPANY, LIMITED

As part of administering the CBRE program, the Subscriber Organization or the Company may provide information related to the Subscriber and/or the CBRE Project to:

- the PUC
- the State of Hawaii Division of Consumer Advocacy (“CA”)
- Other governmental or private entities as required by law or regulation

Additionally, as part of administering the CBRE Program, the Company may share Subscriber's Account Information and Subscriber's Energy Usage Data to service providers, agents, or contracted agents who support the program on its behalf. The Company prohibits these service providers from using or disclosing the Subscriber's information except as necessary to perform these specific services or to comply with legal requirements. More information about the Company's general privacy practices is explained in its Privacy Policy available on [www.hawaiianelectric.com](http://www.hawaiianelectric.com).

b. Permitted Public Reporting

The Subscriber's Energy Usage Data of each participating Subscriber to a CBRE Project will be combined and may be reported in the aggregate by the Subscriber Organization to the PUC or CA as may be requested or in the Biannual Status Report required under the CBRE Framework. The identity of specific Subscribers, the specific Subscriber's Account Information, Subscriber's Energy Usage Data and Subscriber-specific Bill Credit will not be listed in any public report unless the Subscriber has provided the Subscriber Organization with prior written consent.

Per the requirements of the PUC, the Company will provide to the PUC reports, including the Biannual Status Report, which will include information or data requested by the PUC, including the following:

- Total nameplate capacity (kW DC) and the total output capacity (kW AC) of CBRE facilities installed within the electric utility's territory;
- Total kWh for each of the CBRE facilities on an hourly and monthly basis;
- Type and costs for any grid infrastructure upgrades;
- All Administrator costs pertaining to the CBRE Program (operating and capital expenses);
- CBRE facility design details (e.g. project location, equipment list, interconnection requirements);
- Subscription and Subscriber information (e.g. fees, subscription size, rates, terms, customer class, annual usage, average bill, household income or LMI designation, estimated annual bill savings or additional costs, subscriber turnover statistics);
- Participation data from the Administrators;
- Marketing materials and techniques employed to encourage participation by LMI and other customers; and
- Any other information requested by the PUC

c. Prohibited Reporting or Sharing

Except as otherwise provided in this document or the Company privacy policy, the Company will not disclose the Subscriber's Account Information, Subscriber's Energy Usage Data or Subscriber-specific Bill Credits to a third party without first obtaining the Subscriber's written consent.

Any requests by the Subscriber Organization to the Company for information about a Subscriber that is not Subscriber's Account Information or Subscriber's Energy Usage Data will require execution of a separate written consent by the Subscriber. Notwithstanding the previous statement, the Company will not provide the Subscriber Organization with the

Subscriber's Social Security Number unless directed to do so by the PUC or compelled by law or regulation or under exigent circumstances provided for in the Company privacy policy.

MAUI ELECTRIC COMPANY, LIMITED

**3. Subscriber Data Access and Correction**

The following outlines what information is available to the Subscriber from the Company and the Subscriber Organization, and methods of correcting any inaccuracies.

a. Information Available from the Company

Subscribers may access the CBRE Portal or contact the Company's call center to obtain information pertaining to their specific Bill Credit attributable to their participation in CBRE Program. The correction of any allocation of previously-applied Bill Credits among Subscribers or payments to the Subscriber Organization for Unsubscribed Energy or Unsubscribed RDG, pertaining to a particular month due to any inaccuracy reflected in such Monthly Subscription Information with regard to a Subscriber's Subscription in the CBRE Project and the beneficial Subscription of energy or Subscribed RDG produced by the CBRE Project, or the portion of Unsubscribed Energy or Unsubscribed RDG, shall be the full responsibility of the Subscriber Organization, unless such inaccuracies are caused by the Company .

Subscribers may also obtain from the Company the following information related to the CBRE Program without obtaining written consent from the Subscriber Organization:

- CBRE Project Address
- Operator name
- Nameplate capacity
- Production data related to the CBRE Project
- Bill Credit Rate and total amount of Bill Credits applied to the CBRE Project
- Any other information pertaining to the Subscriber's Subscription

Other information regarding the Subscriber Organization known to the Company will not be disclosed to Subscriber unless the Subscriber obtains prior explicit informed consent from the Subscriber Organization or unless directed to do so by the PUC or compelled by law or regulation.

b. Information Available from the Subscriber Organization

Subscribers and prospective subscribers can contact the Subscriber Organization to obtain the following information:

- Future costs and benefits of the Subscription, including:
  - i. All nonrecurring (i.e., one-time) charges;
  - ii. All recurring charges;
  - iii. Terms and conditions of service;
  - iv. Whether any charges may increase during the course of service, and if so, how much advance notice is provided to the Subscriber;
  - v. Whether the Subscriber may be required to sign a term contract;
  - vi. Terms and conditions for early termination;
  - vii. Any penalties that the CBRE Project may charge to the Subscriber;
  - viii. The process for unsubscribing and any associated costs;

MAUI ELECTRIC COMPANY, LIMITED



- ix. An explanation of the Subscriber data the Subscriber Organization will share with the Company and that Company will share with the Subscriber Organization;
- x. The data privacy policies of the Company and of the Subscriber Organization;
- xi. The method of providing notice to Subscribers when the CBRE Project is out of service, including notice of estimated length and loss of production;
- xii. Assurance that all installations, upgrades and repairs will be under direct supervision of a NABCEP-certified solar professional and that maintenance will be performed according to industry standards, including the recommendations of the manufacturers of solar panels and other operational components;
- xiii. Allocation of unsubscribed production; and
- xiv. A statement that the Subscriber Organization is solely responsible for resolving any disputes with Company or the Subscriber about the accuracy of the CBRE Project production and that the Company is solely responsible for resolving any disputes with the Subscriber about the applicable Credit Rate used to determine the amount of the Bill Credit.

- Copy of the contract with Company for the CBRE Program
- Copy of the solar panel warranty
- Description of the compensation to be paid for any underperformance
- Proof of insurance
- Proof of a long-term maintenance plan
- Current production projections and a description of the methodology used to develop production projections
- Subscriber Organization contact information for questions and complaints
- Demonstration to the Subscriber by the Subscriber Organization that it has sufficient funds to operate and maintain the CBRE Program

The Subscriber Organization is solely responsible for the accuracy of the Subscriber's portion of the CBRE Project production or availability information forwarded to the Company and should resolve with the Subscriber any dispute regarding the accuracy of such information.

Subscribers can submit comments to the Company on the accuracy and completeness of its biannual report by contacting the Company.

#### 4. **Data Retention**

The Company will retain the Subscriber's Account Information, Subscriber's Energy Usage Data and information on Bill Credits for as long as required under applicable agreements with Subscriber or Subscriber Organization or under applicable law. Such data may thereafter be deleted in accordance with such agreements, applicable law or Company data retention or other applicable policies.

MAUI ELECTRIC COMPANY, LIMITED

**Appendix II**  
**DISCLOSURE CHECKLIST**

**COMMUNITY BASED RENEWABLE ENERGY (CBRE) PHASE 2 PROGRAM**  
**SUBSCRIBER ORGANIZATION DISCLOSURE CHECKLIST**

This disclosure checklist is intended to enable potential Subscribers in the service territories of Hawaiian Electric, Maui Electric, and/or Hawai'i Electric Light to clearly understand where (and whether) a given Subscriber Organization (“SO”) discloses the below-listed relevant terms and conditions in its Subscriber Agreement as required by the CBRE Framework.<sup>1</sup>

Each SO shall complete this Disclosure Checklist with the page number and/or section reference in its Subscriber Agreement indicating where the stated disclosure or disclaimer is found in the Subscriber Agreement. SO’s initial beside each Disclosure described in this Checklist shall serve as the SO’s warranty to the Subscriber that the subject of the Disclosure is present in the Subscriber Agreement.

<b>SO Initials</b>	<b>Disclosure Description</b>	<b>Page # in Agreement</b>	<b>Subscriber Confirmed Initials</b>
<b>STATE OF HAWAII CBRE SUBSCRIBERS BILL OF RIGHTS</b>			
	Covenant by SO to Subscriber that it will adhere to the State of Hawaii’s Division of Consumer Advocacy “State of Hawaii CBRE Subscribers Bill of Rights” and provide a copy of such to the Subscriber		

<b>FUTURE COSTS AND BENEFITS OF THE SUBSCRIPTION (Section 4.4.1 of the CBRE Framework)</b>			
	Production projections and a description of the methodology used to develop production projections		
	Bill savings and added cost projections and a description of the methodology used to develop bill projections		
	All nonrecurring (i.e., one-time) charges		
	All recurring charges and any escalation rate associated with those charges		
	Terms and conditions of service		
	Whether any charges may increase during the course of service, and if so, how much advance notice is provided to the Subscriber		

<sup>1</sup> On December 22, 2017, the State of Hawaii Public Utilities Commission (“Commission”) issued Order No. 35137 in Docket No. 2015-0389 approving a CBRE Framework (“Order 35137”). Order 35137 requires SOs to submit an executed CBRE Disclosure Checklist with the Subscriber Agreement for each subscriber.

SO Initials	Disclosure Description	Page # in Agreement	Subscriber Confirmed Initials
	Whether the Subscriber is required to sign a term contract		
	Terms and conditions for early termination		
	Any penalties that the CBRE SO and/or Owner may charge to the Subscriber		
	Disclose the circumstances in which SO payment reductions or Liquidated Damages would result in reductions to the Subscriber's bill credit		
	Disclose the circumstances in which SO failure to comply with requirements of the tariff could result in reductions to the Subscriber's bill credit		
	The process for unsubscribing or transferring subscriptions and any associated costs		
<b>DISCLAIMERS (Section 4.4.2 of the CBRE Framework)</b>			
	Affidavit verifying LMI status		
	Data privacy policies of SO and/or Owner		
	Description of circumstances and method of notice Subscribers will be issued when the CBRE Facility is out of service, including notice of estimated length and loss of production		
	Assurances that all installations, upgrades and repairs will be under direct supervision of a qualified professional and that maintenance will be performed according to industry standards, including the recommendation of the manufacturers of solar panels and other operational components		
	SO statement regarding allocation of unsubscribed production		
	Statement that SO and/or Owner is solely responsible for resolving any disputes with Hawaiian Electric, Maui Electric, or Hawai'i Electric Light (as applicable) or the Subscriber about the accuracy of the CBRE Facility production		
	Statement that Hawaiian Electric, Maui Electric, or Hawai'i Electric Light (as applicable) is solely responsible for resolving any disputes with the Subscriber about the applicable rate used to determine the amount of the bill credit		

MAUI ELECTRIC COMPANY, LIMITED

Order No. 38038 filed October 25, 2021, Docket 2015-0389

Transmittal Letter dated November 4, 2021.

SO Initials	Disclosure Description	Page # in Agreement	Subscriber Confirmed Initials
	How to obtain a copy of the solar panel, inverter, and/or any other core component's warranty		
	Definition of underperformance and a description of the compensation to be paid by the Subscriber Organization for any underperformance (i.e., an output guarantee)		
	Disclosure of the type and level of insurance, and what insurance benefits protect Subscribers		
	Proof and description of a long-term maintenance plan including which services the plan includes (module or inverter failures, etc.)		
	SO and/or Owner contact information for questions and complaints and agreement to update and notify the subscriber if ownership changes hands		
<b>SUBSCRIBER AGREEMENT REQUIREMENTS (Section 5.4 of the CBRE Framework)</b>			
	Credit Rate and Calculation		
	Bill Credit mechanism and timing, including (1) calculating credits for delivered energy and confirmation there will be no compensation for curtailed energy events for CBRE Small Projects, or (2) calculating credits for contract capacity availability irrespective of delivered energy for CBRE Mid-Tier Projects, CBRE Large Projects and CBRE LMI Projects		
	Tax and Securities Implications		
	If applicable, proof of a SO escrow account established including (1) what fees/payments are deposited into such account, i.e., pre-development fees or deposits, and (2) how the funds may be released to the SO (upon Commercial Operations) or refunded to the Subscriber		
	No transfer fee of subscription interest if a Subscriber moves within the same service territory or transfer involves a change of name without any change in the account or meter		
	No downsizing fees within six months of CBRE program enrollment		
	Transparency of all Costs and Contractual Requirements		
	Subscription limitations (i.e., maximum and minimum kW interest per Subscriber)		
	Proof of Surety bond, financial guarantee, or letter of credit for the benefit of Subscribers and the circumstances under which Subscribers may make claims to such recoupment mechanisms		

MAUI ELECTRIC COMPANY, LIMITED

Order No. 38038 filed October 25, 2021, Docket 2015-0389

Transmittal Letter dated November 4, 2021.

<b>SO Initials</b>	<b>Disclosure Description</b>	<b>Page # in Agreement</b>	<b>Subscriber Confirmed Initials</b>
	How to obtain a copy of the SO's Standard Form Contract with Hawaiian Electric, Maui Electric, or Hawai'i Electric Light (as applicable) for the CBRE Phase 2 Program		
	SO notification requirements to Subscribers regarding project changes, development status, and operational updates		
	Statement that the Commission and Hawaiian Electric, Maui Electric, or Hawai'i Electric Light (as applicable) make no warranty or representation concerning potential implications, if any, of federal or state tax, securities, or other laws		
<b>ADDITIONAL DISCLOSURES (Section 5.5 of the CBRE Framework)</b>			
	Payment schedule (\$/month) with preset repurchase/resale price for the lifetime of the Agreement for a Subscriber		
	Transfer of the selling Subscriber's ownership must be for at least 50% of Subscriber's interest		
	For a Pay-As-You-Go subscription, Subscriber has the right to cancel the Subscriber's subscription at any time		
	For a Pay-Up-Front interest, SO must buy back all or a portion of the Subscriber's interest upon request in accordance with the preset repurchase/resale price schedule within 30 days		

MAUI ELECTRIC COMPANY, LIMITED

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Transmittal Letter dated November 4, 2021.

**APPENDIX III**  
**COMMUNITY-BASED RENEWABLE ENERGY PROGRAM**  
**INTERCONNECTION AGREEMENT**  
**(LESS THAN 250 KW)**

This Community-Based Renewable Energy Program Interconnection Agreement (less than 250 kW) (“Agreement”) is made by [Hawaiian Electric Company, Inc., Maui Electric Company, Ltd., Hawai‘i Electric Light Company, Inc.], a Hawai‘i corporation (hereafter called "Company"), and \_\_\_\_\_ (“Subscriber Organization”), and is made, effective and binding as of \_\_\_\_\_ (“Effective Date”). Company and Subscriber Organization may be referred to individually as a “Party” and collectively as the “Parties”.

**WHEREAS**, Company is an operating electric public utility subject to the Hawai‘i Public Utilities Law, Hawaii Revised Statutes, Chapter 269, and the rules and regulations of the Hawai‘i Public Utilities Commission (“Commission”); and

**WHEREAS**, Subscriber Organization is an “approved Subscriber Organization,” as defined in the Company’s Community-Based Renewable Energy (“CBRE”) Program Phase 2 Tariff (“CBRE Tariff”), intends to construct a CBRE Facility (as defined in Section 4 below), that qualifies for the Company’s CBRE program (“CBRE Program”), and desires to interconnect and operate the CBRE Facility in parallel with the Company’s electric system;

**NOW, THEREFORE**, in consideration of the premises and the respective promises herein, the Company and the Subscriber Organization hereby agree as follows:

1. **Notice and Disclaimer Regarding Future Rate and Tariff Modifications.** This Agreement shall, at all times, be subject to modification by the Commission as said Commission may, from time to time, direct in the exercise of its jurisdiction. Without limiting the foregoing, Subscriber Organization expressly acknowledges the following:
  - (a) The CBRE Tariff is subject to modification by the Hawai‘i Public Utilities Commission (“Commission”).
  - (b) **Your Agreement and CBRE Facility shall be subject to any future modifications ordered by the Commission. You agree to pay for any costs related to such Commission-ordered modifications.**

**BY SIGNING BELOW, YOU ACKNOWLEDGE THAT YOU HAVE READ, UNDERSTAND AND AGREE TO THE ABOVE NOTICE AND DISCLAIMER.**

2. **Effectiveness of Agreement.** This Agreement shall not be effective until approved and executed by each Party, i.e. upon the Effective Date. Subscriber Organization shall not interconnect and operate the CBRE Facility in parallel with the Company’s system prior to approval and execution of this Agreement by the Company. Until this Agreement is effective, no Party shall have any legal obligations arising hereunder, express or implied, and any actions taken by a Party in reliance on the terms of this Agreement prior to the Effective Date shall be at that Party’s own risk.
3. **Term and Termination.** This Agreement shall become effective as of the date when both the Subscriber Organization and the Company have signed this Agreement. This Agreement shall continue in full force and effect until the earliest date that one of the following events occurs:
  - (a) The Parties agree in writing to terminate the Agreement; or
  - (b) The Subscriber Organization may terminate this Agreement at any time, by written notice to the Company, prior to completion of the final acceptance testing of the CBRE Facility by the Company.

MAUI ELECTRIC COMPANY, LIMITED

Once the CBRE Facility is operational, then 3(c) applies. Upon receipt of a cancellation notice, the Company shall take reasonable steps to minimize additional costs to the Subscriber Organization, where reasonably possible; or

- (c) Once the CBRE Facility is operational, the Subscriber Organization may terminate this Agreement after 30 days written notice to the Company, provided, however, that any termination by Subscriber Organization under 3(b) or 3(c) shall be accompanied by a corresponding termination of the SFC (as defined in Section 6 below); or
- (d) Company may terminate this Agreement after 30 days written notice to the Subscriber Organization if:
  - (i) The Subscriber Organization fails to interconnect and operate the CBRE Facility pursuant to the terms of this Agreement; or
  - (ii) The Subscriber Organization fails to take all corrective actions specified by the Company's written notice that the CBRE Facility is out of compliance with the terms of this Agreement, within the timeframe set forth in such notice;
  - (iii) There is a default by the Subscriber Organization under the SFC which entitles Company to terminate the SFC;

provided, that the Company has satisfied all notice and other requirements for such termination by the Company, as provided in Section I.K.1 of the CBRE Tariff, provided, further, that any termination by Company under this 3(d) shall be accompanied by a corresponding termination of the SFC.

- 4. **CBRE Facility Description.** For the purposes of this Agreement, the "CBRE Facility" is defined as the equipment and devices, and associated appurtenances, owned by the Subscriber Organization, which produce electric energy for use by the Subscriber Organization and are to be interconnected and operated in parallel with the Company's system. The CBRE Facility is identified in Exhibit A (Description of CBRE Facility). **[DRAFTING NOTE: This Agreement is drafted to include a battery energy storage system ("BESS") as part of the CBRE Facility. References to the BESS and/or storage appear in bold text and brackets and will need to be revised to conform to specifics of each CBRE Project.]**
- 5. **Scope of Agreement.** The Parties understand and agree that this Agreement applies only to the operation of the CBRE Facility described in Exhibit A.
- 6. **Parallel Operation.** For Generating Facilities less than 250 kW, Company shall allow Subscriber Organization to interconnect and operate the CBRE Facility in parallel with the Company's distribution system in accordance with the terms and conditions of this Agreement, the Standard Form Contract for Hawai'i Community Based Renewable Energy – Phase Two between Subscriber Organization and Company ("SFC"), and Company Rule 14, Paragraph H (Interconnection of Distributed Generating Facilities Operating in Parallel With The Company's Electric System) ("Rule 14H") provided that the Company determines that all applicable requirements and conditions of this Agreement, the SFC, the CBRE Tariff and Rule 14H have been satisfied. Additional provisions to Rule 14H in this Agreement shall also apply. To the extent this Agreement conflicts with Rule 14H the provisions of this Agreement shall apply.
  - a. **Voltage Ride-Through. Voltage Ride-Through.** Whenever the utility Distribution System voltage at the Point of Interconnection varies from and remains outside the normal operating high and normal operating low region voltage for the predetermined parameters set forth in Table 1. The Facility's protective functions shall cause the Facility's Advanced Inverter(s) to Cease to Energize the utility Distribution System. Unless provided alternate settings by the

MAUI ELECTRIC COMPANY, LIMITED

Company, the Facility must comply with the voltage ride-through and trip settings specified in Table 1:

1. The Facility shall stay connected to the utility Distribution System while the grid remains within the “Ride-Through Until” voltage-time range and must operate in accordance with the “Operating Mode” specified for each “Operating Region”.
2. In the Continuous Operation region, the Facility’s Advanced Inverter shall reduce power output as a function of voltage, in accordance with section (iv) Volt-Watt of Rule 14H.
3. Different settings than those specified in Table 1 may be specified by the Company

Table 1: Voltage Ride-Through Table

Operating Region	Voltage at Point of Interconnection (% of Nominal Voltage)	Operating Mode	Ride-Through Until (s)	Default Maximum Trip Time (s)
OV2	$V > 120$	Cease to Energize	N/A	0.16 <sup>(1)</sup>
OV1	$120 \geq V > 110$	Mandatory Operation	0.92	1
CO	$110 \geq V > 100$	Continuous Operation (Volt-Watt)	N/A	N/A
CO	$100 > V \geq 88$	Continuous Operation	N/A	N/A
UV1	$88 > V \geq 70$	Mandatory Operation	20	21
UV2	$70 > V \geq 50$	Mandatory Operation	10-20	11-21 <sup>(2)</sup>
UV3	$50 > V$	Momentary Cessation	N/A	2

<sup>(1)</sup>Must trip time under steady state condition. Inverters will also be required to meet the Company’s Transient Overvoltage criterion (TrOV-2). Ride-Through shall not inhibit TrOV-2 requirements.

<sup>(2)</sup>May be adjusted within these ranges at manufacturer's discretion.

- (b) Frequency-Watt. A Facility’s inverters shall be certified to meet the frequency-droop requirement stated in IEEE 1547-2018, “IEEE Standard for Interconnection and Interoperability of Distributed Energy Resources with Associated Electric Power System Interfaces.” For certification purposes, range of allowable settings in Table 2 shall be used as an exception to the 1547-2018 values. In this mode, the Advanced Inverter shall modulate active power when the frequency at the Point of Interconnection is outside the Frequency-Watt deadband dbOF and dbUF as specified by the default settings in Table 2.

Table 2 Frequency-Watt Settings

Parameter	Default Value	Range of allowable settings <sup>(1)</sup>



dbOF, dbUF (Hz)	0.036	0.017 -1.0
kOF, kUF	0.04	0.02 - 0.07
Tresponse (small-signal) (s)	0.5	0.2-10

<sup>(1)</sup>For the single-sided deadband values (dbOF, dbUF) ranges, both the lower value and the upper value is a minimum requirement (wider settings shall be allowed). For the frequency droop values (kOF, kUF) ranges, the lower value is a limiting requirement (the setting shall not be set to lower values) and the upper value is a minimum requirement (the setting may be set to greater values). For the open-loop response time, Tresponse (small-signal), the upper value is a limiting requirement (the setting shall not be set to greater values) and the lower value is a minimum requirement (the setting may be set to lower values).

- (c) Unintended Islanding. A Facility’s inverters shall be certified to meet the unintentional islanding requirement stated in IEEE 1547-2018 (or latest version), “IEEE Standard for Interconnection and Interoperability of Distributed Energy Resources with Associated Electric Power System Interfaces.” Ride through requirements specified herein shall not inhibit the islanding detection performance where a valid unintentional islanding condition exists.

7. **Permits and Licenses**. Subscriber Organization shall be responsible for the design, installation, operation, and maintenance of the CBRE Facility and shall obtain at its expense, and maintain any required governmental authorizations and/or permits for the construction and operation of the CBRE Facility.

8. **Installation**.

- (a) Design, installation, operation and maintenance of the CBRE Facility shall include control and protection equipment as specified by the Company, including but not limited to an automatic load-break device such as a circuit breaker or inverter and a manual disconnect that has a visible break or breaker with rack-out capability to isolate the CBRE Facility from the Company’s system. The manual disconnect device must be accessible by the Company and be capable of being locked by the Company in the open position, to establish working clearance for maintenance and repair work in accordance with the Company’s safety rules and practices. The disconnect devices shall be furnished and installed by the Subscriber Organization and are to be connected between the CBRE Facility and the Company’s electric system. The disconnect devices shall be located in the immediate vicinity of the electric meter serving the Subscriber Organization. The manual disconnect device shall be, at a minimum, clearly labeled “Subscriber Organization System Disconnect”. With permission of the Company, the disconnect devices may be located at an alternate location which is readily and safely accessible to the Company on a 24-hour basis. Such alternate location shall be clearly identified with signage placed in the immediate vicinity of the electric meter serving the Subscriber Organization.
- (b) The Subscriber Organization grants access to the Company to utilize the disconnect device, if needed. Company may enter premises where the CBRE Facility is located, as permitted by law or tariff, for the following purposes: (1) to inspect CBRE Facility’s protective devices and read or test meter(s); and (2) to disconnect the CBRE Facility and/or service to Subscriber Organization, whenever in Company’s sole opinion, a hazardous condition exists and such immediate action is necessary to protect persons, Company’s facilities, or property of others from damage or interference caused by the CBRE Facility, or the absence or failure of properly operating protective device.
- (c) Under no circumstances shall a Subscriber Organization interconnect and operate the CBRE Facility in parallel with the Company’s electric system without prior written approval by the Company.

MAUI ELECTRIC COMPANY, LIMITED

- (d) Once the CBRE Facility is interconnected to the Company's system, the Company reserves the right to require the installation of, or modifications to, equipment determined by the utility to be necessary to facilitate the delivery of reliable electric service to its customers, subject to the requirement that such installation or modification be consistent with applicable interconnection standards (e.g., Rule 14H). The Company shall provide a written explanation of the need for such installation or modification. Such installation or modification shall be made by mutual agreement of the Company and the Subscriber Organization. Any disputes related to this provision shall be resolved according to the dispute resolution process set forth below.
- (e) If the CBRE Facility is a facility interconnecting at the Distribution Level, the CBRE Facility shall follow the applicable Rule 14H interconnection process at the time of interconnection.
- (f) The CBRE Facility must comply with the communications and controllability requirements set forth in Part I, Section G of the CBRE Tariff.

9. **Interconnection Facilities.**

(a) **Subscriber Organization-Owned Interconnection Facilities.**

- (1) The Subscriber Organization shall furnish, install, operate and maintain, at its cost, the interconnection facilities (such as circuit breakers, relays, switches, synchronizing equipment, monitoring equipment, and control and protective devices and schemes) identified in Exhibit B (Subscriber Organization-Owned CBRE Facility and Interconnection Facilities).
- (2) The point of interconnection is shown on the single-line diagram and three-line diagram (provided by the Subscriber Organization and reviewed by the Company) which are attached to Exhibit B (Subscriber Organization-Owned CBRE Facility and Interconnection Facilities). Pursuant to Company Rule 14H, Appendix I (Distributed Generating Facility Interconnection Standards Technical Requirements), Section 6.c (Review of Design Drawings), the Company must review and approve Subscriber Organization's single-line and three-line diagrams prior to Subscriber Organization constructing of the CBRE Facility interconnection.
- (3) The Subscriber Organization agrees to test the CBRE Facility, to maintain operating records, and to follow such operating procedures, as may be specified by the Company to protect the Company's system from damages resulting from the parallel operation of the CBRE Facility, including such testing, records and operating procedures as more fully described in Exhibit C attached hereto.
- (4) The Company may inspect the CBRE Facility and Subscriber Organization's interconnection facilities.

(b) **Company-Owned Interconnection Facilities.**

- (1) The Company agrees to furnish, install, operate and maintain such interconnection facilities on its side of the point of interconnection with the CBRE Facility as required for the parallel operation with the CBRE Facility and more fully described in Exhibit C (Company-Owned Interconnection Facilities) attached hereto and made apart hereof ("Company Interconnection Facilities"). All Company Interconnection Facilities shall be the property of the Company. Where portions of the Company Interconnection Facilities are located on the Subscriber Organization's premises, the Subscriber Organization shall provide, at no expense to the Company, a suitable location for and access to all such equipment. If a 120/240 Volt power

source or sources are required, the Subscriber Organization shall provide these at no expense to the Company.

- (2) The Subscriber Organization agrees to pay to the Company a non-refundable contribution for the Company's investment in the Company Interconnection Facilities described in Exhibit C (Company-Owned Interconnection Facilities), subject to the terms and conditions included in Exhibit C and to pay for other interconnection costs. The interconnection costs will not include the cost of an initial technical screening of the impact of the CBRE Facility on the Company's system.
- (3) The Subscriber Organization shall provide an irrevocable standby letter of credit with no documentation requirement (i) in an amount not less than twenty-five percent (25%) of the total estimated costs for the Company Interconnection Facilities; and (ii) substantially in the form attached to this Agreement as Exhibit D (Form of Letter of Credit) from a bank or other financial institution chartered in the United States with a credit rating of "A-" or better. An irrevocable standby letter of credit is not required when either: (1) the Subscriber Organization pays the total estimated costs for the Company Interconnection Facilities up front; or (2) the Subscriber Organization is not required to be responsible for any estimated costs for the Company Interconnection Facilities. The Independent Observer has the discretion to waive the letter of credit requirement on a case-by-case basis. Such letter of credit shall remain in effect through the earlier of forty-five (45) days after the Commercial Operations Date, as such term is defined in the SFC, or seventy-five (75) days after the termination of this Agreement and true-up of any costs owed to Company. Subscriber Organization shall replenish the security amount to the level required under this Agreement (the "Security") within fifteen (15) business days after any draw on the Security by Company or any reduction in the value of Security below the required level for any other reason. In addition to any other remedy available to it, Company may, before or after termination of this Agreement, draw from the Security such amounts as are necessary to recover amounts Company is owed pursuant to this Agreement, the SFC and/or any other obligation of Subscriber Organization to Company under the Company's applicable electric service tariff, the CBRE Tariff or any other applicable law, regulation, rule ordinance or regulatory order. Any failure to draw upon the Security or other security for any amounts due Company shall not prejudice Company's rights to recover such amounts in any other manner.

If the letter of credit is not renewed or extended at least thirty (30) days prior to its expiration or earlier termination, Company shall have the right to draw immediately upon the full amount of the letter of credit and right (but not the obligation) to place the proceeds of such draw (the "L/C Proceeds"), at Subscriber Organization's cost, in an escrow account until and unless Subscriber Organization provides a satisfactory substitute letter of credit. If it so chooses, the Company will place the L/C Proceeds in an escrow account with a reputable escrow agent acceptable to Company ("Escrow Agent"). Thereafter, the Company shall have the right to apply the L/C Proceeds as necessary to recover amounts Company is owed. Company shall have the sole authority to draw from the account and Subscriber Organization shall have no rights to the L/C Proceeds. Upon full satisfaction of Subscriber Organization's obligations under this Contract, including recovery by Company of amounts owed to it, Company shall instruct the Escrow Agent to remit to the bank that issued the letter of credit that was the source of the L/C Proceeds the remaining balance (if any) of the L/C Proceeds. Any failure to draw upon the L/C Proceeds for any amounts due Company shall not prejudice Company's rights to recover such amounts in any other manner.

Promptly following the Commercial Operations Date, and the complete performance of all of Subscriber Organization's obligations under this Agreement and the SFC, including but not

MAUI ELECTRIC COMPANY, LIMITED

limited to the obligation to pay any and all amounts owed by Subscriber Organization to Company, Company shall release the Security (including any accumulated interest, if applicable) to Subscriber Organization.

10. **Dispute Resolution:** Each Party agrees to attempt to resolve all disputes arising hereunder promptly, equitably and in a good faith manner. In the event a dispute arises under this Agreement, and if it cannot be resolved by the Parties within thirty (30) days after written notice of the dispute to the other Party, the Parties agree to submit the dispute to the Independent Observer for the CBRE Tariff. Pursuant to Section I.M. of the CBRE Tariff, material disputes unresolved after consultation with the Independent Observer may be presented to the Commission for review and the Commission may issue guidance and/or orders to resolve such disputes consistent with the CBRE Tariff.
11. **Continuity of Service.**
- (a) The Company may require the Seller to temporarily curtail, interrupt or reduce deliveries of energy when necessary in order for the Company to construct, install, maintain, repair, replace, remove, investigate, test or inspect any of its equipment or any part of the Company System including, but not limited to, accommodating the installation and/or testing of non-utility owned facilities to the Company system; or if the Company determines that such curtailment, interruption or reduction is necessary because of a system emergency, forced outage, operating conditions on its system; or the inability to accept deliveries of energy due to excess energy conditions; or if either the CBRE Facility does not operate in compliance with good engineering and operating practices or acceptance of energy from the Seller by the Company would require the Company to operate the Company system outside of good engineering and operating practices which in this case shall include, but not be limited to, excessive system frequency fluctuations or excessive voltage deviations, and any situation that the Company system operator determines, at his or her sole discretion, could place in jeopardy system reliability.
  - (b) When the Company determines that curtailment of energy becomes necessary for excess energy (“Curtailment Event”), curtailments shall be made in reverse chronological order in accordance with Section 2.A.2 of the Standard Form Contract. When Company determines that curtailment of energy becomes necessary for engineering and/or operating reasons that are directly attributable to the CBRE Facility, or system conditions exist that require reduction of the CBRE Facility for reliability and stability reasons, the above curtailment order will not apply.
  - (c) The CBRE Facility will be included in a group of solar projects designated as Phase 2 of the CBRE Program established by the Commission’s Decision and Order No. 37070 in Docket No. 2015-0389 that Company will, to the extent possible, treat as a single “block” (designated for convenience of reference as “CBRE Phase 2 Curtailment Block”) for purposes of implementing excess energy curtailment. When the Company is implementing excess energy curtailments, facilities included in the CBRE Phase 2 Curtailment Block shall be curtailed in reverse chronological order in accordance with the Standard Form Contract Section A.2 and Section 2 of Attachment B to the Standard Form Contract. Projects (such as photovoltaic net energy metering projects, feed-in tariff projects, etc.) that are allowed to be installed without remote curtailment controls and projects for which remote control is otherwise unavailable or inoperable will not be curtailed before the CBRE Facility for excess energy.
  - (d) If the telemetry and control interface is unavailable, due to loss of communication link, remote terminal unit failure, or other event resulting in the loss of the remote control by Company, provision must be made for Subscriber Organization to be able to institute via local controls, within 30 minutes (or such other period as Company accepts in writing) of the verbal directive by the Company system operator, such raising and lowering of the curtailment limits as directed by the Company system operator. Due to timing considerations, this local instruction may not correlate to the remaining CBRE “block” controls.

MAUI ELECTRIC COMPANY, LIMITED

- (e) If all local and remote curtailment controls become unavailable or fail, the CBRE Facility shall, without intentional delay, disconnect from the Company's system.
- (f) If direct transfer trip is determined to be required, but is unavailable due to any reason, including loss of communication or equipment problems, provision must be made for the Subscriber Organization to trip the main circuit breaker.
- (g) In the event that the Company initiates a curtailment event pursuant to this Agreement, Company shall not be obligated to accept any electric energy from the CBRE Facility except for such electric energy that Company notifies the Subscriber Organization that it is able to take during the duration of a curtailment. The Company shall not be liable to the Subscriber Organization for any curtailments that are not a Curtailment Event. The Subscriber Organization shall not override Company's curtailment.

12. **Personnel and System Safety.** If at any time the Company determines, in its sole discretion, that the continued operation of the CBRE Facility may endanger any person or property, the Company's electric system, or have an adverse effect on the safety or power quality of other customers, the Company shall have the right to curtail or disconnect the CBRE Facility from the Company's electric system remotely or otherwise. The CBRE Facility shall remain curtailed or disconnected until such time as the Company is satisfied that the endangering or power quality condition(s) has been corrected, and the Company shall not be obligated to accept any energy from the CBRE Facility during such period. The Company shall not be liable, directly or indirectly, for permitting or continuing to allow an attachment of the CBRE Facility for the acts or omissions of the Subscriber Organization that cause loss or injury, including death, to any third party.

13. **Prevention of Interference.** The Subscriber Organization shall not operate equipment that superimposes a voltage or current upon the Company's system that interferes with the Company's operations, service to the Company's customers, or the Company's communication facilities. Such interference shall include, but not be limited to, overcurrent, voltage imbalance, and abnormal waveforms. If such interference occurs, the Subscriber Organization must diligently pursue and take corrective action at its own expense after being given notice and reasonable time to do so by the Company. If the Subscriber Organization does not take timely corrective action, or continues to operate the equipment causing interference without restriction or limit, the Company may, without liability, disconnect the Subscriber Organization's equipment from the Company's system.

14. **Limitation of Liability.**

- (a) Each Party shall at all times indemnify, defend and save the other Party harmless from any and all damages, losses, claims, including claims and actions relating to injury or death of any person or damage to property, costs and expenses, reasonable attorneys' fees and court costs, arising out of or resulting from the Party's performance of its obligations under this Agreement, except to the extent that such damages, losses or claims were caused by the negligence or intentional acts of the other Party.
- (b) Each Party's liability to the other Party for failure to perform its obligations under this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any punitive, incidental, indirect, special, or consequential damages of any kind whatsoever, including for loss of business opportunity or profits, regardless of whether such damages were foreseen.
- (c) Notwithstanding any other provision in this Agreement, with respect to the Company's provision of electric service to any customer including the Subscriber Organization, the Company's liability to

MAUI ELECTRIC COMPANY, LIMITED

such customer shall be limited as set forth in the Company's tariffs and terms and conditions for electric service, and shall not be affected by the terms of this Agreement.

15. **Subscriber Organization and CBRE Facility Information.** By signing this Agreement, the Subscriber Organization expressly agrees and authorizes the Company to: (a) request and obtain from Subscriber Organization and its contractors, vendors, subcontractors, installers, suppliers or agents (collectively "Subscriber Organization Agents"), at no cost to Company, information related to the CBRE Facility, including but not limited to Watts, Vars, Watt Hours, current and voltage, status of the CBRE Facility, inverter settings, any and all recorded event or alarm logs recorded, (collectively "CBRE Facility Data") that Company reasonably determines are needed to ensure the safe and reliable operation of the CBRE Facility or the Company's system; or (b) make such modifications to the Subscriber Organization's system, at no cost to the Company, that Company determines, in its reasonable discretion, are needed to ensure the safe and reliable operation of the CBRE Facility or the Company's system. Subscriber Organization expressly agrees and irrevocably authorizes Subscriber Organization Agents to disclose such Subscriber Organization Data to Company and to make such modifications to the Subscriber Organization's CBRE Facility upon request by Company.
16. **Additional Information.** The Company reserves the right to request additional information from Subscriber Organization relating to the CBRE Facility, where reasonably necessary, to serve the Subscriber Organization under this Agreement or to ensure reliability, safety of operation, and power quality of the Company's system.
17. **No Material Changes to CBRE Facility.** The Subscriber Organization agrees that no material changes or additions to the CBRE Facility shall be made without having obtained prior written consent from the Company, which consent shall not be unreasonably withheld. Total Rated Capacity of the CBRE Facility must be less than 250kW and in no event may exceed such Total Rated Capacity. If the CBRE Facility changes ownership, the Company may require the new Subscriber Organization to complete and execute an amended Agreement or new Agreement, as may be applicable.
18. **Certification by Licensed Electrical Contractor.** Generating and interconnection systems must comply with all applicable safety and performance standards of the National Electrical Code (NEC), Institute of Electrical and Electronic Engineers (IEEE), and accredited testing laboratories such as the Underwriters Laboratories (UL), and where applicable, the rules of the Commission, or other applicable governmental laws and regulations, and the Company's interconnection requirements, in effect at the time of signing this agreement. This requirement shall include, but not be limited to, the interconnection standards and procedures of the Company's Rule 14H, as well as any other requirements as may be specified in this Agreement, its exhibits, and/or in the SFC, all as authorized by the Commission. Upon request by Company, Subscriber Organization shall cause a Licensed Electrical Contractor, as agent for Subscriber Organization, to certify that once approved by the Company, the proposed CBRE Facility will be installed to meet all preceding requirement(s).
19. **Good Engineering Practice.**
  - (a) Each Party agrees to install, operate and maintain its respective equipment and facilities and to perform all obligations required to be performed by such Party under this Agreement in accordance with good engineering practice in the electric industry and with applicable laws, rules, orders and tariffs.
  - (b) Wherever in this Agreement and the attached Exhibits the Company has the right to give specifications, determinations or approvals, such specifications, determinations and/or approvals shall be given in accordance with the Company's standard practices, policies and procedures, which may include the Company's Electric Service Installation Manual, the Company's Engineering Standard Practice Manual and the IEEE Guides and Standards for Protective Relaying Systems.
20. **Insurance.** The following insurance provisions are only applicable to Generating Facilities with a Total Rated

MAUI ELECTRIC COMPANY, LIMITED

Capacity greater than 10 kW but less than 250 kW:

- (a) The Subscriber Organization shall, at its own expense and during the term of the Agreement and any other time that the CBRE Facility is interconnected with the Company’s system, maintain in effect with a responsible insurance company authorized to do insurance business in Hawaii and with a rating by A.M. Best Company, Inc. of “A-VII” or better, the following insurance or its equivalent at Company’s discretion that will protect the Subscriber Organization and the Company with respect to the CBRE Facility, the CBRE Facility’s operations, and the CBRE Facility’s interconnection with the Company’s system:
- (b) A Commercial General Liability policy covering bodily injury and property damage with a combined single limit of liability of at least the following amounts based on the Total Rated Capacity of the generator (for solar systems—Total Rated Capacity of the generator or inverter, whichever is lower, can be used with appropriate technical documentation on inverter, if not higher Total Rated Capacity will be used), for any occurrence. The limits below may be satisfied through the use of umbrella or excess liability insurance sufficient to meet these requirements:

Commercial General Liability Coverage Amount	Total Rated Capacity of the CBRE Facility
\$1,000,000	Greater than 30 kW and less than 250 kW
\$500,000	Greater than 10 kW and less than or equal to 30 kW

- (c) Solely with respect to the insurance policies required for Generating Facilities with a Total Rated Capacity greater than 30 kW, said insurance by endorsement to the policy or policies shall: name the Company, its directors, officers, agents, and employees as additional insured; include contractual liability coverage for written Agreements; include provisions stating that the insurance will respond to claims or suits by additional insureds against the Subscriber Organization or any other insured thereunder; provide that the insurance is primary with respect to the Subscriber Organization and the Company; and provide that the insurance company waives all rights of subrogation which Subscriber Organization or the insurance company may have against Company, its directors, officers, agents, and employees. Any insurance carried by Company will be excess only and not contribute with this insurance.
- (d) Said insurance by endorsement to the policy or policies shall provide written notice within 30 days to the Company should the required insurance be cancelled, limited in scope, or not renewed upon expiration. “Claims made” policies are not acceptable unless the Subscriber Organization agrees to maintain coverage in full effect at all times during the term of this Agreement and for THREE (3) years thereafter. The adequacy of the coverage afforded by the required insurance shall be subject to review by the Company from time to time, and if it appears in such review that risk exposures require an increase in the coverages and/or limits of this insurance, the Subscriber Organization shall make such increase to that extent and any increased costs shall be borne by the Subscriber Organization. The Subscriber Organization has the responsibility to determine if higher limits are desired and purchased. The Subscriber Organization shall provide certificates of insurance to the Company prior to executing the Agreement and any parallel interconnection. Receipt of any certificate showing less coverage than required shall not operate as a waiver by the Company of the Subscriber Organization’s

obligation to fulfill the applicable requirements of this Section 20. The Subscriber Organization's indemnity and other obligations shall not be limited by the foregoing insurance requirements. Any deductible shall be the responsibility of the Subscriber Organization.

- (e) Alternatively, where the Subscriber Organization is a governmental entity, Subscriber Organization may elect to be self-insured for the amounts set forth above in lieu of obtaining insurance coverage to those levels from an insurance company.

21. **Miscellaneous.**

- (a) **Disconnection and Survival of Obligations.** Upon termination of this Agreement, the CBRE Facility shall be disconnected from the Company's system. The termination of this Agreement shall not relieve the Parties of their respective liabilities and obligations, owed or continuing at the time of termination.
- (b) **Governing Law and Regulatory Authority.** This Agreement was executed in the State of Hawaii and must in all respects be interpreted, governed, and construed under the laws of the State of Hawaii. This Agreement is subject to, and the Parties' obligations hereunder include, operating in full compliance with all valid, applicable federal, state, and local laws or ordinances, and all applicable rules, regulations, orders of, and tariffs approved by, duly constituted regulatory authorities having jurisdiction.
- (c) **Amendment, Modifications, or Waiver.** This Agreement may not be altered or modified by either of the Parties, except by an instrument in writing executed by each of them. None of the provisions of this Agreement shall be considered waived by a Party unless such waiver is given in writing. The failure of a Party to insist in any one or more instances upon strict performance of any of the provisions of this Agreement or to take advantage of any of its rights hereunder shall not be construed as a waiver of any such provisions or the relinquishment of any such rights for the future, but the same shall continue and remain in full force and effect. This Agreement contains the entire agreement and understanding between the Parties, their agents, and employees as to the subject matter of this Agreement. Each Party also represents that in entering into this Agreement, it has not relied on any promise, inducement, representation, warranty, agreement or other statement not set forth in this Agreement.
- (d) **Termination of Existing Agreement.** This Agreement shall supersede any existing agreement, if any, under which Subscriber Organization is currently operating the CBRE Facility and any such agreement shall be deemed terminated as of the date this Agreement becomes effective.

- (e) **Notices.**

All notices, consents and waivers under this Agreement shall be in writing and will be deemed to have been duly given when (i) delivered by hand, (ii) sent by electronic mail ("E-mail") (provided receipt thereof is confirmed via E-mail or in writing by recipient), (iii) sent by certified mail, return receipt requested, or (iv) when received by the addressee, if sent by a nationally recognized overnight delivery service (receipt requested), in each case to the appropriate addresses and E-mail Addresses set forth below (or to such other addresses and E-mail addresses as a Party may designate by notice to the other Party):

Company:

By Mail:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

MAUI ELECTRIC COMPANY, LIMITED



\_\_\_\_\_  
\_\_\_\_\_

Delivered By Hand or Overnight Delivery:

\_\_\_\_\_  
\_\_\_\_\_  
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\_\_\_\_\_  
\_\_\_\_\_

By E-mail:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

With a copy to:

By Mail:

Hawaiian Electric Company, Inc.  
Legal Division  
P.O. Box 2750  
Honolulu, Hawai'i 96840

By E-mail:

Hawaiian Electric Company, Inc.  
Legal Division  
Email: legalnotices@hawaiianelectric.com

Seller: The contact information listed in Attachment A (Description of Generation, Conversion and Storage Facility) hereto.

Notice sent by mail shall be deemed to have been given on the date of actual delivery or at the expiration of the fifth Day after the date of mailing, whichever is earlier. Any Party hereto may change its address for written notice by giving written notice of such change to the other Party hereto.

MAUI ELECTRIC COMPANY, LIMITED

Any notice delivered by E-mail shall request a receipt thereof confirmed by E-mail or in writing by the recipient and followed by personal or mail delivery of such correspondence any attachments as may be requested by the recipient, and the effective date of such notice shall be the date of receipt, provided such receipt has been confirmed by the recipient.

The Parties may agree in writing upon additional means of providing notices, consents and waivers under this Agreement in order to adapt to changing technology and commercial practices.

- (f) **Assignment.** This Agreement may not be assigned by either Party without the prior written consent of the other Party. Such consent shall not be unreasonably withheld. In the event of an assignment for financing, to the extent necessary, Company shall, if requested by Subscriber Organization and if its costs (including reasonable attorneys' fees of outside counsel) in responding to such request are paid by Subscriber Organization, execute such Hawai'i-law-governed documents as may be reasonably requested by a lender in connection with CBRE Facility debt and reasonably acceptable to Company, to acknowledge an assignment of such debt and/or pledge/mortgage.
- (g) **Binding Effect.** This Agreement shall be binding upon and inure to the benefit of the Parties hereto and their respective successors, legal representatives, and permitted assigns.
- (h) **Relationship of Parties.** Nothing in this Agreement shall be deemed to constitute any Party hereto as partner, agent or representative of the other Party or to create any fiduciary relationship between the Parties.
- (i) **Limitations.** Nothing in this Agreement shall limit the Company's ability to exercise its rights or expand or diminish its liability with respect to the provision of electrical service pursuant to the Company's tariffs as filed with the Commission, or the Commission's Standards for Electric Utility Service in the State of Hawai'i, which currently are included in the Commission's General Order Number 7, as either may be amended from time to time.
- (j) **Force Majeure.** For purposes of this Agreement, "Force Majeure Event" means any event: (a) that is beyond the reasonable control of the affected Party; (b) that is not the direct or indirect result of the fault or negligence of that Party; (c) in whole or in part delays or prevents a Party's performance under this Agreement, and (d) that the affected Party is unable to prevent or provide against by exercising reasonable diligence, including the following events or circumstances, but only to the extent they satisfy the preceding requirements: acts of war, public disorder, insurrection or rebellion; floods, hurricanes, earthquakes, lightning, storms, and other natural calamities; explosions or fires; strikes, work stoppages, or labor disputes; embargoes; and sabotage. If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, such Party will, within five (5) Days, notify the other Party in writing, and will keep the other Party informed on a continuing basis of the scope and duration of the Force Majeure Event. The affected Party will specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the affected Party is taking to mitigate the effects of the event on its performance. The affected Party will be entitled to suspend or modify its performance of obligations under this Agreement, other than the obligation to make payments then due or becoming due under this Agreement, but only to the extent that the effect of the Force Majeure Event cannot be mitigated by the use of reasonable efforts. The affected Party will use reasonable efforts to resume its performance as soon as possible.
- (k) **Non-Warranty.** Neither by inspection, if any, or non-rejection, nor in any other way, does the Company give any warranty, express or implied, as to the adequacy, safety, or other characteristics of any structures, equipment, wires, appliances or devices owned, installed or maintained by the Subscriber Organization or leased by the Subscriber Organization from third parties, including without limitation the CBRE Facility and any structures, equipment, wires, appliances or devices appurtenant

MAUI ELECTRIC COMPANY, LIMITED

thereto.

- (l) **Confidential Information.** Except as otherwise agreed or provided herein, each Party shall hold in confidence and shall not disclose confidential information to any person (except employees, officers, representatives and agents, who agree to be bound by this section). Confidential information shall be clearly marked as such on each page or otherwise affirmatively identified. If a court, government agency or entity with the right, power, and authority to do so, requests or requires either Party, by subpoena, oral disposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose confidential information, that Party shall provide the other Party with prompt notice of such request(s) or requirements(s) so that the other Party may seek an appropriate protective order or waive compliance with the terms of this Agreement. In the absence of a protective order or waiver the Party shall disclose only such confidential information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use reasonable efforts to obtain reliable assurance that confidential treatment will be accorded any confidential information so furnished.
- (m) **Execution of Agreement; Multiple Counterparts.** The parties agree that this Agreement, including amendments, may be executed and delivered by exchange of electronic signatures, which may be transmitted by facsimile, E-mail, or other acceptable means. A party's electronic signature shall be considered an "original" signature which is binding and effective for all purposes. This Agreement may be executed in counterparts, each of which shall be deemed an original, and all of which shall together constitute one and the same instrument binding all Parties

22. **Generator/Equipment Certification**

Generating Facilities that utilize inverter technology must be compliant with *Institute of Electrical and Electronics Engineers IEEE Std 1547* and *Underwriters Laboratories UL 1703* and *UL 1741* in effect at the time this Agreement is executed as well as the Company's Rule 14H and utilize equipment listed on the Company's certified advanced inverter list. Generating Facilities that use a rotating machine must be compliant with applicable National Electrical Code, Underwriters Laboratories, and Institute of Electrical and Electronics Engineers standards and rules and orders of the Public Utilities Commission of the State of Hawaii in effect at the time this Agreement is executed. By signing below, the Applicant certifies that the installed generating equipment will meet the appropriate preceding requirement(s) and can supply documentation that confirms compliance, including a certification of the same from the Installing Electrical Contractor upon request by the Company.

MAUI ELECTRIC COMPANY, LIMITED

IN WITNESS WHEREOF, the Parties hereto have caused this Contract to be executed by their duly authorized representatives. This Contract is effective as of the Effective Date set forth above.

[Subscriber Organization]

[Hawaiian Electric Company, Inc.  
Hawai'i Electric Light Company, Inc.  
Maui Electric Company, Limited], a Hawai'i corporation

By: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

MAUI ELECTRIC COMPANY, LIMITED

Order No. 38038 filed October 25, 2021, Docket 2015-0389

Transmittal Letter dated November 4, 2021.

**EXHIBIT A**  
**DESCRIPTION OF CBRE FACILITY**

**1. Subscriber Organization Information**

Name (print): \_\_\_\_\_

**Property Address:** \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Meter # (if applicable): \_\_\_\_\_ TMK: \_\_\_\_\_

Phone: \_\_\_\_\_ Cell: \_\_\_\_\_ Email: \_\_\_\_\_

Mailing Address is the same as the Property Address

**Mailing Address:** \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

**Name of Person Authorized to Sign on behalf of Subscriber Organization:** \_\_\_\_\_

**Hawaii Gross Excise Tax License Number of Subscriber Organization:** \_\_\_\_\_

**2. Electrical Contractor**

Electrical Contractor: \_\_\_\_\_ Hawai'i License #: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Cell: \_\_\_\_\_ Email: \_\_\_\_\_

Supply certification that the generating system will be installed and inspected in compliance with the local Building/Electrical code of the County of:  Honolulu  Maui  Hawai'i

Generating System Building Permit # (to be filled out by the Company upon the Company's approval and execution of Agreement): \_\_\_\_\_ To be filled out by the Company

Interconnection Date (to be filled out by the Company upon the Company's approval and execution of the Agreement): \_\_\_\_\_ To be filled out by the Company

**3. Insurance**

Not Applicable (less than 10 kW)

Insurance Carrier: \_\_\_\_\_

**4. General Technical Information (Attached)**

**Single Line Diagram**  **Three Line Diagram**  **Relay List and Trip Scheme (if applicable)**

5. Generator Qualifications

Generator Type:

- Photovoltaic with Non-Photovoltaic DC Generator  
DC Inverter

Does this design include an Energy Storage System?

- No       Yes (include Exhibit A-1)

What is the system's Maximum Export capability?

Technical System Size: \_\_\_\_\_ kW      Maximum Export: \_\_\_\_\_ kW

6. Interconnecting Equipment Technical Data

Manufacturer: \_\_\_\_\_ Catalog #: \_\_\_\_\_

Type: \_\_\_\_\_ Rated Amps: \_\_\_\_\_ Rated Volts: \_\_\_\_\_

- Fused *or*  Non-Fused |  Single Phase *or*  Three Phase |  Uses multiple disconnects

Mounting Location: \_\_\_\_\_

Will an interposing transformer be used between the generator and the point of interconnection?

- No       Yes

7. Generator Facility Technical Information  
System Information:

Micro Inverter	Central/ String Inverter	Energy Storage (Inverter)	Inverter Manufacturer	Model	Qty.	Peak AC Output Rating (kW)*	Quantity x Peak AC Output Rating (kW)
<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 1					
<input type="checkbox"/> 2	<input type="checkbox"/> 2	<input type="checkbox"/> 2					
<input type="checkbox"/> 3	<input type="checkbox"/> 3	<input type="checkbox"/> 3					
<input type="checkbox"/> 4	<input type="checkbox"/> 4	<input type="checkbox"/> 4					
<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5					
Total Inverter Capacity (kW):							

Micro Inverter	Central/String Inverter	Module Manufacturer	Model	Qty.	STC Rating (kW)*	Quantity x STC Rating (kW)
<input type="checkbox"/> 1	<input type="checkbox"/> 1					
<input type="checkbox"/> 2	<input type="checkbox"/> 2					
<input type="checkbox"/> 3	<input type="checkbox"/> 3					
<input type="checkbox"/> 4	<input type="checkbox"/> 4					
<input type="checkbox"/> 5	<input type="checkbox"/> 5					
Total Module Capacity (kW):						
Total Capacity of Inverter #:		1:	2:	3:	4:	5:
<b>Total Program Size (kW):</b>						
Total System Capacity is the combined sums of the lesser of the AC or DC capacities per inverter.						

\*All equipment ratings must match those listed on their manufacturer's specification sheets.

8. Reserved  Not Applicable

9. Interconnecting Equipment Technical Data  Not Applicable  
Transformer Data

*A copy of transformer Nameplate and Manufacturer's Test Report may be substituted*

Transformer Primary (Volts): \_\_\_\_\_ Transformer Secondary (Volts): \_\_\_\_\_  
 Delta       Wye       Wye Grounded       Delta       Wye       Wye Grounded

Size: \_\_\_\_\_ KVA Transformer Impedance: \_\_\_\_\_ % on \_\_\_\_\_ KVA Base

Transformer Fuse Data  Not Applicable

*Attach fuse manufacturer's Minimum Melt & Total Clearing Time-Current Curves*

At Primary Voltage       At Secondary Voltage

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Size: \_\_\_\_\_ Speed: \_\_\_\_\_

Transformer Protection (if not fuse)  Not Applicable

Please describe: \_\_\_\_\_

Generator Main Circuit Breaker  Not Applicable

*A copy of circuit breaker's Nameplate and Specification Sheet may be substituted*

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_

Continuous Load Rating (Amps): \_\_\_\_\_ Interrupting Rating (Amps): \_\_\_\_\_ Trip Speed (Cycles): \_\_\_\_\_

Feeder Circuit Breaker  Not Applicable

*Attach copy of any proposed Time-Overcurrent Coordination Curves*

Manufacturer	Type	Style/Catalog No.	Proposed Setting


Current Transformer Data  Not Applicable

*Attach copy of Manufacturer's Excitation & Ratio Correction Curves*

Manufacturer	Type	Accuracy Class	Proposed Ration Connection
			/5
			/5
			/5
			/5
			/5



**EXHIBIT A-1**

**DESCRIPTION OF CBRE FACILITY – ADDITIONAL INFORMATION**

**[ADDITIONAL INFORMATION FOR CBRE FACILITIES THAT: (1) INCLUDE AN ENERGY STORAGE SYSTEM; (2) INCLUDE NON-PHOTOVOLTAIC GENERATORS; OR (3) HAVE A TOTAL SYSTEM CAPACITY GREATER THAN 30 KW OR THREE-PHASE ELECTRICAL SERVICE]**

**1. Energy Storage System Information**

Not Applicable

*Specification sheets must be provided for all equipment listed in the section below*

**Description of Energy Storage System Operations:**

Manufacturer: \_\_\_\_\_ Model: \_\_\_\_\_

Size kW: \_\_\_\_\_ Max Capacity kWh: \_\_\_\_\_

Rated kW discharge: \_\_\_\_\_ Rated kW charge: \_\_\_\_\_

Will the energy storage system be used only as an Emergency Backup System?

No  Yes

Describe mode(s) of operation (e.g. charge and discharge timing; does the system match the load with PV and battery?)

Will the distribution grid be used to charge the storage device?

No  Yes, charging periods: \_\_\_\_\_

Will power be exported to the grid?

No  Yes, maximum export to the grid: \_\_\_\_\_

**2. Wind Generator System Information**

Not Applicable

*Specification sheets must be provided for all equipment listed in the section below*

DC Generator Manufacturer	Model	Qty.	Rating (kW)	Quantity x Rating (kW)
<b>Total DC Generator Capacity (kW):</b>				
Inverter Manufacturer	Model	Qty.	Rating (kW)	Quantity x Rating (kW)
<b>Total Inverter Capacity (kW):</b>				
<b>Total System Capacity (kW):</b>				
<b>Fault Current Contribution of Generator (Amps):</b>				

**3. Technical Information for Synchronous and Induction Generators**

Not Applicable

*Specification sheets must be provided for all equipment referenced in the section below*

Number of starts per day: \_\_\_\_\_ Maximum Starting kVA: \_\_\_\_\_ Generator Operating Power Factor: \_\_\_\_\_

MAUI ELECTRIC COMPANY, LIMITED

Order No. 38038 filed October 25, 2021, Docket 2015-0389

Transmittal Letter dated November 4, 2021.

Effectively Grounded     Resonant Grounded     Low-Inductance Grounded     Low-Resistance Grounded     High-Resistance Grounded     Ungrounded

**Generator Characteristic Data\*:**

\* Not needed if Generator Nameplate and Manufacturer's Specification Sheet are provided.

Direct Axis Synchronous Reactance,  $X_d$ : \_\_\_\_\_ P.U.    Direct Axis Transient Reactance,  $X'_d$ : \_\_\_\_\_ P.U.  
 Direct Axis Subtransient Reactance,  $X''_d$ : \_\_\_\_\_ P.U.    Inertia Constant, H: \_\_\_\_\_ P.U.    Excitation Response Ratio: \_\_\_\_\_  
 Direct Axis Open-Circuit Transient Time Constant,  $X_d$ : \_\_\_\_\_ Seconds    Direct Axis Open-Circuit Subtransient Time Constant,  $T''_d$ : \_\_\_\_\_ Seconds

**4. Interconnecting Equipment Technical Data**

**Transformer Data**

Not Applicable

*A copy of transformer Nameplate and Manufacturer's Test Report may be substituted*

Transformer Primary (Volts): \_\_\_\_\_ | Transformer Secondary (Volts): \_\_\_\_\_  
 Delta     Wye     Wye Grounded     Delta     Wye     Wye Grounded  
 Size: \_\_\_\_\_ KVA    Transformer Impedance: \_\_\_\_\_ % on \_\_\_\_\_ KVA Base

**Transformer Fuse Data**

Not Applicable

*Attach fuse manufacturer's Minimum Melt & Total Clearing Time-Current Curves*

At Primary Voltage     At Secondary Voltage

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Size: \_\_\_\_\_ Speed: \_\_\_\_\_

**Transformer Protection (if not fuse)**

Not Applicable

Please describe: \_\_\_\_\_

**Generator Main Circuit Breaker**

Not Applicable

*A copy of circuit breaker's Nameplate and Specification Sheet may be substituted*

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_

Continuous Load Rating (Amps): \_\_\_\_\_    Interrupting Rating (Amps): \_\_\_\_\_    Trip Speed (Cycles): \_\_\_\_\_

**Feeder Circuit Breaker**

Not Applicable

*Attach copy of any proposed Time-Overcurrent Coordination Curves*

Manufacturer	Type	Style/Catalog No.	Proposed Setting

**Current Transformer Data**

Not Applicable

*Attach copy of Manufacturer's Excitation & Ratio Correction Curves*

Manufacturer	Type	Accuracy Class	Proposed Ration Connection
			/5
			/5
			/5
			/5
			/5

**EXHIBIT B**  
**SUBSCRIBER ORGANIZATION-OWNED CBRE FACILITY AND  
INTERCONNECTION FACILITIES**

**1. CBRE Facility**

- a. Compliance with laws and standards.
- (i) The CBRE Facility, CBRE Facility design, and CBRE Facility drawings shall meet all applicable national, state, and local laws, rules, regulations, orders, construction and safety codes, and shall satisfy the terms of the Interconnection Agreement, the SFC, and the Company's Distributed CBRE Facility Interconnection Standards, Technical Requirements ("Interconnection Standards"), as set forth in Rule 14, Paragraph H.1 of the Company's tariff.
  - (ii) This Agreement incorporates by reference the standards and requirements of Company Rule 14H; however, in the event of any conflict between this Agreement and Company Rule 14H, the provisions of this Agreement shall control.
- b. Avoidance of adverse system conditions. The CBRE Facility shall be designed, installed, operated and maintained so as to prevent or protect against adverse conditions on the Company's system that can cause electric service degradation, equipment damage, or harm to persons, such as:
- (i) Unintended islanding.
  - (ii) Inadvertent and unwanted re-energization of a Company dead line or bus.
  - (iii) Interconnection while out of synchronization.
  - (iv) Overcurrent.
  - (v) Voltage imbalance.
  - (vi) Ground faults.
  - (vii) Generated alternating current frequency outside of permitted safe limits.
  - (viii) Voltage outside permitted limits.
  - (ix) Poor power factor or reactive power outside permitted limits.
  - (x) Abnormal waveforms.
- c. Specification of protection, synchronizing and control requirements. The Subscriber Organization shall provide the design drawings, operating manuals, manufacturer's brochures/instruction manual and technical specifications, manufacturer's test reports, bill of material, protection and synchronizing relays and settings, and protection, synchronizing, and control schemes for the CBRE Facility to the Company for its review, and the Company shall have the right to specify the protection and synchronizing relays and settings, and protection, synchronizing and control schemes that affect the reliability and safety of operation and power quality of the Company's system with which the CBRE Facility is interconnected ("Facility Protection Devices/Schemes").
- d. Maximum Export. The net instantaneous MW output from the CBRE Facility may not exceed the Maximum Export capability, as set forth in Section 5 of this Agreement. The Company may take appropriate action to limit such net instantaneous MW output, pursuant to Company's Rule 14H, this Agreement and/or the SFC.

e. CBRE Facility protection and maintenance.

- (i) The Subscriber Organization is solely responsible for securing and providing adequate protection for the CBRE Facility. The Subscriber Organization shall also perform vegetation management and other routine maintenance in accordance with manufacturer recommendations and intervals for purposes of maintaining the CBRE Facility in good working order. Subscriber Organization shall comply with all commercially reasonable requests of Company to update security and/or maintenance if required to prevent security breaches.
- (ii) By the first day of each calendar quarter following the Commercial Operations Date, Subscriber Organization shall provide the Company in writing a projection of maintenance outages for the next calendar quarter. If, during the term of this Agreement, the CBRE Facility or any of the individual components of the CBRE Facility should be damaged or destroyed, or taken out of service for unscheduled maintenance, the Subscriber Organization shall provide the Company as soon as reasonably practicable following or in anticipation of such event, and promptly repair or replace the damaged or destroyed equipment at the Subscriber Organization's sole expense. If the time period for repair or replacement is reasonably anticipated to exceed one hundred eighty (180) days, the Company shall have the right to request to terminate this Agreement by written notice.

f. Information Security Requirements.

- (i) Safety and Security Procedures. The Subscriber Organization shall maintain and enforce safety and security procedures to safeguard: all data provided by Company to Subscriber Organization pursuant to this Agreement or in any way connected with the CBRE Program and the administration of the CBRE Program including but not limited to Subscriber names, Subscriber account numbers and information on such accounts, Subscriber addresses, Subscriber rate schedules and Subscriber CBRE bill credit information ("Company CBRE Data"); and all information regarding Company's customers, customer lists, any of the data and testing results produced under this Agreement and any information identified by Company as confidential ("Company Customer Data" and together with Company CBRE Data, collectively referred to as "Company Confidential Information"); all generation and telemetry data provided by the Subscriber Organization to the Company ("SO Data"); in Subscriber Organization's possession, including Company Confidential Information that Subscriber Organization provides to any contractors, consultants, and other third parties retained by Subscriber Organization to assist Subscriber Organization to perform under this Agreement in the course of Subscriber Organization's performance pursuant to this Agreement. Subscriber Organization warrants that it shall (A) use the National Institute of Standards and Technology ("NIST") industry best practices for physical and systems security measures to prevent destruction, loss, alteration or unauthorized access to, use of, or tampering with, the CBRE Facility, Subscriber Organization software, and Company Confidential Information, including to protect the confidentiality and integrity of any of Company Confidential Information, operation of Company's systems, and to prevent viruses and similar destructive code from being placed in any software or data provided to Company, on Subscriber Organization's or Company's website, or in Subscriber Organization's or Company's programming; and (B) use NIST industry best practices physical security and precautionary measures to prevent unauthorized access or damage to the CBRE Facility, including to protect the

confidentiality and integrity of any of Company's Confidential Information as well as the operation of Company's systems. Subscriber Organization shall, at a minimum, protect Company's Confidential Information and provide the standard of care required by NIST cybersecurity requirements, and the same measures it uses to protect its own confidential information.

- (ii) Exception to Certain NIST Requirements. Company, at its sole and absolute discretion, may waive the requirements concerning NIST industry best practices as set forth in subsection (i)(A) and (B) above provided that Subscriber Organization implements alternate measures that Company deems acceptable and not inconsistent with Company's standards with respect to (A) physical and systems security measures to prevent destruction, loss, alteration or unauthorized access to, use of, or tampering with, the CBRE Facility, software and Company's Confidential Information, including to protect the confidentiality and integrity of any of Company's Confidential Information, operation of Company's systems, and to prevent viruses and similar destructive code from being placed in any software provided to Company, on Subscriber Organization's or Company's website, or in Subscriber Organization's or Company's programming; and (B) physical security and precautionary measures to prevent unauthorized access or damage to the CBRE Facility, including to protect the confidentiality and integrity of any of Company's Confidential Information as well as the operation of Company's systems.
- (iii) Security Breach. In the event that Subscriber Organization discovers or is notified of a breach, potential breach of security, or security incident at the CBRE Facility or of Subscriber Organization's systems (a "Security Breach"), Subscriber Organization shall immediately (i) notify Company of such Security Breach, whether or not such breach has compromised any of Company Confidential information, (ii) investigate and remediate the effects of the Security Breach, (iii) cooperate with Company with respect to any such Security Breach and provide necessary information on the Security Breach as requested by Company; and (iv) comply with all applicable privacy and data protection laws, including any notification obligations. Any remediation of any Security Breach will be at Subscriber Organization's sole expense.
- (iv) "Subscriber" means a retail customer of the Company who owns a subscription of Subscriber Organization's CBRE project interconnected with the Company.

g. Subscriber Organization Interconnection Facilities.

- (i) The Subscriber Organization shall furnish, install, operate and maintain interconnection facilities (such as circuit breakers, relays, switches, synchronizing equipment, monitoring equipment, and control and protective devices and schemes) designated by or acceptable to the Company as suitable for parallel operation of the CBRE Facility with the Company's system ("Subscriber Organization Interconnection Facilities"). Such facilities shall be accessible at all times to authorized Company personnel.
- (ii) The Subscriber Organization shall comply with the Company's Interconnection Standards.
- (iii) 1) Single-line diagram of the CBRE Facility, 2) relay list, trip scheme and settings of the CBRE Facility, 3) CBRE Facility Equipment List, and 4) three-line diagram, which identify the circuit breakers, relays, switches, synchronizing equipment, monitoring equipment, and control and protective devices and schemes, shall, after having

MAUI ELECTRIC COMPANY, LIMITED

obtained prior written consent from the Company, be attached to Exhibit A and made a part hereof at the time the Agreement is signed. The single-line diagram shall include pertinent information regarding operation, protection, synchronizing, control, monitoring, and alarm requirements. The single-line diagram and three-line diagram shall expressly identify the point of interconnection of the CBRE Facility to the Company's system. The relay list, trip scheme and settings shall include all protection, synchronizing and auxiliary relays that are required to operate the CBRE Facility in a safe and reliable manner. The three-line diagram shall show potential transformer and current transformer ratios, and details of the CBRE Facility's configuration, including relays, meters, and test switches.

(iv) Subscriber Organization shall provide final as-built drawings of the Subscriber Organization Interconnection Facilities within thirty (30) days of the successful completion of the initial verification test. Within thirty (30) days of Company's receipt of the proposed as-built drawings, Company shall provide Subscriber Organization with either (A) its comments on the proposed as-built drawings or (B) notice of acceptance of the proposed as-built drawings as final as-built drawings. If Company provides comments on the proposed as-built drawings, Subscriber Organization shall incorporate such comments into a final set of as-built drawings and provide such final as-built drawings to Company within twenty (20) days of Subscriber Organization's receipt of Company's comments.

h. Approval of Design Drawings. The single-line diagram, relay list, trip scheme and settings of the CBRE Facility, and three-line diagram shall be approved by a Professional Electrical Engineer registered in the State of Hawaii prior to being submitted to the Company. Such approval shall be indicated by the engineer's professional seal on all drawings and documents.

i. [Reserved]

j. Schedule. The Company and the Subscriber Organization have agreed upon on a schedule for the progression of the CBRE Facility's construction (e.g., construction start date, Commercial Operations Date, etc.) and each Party has a copy of such schedule and agrees to use commercially reasonable efforts to adhere to such schedule.

## 2. Verification Testing.

a. Upon initial parallel operation of the CBRE Facility, or any time either (i) interface hardware or software is changed, or (ii) the Company observes that the Subscriber Organization is not in compliance with the operational and performance requirements specified in the Company's Rule 14H, this Agreement and/or the SFC, a verification test shall be performed. Such verification test shall include testing of the telemetry and control interface which allows the Company to remotely measure, monitor, evaluate and verify technical compliance, CBRE Facility performance, and power quality and, if necessary, control the CBRE Facility. A licensed professional engineer or otherwise qualified individual shall perform verification testing in accordance with the manufacturer's published test procedure. Qualified individuals include professional engineers, factory trained and certified technicians, and licensed electricians with experience in testing protective equipment. The Company reserves the right to witness verification testing or require written certification that the testing was performed.

b. Verification testing shall also be performed every four years. The Company reserves the right to perform, at its expense, additional verification testing. All verification tests prescribed by the manufacturer shall be performed. If wires must be removed to perform certain tests, each wire

MAUI ELECTRIC COMPANY, LIMITED

and each terminal shall be clearly and permanently marked. The Subscriber Organization shall maintain verification test reports for inspection by the Company.

- c. Inverters shall be verified once per year as follows: once per year the Subscriber Organization shall operate the Subscriber Organization system disconnect switch and verify the CBRE Facility automatically shuts down and does not reconnect with the Company's system until the Company's system continuous normal voltage and frequency have been maintained for a minimum of 5 minutes. The Subscriber Organization shall maintain a log of these operations for inspection by the Company.
- d. Any system that depends upon a battery for trip power shall be checked once per month for proper voltage. Once every four (4) years the battery shall either be replaced or have a discharge test performed. The Subscriber Organization shall maintain a log of these operations for inspection by the Company.
- e. Tests and battery replacements as specified in this section 2 of Exhibit B shall be at the Subscriber Organization's expense.
- f. The CBRE Facilities may also be subject to an acceptance test and a control system acceptance test prior to initial parallel operation. The procedures for such tests will be provided to Subscriber Organization by the Company prior to executing this Agreement.

**3. Inspection of the CBRE Facility.**

- a. The Company may, in its discretion and upon reasonable notice not to be less than 24 hours (unless otherwise agreed to by the Company and the Subscriber Organization), observe the construction of the CBRE Facility (including but not limited to relay settings and trip schemes) and the equipment to be installed therein.
- b. Within fourteen days after receiving a written request from the Subscriber Organization to begin producing electric energy in parallel with the Company's system, the Company may inspect the CBRE Facility (including but not limited to relay settings and trip schemes) and observe the performance of the verification testing. The Company may accept or reject the request to begin producing electric energy based upon the inspection or verification test results.
- c. If the Company does not perform an inspection of the CBRE Facility (including but not limited to relay settings and trip schemes) and observe the performance of verification testing within the fourteen-day period, the Subscriber Organization may begin to produce energy after certifying to the Company that the CBRE Facility has been tested in accordance with the verification testing requirements and has successfully completed such tests. After receiving the certification, the Company may conduct an inspection of the CBRE Facility (including but not limited to relay settings and trip schemes) and make reasonable inquiries of the Subscriber Organization, but only for purposes of determining whether the verification tests were properly performed. The Subscriber Organization shall not be required to perform the verification tests a second time, unless irregularities appear in the verification test report or there are other objective indications that the tests were not properly performed in the first instance.
- d. The Company may, in its discretion and upon reasonable notice not to be less than 24 hours (unless an apparent safety or emergency situation exists which requires immediate inspection to resolve a known or suspected problem), inspect the CBRE Facility (including but not limited to relay settings and trip schemes) and its operations (including but not limited to the operation of control, synchronizing, and protection schemes) after the CBRE Facility commences

operations.

**4. Operating Records and Procedures.**

- a. The Company may require periodic reviews of the maintenance records, and available operating procedures and policies of the CBRE Facility.
- b. The Subscriber Organization must separate the CBRE Facility from the Company's system whenever requested to do so by the Company's System Operator pursuant to this Agreement. It is understood and agreed that at times it may not be possible for the Company to accept electric energy due to temporary operating conditions on the Company's system, and these periods shall be specified by the Company's System Operator. Notice shall be given in advance when these are scheduled operating conditions.
- c. Logs shall be kept by the Subscriber Organization for information on unit availability including reasons for planned and forced outages; circuit breaker trip operations, relay operations, including target initiation and other unusual events. The Company shall have the right to review these logs, especially in analyzing system disturbance. Subscriber Organization shall maintain such records for a period of not less than six (6) years.

**5. Changes to the CBRE Facility, Operating Records, and Operating Procedures.**

- a. The Subscriber Organization agrees that no material changes or additions to the CBRE Facility as reflected in the single-line diagram, relay list, trip scheme and settings of the CBRE Facility, CBRE Facility Equipment List, and three-line diagram shall be made without having obtained prior written consent from the Company, which consent shall not be unreasonably withheld.
- b. As a result of the observations and inspections of the CBRE Facility (including but not limited to relay list, trip scheme and settings) and the performance of the verification tests, if any changes in or additions to the CBRE Facility, operating records, and operating procedures and policies are required by the Company, the Company shall specify such changes or additions to the Subscriber Organization in writing, and the Subscriber Organization shall, as soon as practicable, but in no event later than thirty (30) days after receipt of such changes or additions, respond in writing, either noting agreement and action to be taken or reasons for disagreement. If the Subscriber Organization disagrees with the Company, it shall note alternatives it will take to accomplish the same intent, or provide the Company with a reasonable explanation as to why no action is required by good engineering practice.

**6. CBRE Facility Equipment List.**

The CBRE Facility shall include the following equipment:

[Specific items to be attached as necessary. The CBRE Facility Equipment List, together with the single-line diagram, relay list and trip scheme, and three-line diagram, should be attached to this Exhibit B.]



**EXHIBIT C**  
**COMPANY-OWNED INTERCONNECTION FACILITIES**

(To be filled out by Company)

**1. Description of Company Interconnection Facilities**

The Company will purchase, construct, own, operate and maintain all interconnection facilities required to interconnect the Company’s system with the CBRE Facility at \_\_\_\_\_ volts, up to the point of interconnection.

The Company Interconnection Facilities, for which the Subscriber Organization agrees to pay, include:

[Need to specify the interconnection facilities. If no interconnection facilities, state “None”.]

**2. Subscriber Organization Payment to Company for Company Interconnection Facilities. Review of CBRE Facility, and Review of Verification Testing**

The Subscriber Organization shall pay to the Company the total estimated interconnection cost to be incurred by the Company (Total Estimated Interconnection Cost), which is comprised of (i) the estimated cost of the Company Interconnection Facilities, (ii) the estimated engineering costs associated with a) developing the Company Interconnection Facilities and b) reviewing and specifying those portions of the CBRE Facility which allow interconnected operation, and iii) witnessing and reviewing the verification testing, which shall include testing of the telemetry and control interface which allows the Company to remotely measure, monitor, evaluate and verify technical compliance, CBRE Facility performance, and power quality and, if necessary, control the CBRE Facility. The following summarizes the Total Estimated Interconnection Cost:

Description	Estimated Cost (\$) [If no cost, state “None”.]
<b>Total Estimated Interconnection Cost (\$):</b>	

The Total Estimated Interconnection Cost, which, except as otherwise provided herein, is non-refundable, shall be paid by the Subscriber Organization fourteen (14) days after receipt of an invoice from the Company, which shall be provided not less than thirty (30) days prior to start of procurement of the Company Interconnection Facilities.

Within thirty (30) days of receipt of an invoice, which shall be provided within fourteen (14) days of the final accounting, which shall take place within sixty (60) days of completion of construction of the Company Interconnection Facilities, the Subscriber Organization shall remit to the Company the difference between the Total Estimated Interconnection Cost paid to date and the total actual interconnection cost (Total Actual Interconnection Cost). The latter is comprised of (i) the total costs of the Company Interconnection Facilities, and (ii) the total engineering costs associated with a) developing the Company Interconnection Facilities and b) reviewing and specifying those portions of the CBRE Facility which allow interconnected operations as such are described in Exhibit A, and iii) reviewing the verification testing. If in fact the Total Actual Interconnection Cost is less than the payments received by the Company as the Total Estimated Interconnection Cost, the Company shall repay the difference to the Subscriber Organization within thirty (30) days of the final accounting.

If the Agreement is terminated prior to the Subscriber Organization's payment for the Total Actual Interconnection Cost (or the portion of this cost which has been incurred) or prior to the Company's repayment of the over collected amount of the Total Estimated Interconnection Cost (or the portion of this cost which has been paid), such payments shall be made by the Subscriber Organization or Company, as appropriate. If payment is due to the Company, the Subscriber Organization shall pay within thirty (30) days of receipt of an invoice, which shall be provided within fourteen (14) days of the final accounting, which shall take place within sixty (60) days of the date the Agreement is terminated. If payment is due to the Subscriber Organization, the Company shall pay within thirty (30) days of the final accounting.

All Company Interconnection Facilities shall be the property of the Company.

**3. Operation, Maintenance and Testing Costs**

The Company will bill the Subscriber Organization monthly and the Subscriber Organization will, within 30 days after the billing date, reimburse the Company for any costs incurred in operating, maintaining or testing the Company Interconnection Facilities. The Company's costs will be determined on the basis of outside service costs, direct labor costs, material costs, transportation costs, applicable overheads at time incurred and applicable taxes. Applicable overheads will include such costs as vacation, payroll taxes, non-productive wages, supervision, tools expense, employee benefits, engineering administration, corporate administration, and materials handling. Applicable taxes will include the Public Service Company Tax, and Public Utility Fee.

**EXHIBIT D**  
**FORM OF LETTER OF CREDIT**

**[Bank Letterhead]**

**[Date]**

**Beneficiary: [Hawaiian Electric Company, HELCO or MECO, as appropriate]**  
**[Address]**

**[Bank's Name]**  
**[Bank's Address]**

Re: **[Irrevocable Standby Letter of Credit Number]**

Ladies and Gentlemen:

We hereby establish, in your favor, our irrevocable standby Letter of Credit Number \_\_\_\_\_ (this "Letter of Credit") for the account of **[Applicant's Name]** and **[Applicant's Address]** in the initial amount of \$ \_\_\_\_\_ **[dollar value]** and authorize you, Hawaiian Electric Company **[HELCO or MECO, as appropriate]** ("Beneficiary"), to draw at sight on **[Bank's Name]**.

Subject to the terms and conditions hereof, this Letter of Credit secures **[Project Entity Name]**'s certain obligations to Beneficiary under the Community-Based Renewable Energy Program Interconnection Agreement dated as of \_\_\_\_\_ between **[Project Entity Name]** and Beneficiary.

This Letter of Credit is issued with respect to the following obligations: \_\_\_\_\_.

This Letter of Credit may be drawn upon under the terms and conditions set forth herein.

Partial draws of this Letter of Credit are permitted. This Letter of Credit is not transferable. Drafts on us at sight shall be accompanied by a Beneficiary's signed statement signed by a representative of Beneficiary substantially as follows:

The undersigned hereby certifies that (i) I am duly authorized to execute this document on behalf of Hawaiian Electric Company **[HELCO or MECO, as appropriate]**, and [(ii) the amount of the draft accompanying this certification is due and owing to Hawaiian Electric Company **[or HELCO or MECO, as appropriate]** under the terms of the Interconnection Agreement dated as of \_\_\_\_\_, between \_\_\_\_\_, and Hawaiian Electric Company **[or HELCO or MECO, as appropriate]**] [(ii) the amount of the draft accompanying this certification is due and owing to Hawaiian Electric Company **[or HELCO or MECO, as appropriate]** under the terms of the Standard Form Contract dated as of \_\_\_\_\_, between \_\_\_\_\_, and Hawaiian Electric Company **[or HELCO or MECO, as appropriate]**] [(ii) the Letter of Credit will expire in less than thirty (30) days, it has not been replaced or extended and collateral is still required under Section\_\_\_\_ of the Interconnection Agreement\*].

Such drafts must bear the clause "Drawn under **[Bank's Name and Letter of Credit Number]** \_\_\_\_\_ **and date of Letter of Credit.**"

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\* For draw relating to lapse of Letter of Credit while credit support is still required pursuant to the Standard Form Contract.

All demands for payment shall be made by presentation of originals or copies of documents, by facsimile transmission of documents to **[Bank Fax Number]** or other such number as specified from time to time by the bank, or by email transmission of documents to **[Bank Email Address]** or other such email address as specified from time to time by the bank. If presentation is made by facsimile transmission, you may contact us at **[Bank Phone Number]** to confirm our receipt of the transmission. Your failure to seek such a telephone confirmation does not affect our obligation to honor such a presentation. If presented by facsimile or email, original documents are not required.

This letter of credit shall expire one year from the date hereof. Notwithstanding the foregoing, however, this letter of credit shall be automatically extended (without amendment of any other term and without the need for any action on the part of the undersigned or Beneficiary) for one year from the initial expiration date and each future expiration date unless we notify you in writing at least thirty (30) days prior to any such expiration date that this letter of credit will not be so extended. Any such notice shall be delivered by registered or certified mail, or by FedEx, both to **[revise for HELCO or MECO, as appropriate]**:

Manager, CER Programs - CBRE  
Hawaiian Electric Company, Inc.  
220 South King Street, 12<sup>th</sup> Floor  
Honolulu, Hawai'i 96813

and to

SVP & Chief Financial Officer  
Hawaiian Electric Company, Inc.  
900 Richards Street, 4<sup>th</sup> Floor  
Honolulu, Hawai'i 96813

We hereby agree with drawers that drafts and documents as specified above will be duly honored upon presentation to **[Bank's Name]** and **[Bank's Address]** if presented on or before the then-current expiration date hereof.

Payment of any amount under this Letter of Credit by **[Bank]** shall be made as the Beneficiary shall instruct on the next Business Day after the date the **[Bank]** receives all documentation required hereunder, in immediately available funds on such date. As used in this Letter of Credit, the term "Business Day" shall mean any day other than a Saturday or Sunday or any other day on which banks in the State of Hawai'i are authorized or required by law to be closed.

Unless otherwise expressly stated herein, this irrevocable standby letter of credit is issued subject to the rules of the International Standby Practices, International Chamber of Commerce publication no. 590 ("ISP98").

**[Bank's Name]:**

By: \_\_\_\_\_  
**[Authorized Signature]**

**APPENDIX IV**

**HAWAI'I COMMUNITY BASED RENEWABLE ENERGY – PHASE 2  
STANDARD FORM CONTRACT (LESS THAN 250 KW)**

THIS STANDARD FORM CONTRACT FOR HAWAI'I COMMUNITY BASED RENEWABLE ENERGY – PHASE TWO (“Contract”) is entered into as of \_\_\_\_\_, 20\_\_ (the “Effective Date”), by [Hawaiian Electric Company, Inc., Maui Electric Company, Ltd., Hawai‘i Electric Light Company, Inc.], a Hawai‘i corporation (hereafter called "Company") and \_\_\_\_\_ (hereafter called "Subscriber Organization"). Together, the Company and Subscriber Organization are the “Parties” and may singularly each be referred to as a “Party.”

**RECITALS**

**WHEREAS**, Company is an operating electric public utility engaged in the generation, transmission, distribution, [storage,] regulation, or physical control of electricity (“Company System”) on the Island of [Hawai‘i, Maui, Oahu], subject to the Hawai‘i Public Utilities Law (Hawai‘i Revised Statutes, Chapter 269) and the rules and regulations of the Hawai‘i Public Utilities Commission (hereinafter called the "PUC" or the “Commission”); and [DRAFTING NOTE: This SFC is drafted to include a battery energy storage system ("**BESS**") as part of the CBRE Facility. References to the BESS and/or storage appear in bold text and brackets and will need to be revised to conform to specifics of each CBRE Project.]

**WHEREAS**, the Company System is operated as an independent power grid and must both maximize system reliability for its customers by ensuring that sufficient generation is available that meets the Company’s requirements for voltage stability, frequency stability, and reliability standards; and

**WHEREAS**, Subscriber Organization is an “approved Subscriber Organization,” as defined in the Company’s Community-Based Renewable Energy (“CBRE”) Program Phase 2 Tariff (“CBRE Tariff”), and desires to operate a renewable energy generation system (“RE System”) that is classified as an eligible resource under Hawai‘i’s Renewable Portfolio Standards Statute (codified as Hawai‘i Revised Statutes (HRS) 269-91 through 269-95) and qualifies for the CBRE Program [together with a safe, reliable and operationally flexible battery energy storage system (“**BESS**”)] so as to provide the Company System with those benefits and services associated with renewable energy generation [and energy storage services], as defined herein; and

**WHEREAS**, this Contract applies to RE Systems providing less than 250 kW and is entered into in accordance with the terms and conditions contained herein, the CBRE Tariff, the Interconnection Agreement (attached as Appendix III to the CBRE Tariff ) and Company Rule 14, Paragraph H (Interconnection of Distributed Generating Facilities Operating in Parallel With The Company’s Electric System) (“Rule 14H”); and

**WHEREAS**, concurrent with this Contract the Parties have executed the Interconnection Agreement which allows Subscriber Organization to interconnect and operate the CBRE Facility in parallel with the Company System so long as all applicable requirements and conditions of this Contract, the Interconnection Agreement, the CBRE Tariff and Rule 14H have been satisfied; and

**WHEREAS**, the RE System to be developed by the Subscriber Organization will be an established or planned electrical energy generation system with a nameplate capacity of \_\_\_\_\_ kilowatts of alternating current (AC) and

MAUI ELECTRIC COMPANY, LIMITED

[WHEREAS, the BESS to be installed by the Subscriber Organization will be an electrical energy battery storage system with a nameplate capacity in kilowatt-hours [kWh] of \_\_\_\_\_; and] **[DRAFTING NOTE: REMOVE THIS RECITAL IF PROJECT DOES NOT INCLUDE BESS]**

**WHEREAS**, the RE System **[and BESS]** (hereinafter the “CBRE Facility”) will be constructed and operated on property located at \_\_\_\_\_, Island of \_\_\_\_\_, State of Hawai‘i (“CBRE Project”) and more fully described in Exhibit A (Description of Generating Facility) **[and Exhibit A-1 (Additional Information for Generating Facilities that include an Energy Storage System) to the Interconnection Agreement]**; and

**WHEREAS**, Subscriber Organization desires to sell to Company, and Company agrees to purchase, subject to the terms and conditions set forth herein, the renewable energy produced by the CBRE Facility and exported to Company at the Point of Interconnection; and

**WHEREAS**, Subscriber Organization agrees that it and its subscribers shall be compensated by Company for renewable energy produced by the CBRE Facility and exported to the Company at the Point of Interconnection in accordance with the terms and conditions set forth in this Contract.

**NOW, THEREFORE**, in consideration of the premises and the respective promises herein, Company and Subscriber Organization hereby agree as follows:

#### **AGREEMENT**

**1. DEFINITIONS.** When the capitalized terms set forth in the Schedule of Defined Terms in Attachment A are used in this Contract, such terms shall have the meanings set forth in such Schedule.

**2. SALE AND PAYMENT FOR RENEWABLE ENERGY.**

**A. Sale of Renewable Energy Produced by CBRE Facility**

1. Effective upon the Commercial Operations Date, Subscriber Organization agrees to sell to Company, and Company agrees to purchase from Subscriber Organization, all of the renewable energy produced by the CBRE Facility and delivered to the Point of Interconnection, subject to and in accordance with the terms and conditions of this Contract.
2. Company may require Subscriber Organization to temporarily curtail, interrupt or reduce deliveries of renewable energy produced by the CBRE Facility as a result of circumstances described in and in accordance with Attachment B (Curtailment Block) to this Contract. A Curtailment Event will reduce the amount of renewable electrical energy the CBRE Facility is permitted to deliver to the Company.
3. Subscriber Organization shall not sell the renewable energy produced, stored or associated with the CBRE Facility, to any person or entity other than the Company during the Term of this Contract.
4. The Company will buy (through Bill Credits to the Subscribers) all Subscribed Energy generated by the CBRE Project and delivered to the Company during a particular Production Month at the current applicable “Credit Rate,” as determined by the Phase 2 CBRE Tariff (hereinafter “Bill

Credit Rate”).<sup>1</sup> Each Subscriber to the CBRE Program will receive a Bill Credit at the Bill Credit Rate for electricity generated attributable to the Subscriber's Subscription as detailed below.

5. The Company will buy (through payment to the Subscriber Organization) all Unsubscribed Energy generated by the CBRE Project and delivered to the Company during a particular Production Month at the Bill Credit Rate, subject to adjustment as detailed in Section 2(D) of this Contract.

**B. Updating Monthly Subscription Information During Production Month; Invoicing Following Close of Production Month.**

1. No later than the last Day of each Production Month, the Subscriber Organization shall provide to the Company any and all changes to the Monthly Subscription Information to be used for such Production Month by entering new or updating previously-entered data through the CBRE Online Portal. Such data to be entered or changed by the Subscriber Organization pursuant to this paragraph shall include additions, deletions or changes to the listing of Subscribers holding Subscriptions in the CBRE Facility, including any changes occurring by said last Day of such Production Month to the Subscriber's account number and service address attributable to each Subscription and the Subscriber Allocation for each Subscriber's Subscription.
2. For each Production Month, the purchase or transfer of all or any portion of a Subscriber's Allocation occurring on or before the 20<sup>th</sup> Day of such Production Month of which the Company is notified, as provided for in the preceding paragraph, shall have retroactive effect as of the first Day of such Production Month; the purchase or transfer of all or any portion of a Subscriber's Allocation occurring on or after the 21<sup>st</sup> Day of such Production Month, but prior to the first Day of the following Production Month, shall have effect as of the first Day of such following Production Month. Unsubscribed Energy of the CBRE Facility shall be recalculated as of the last Day of each Production Month to account for the effectiveness of such purchases and transfers as aforesaid.
3. By the fifth (5<sup>th</sup>) Business Day following each Production Month, Company shall provide the following information to Subscriber Organization for its use in computing the amount to be paid for the renewable energy purchased by Company during such Production Month:
  - a. Production Meter data pertaining to renewable energy produced by the CBRE Facility and exported to the Company at the Point of Interconnection during such Production Month; and
  - b. If applicable, amounts reasonably incurred by Company, and reimbursable by Subscriber Organization to Company under Section 7(D) of this Contract, during such Production Month for the maintenance, operation, and testing of the Production Meter and related infrastructure, and any other amounts due to Company under said Section 7(D).
4. By the tenth (10<sup>th</sup>) Business Day following each Production Month, Subscriber Organization shall submit to Company its monthly invoice for such Production Month detailing:
  - a. A computation, based on the updated Monthly Subscriber Information for such Production Month as provided pursuant to Sections 2(B)1 and 2(B)2 of this Contract, of the Bill Credits

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<sup>1</sup> Such Bill Credit Rate shall be either the Credit Rate specified in the Phase 2 CBRE Framework or as determined by Company in accordance with the “competitive credit rate procurement” or “CCRP” mechanism outlined in the Phase 1 CBRE Framework.

to which each Subscriber is entitled based on such Subscriber's Subscriber Allocation for such Production Month, to be applied to each Subscriber's retail electric bill; and

- b. The dollar amount owing to Subscriber Organization for Unsubscribed Energy.
- c. The dollar amount owing Company for the \$25.00 (monthly) Production Meter Administration Fee and any other applicable Subscriber Organization Fees as set forth in Section 7(D) of this Contract. Amounts owed to Company shall appear on the monthly invoice as a credit against the amount owed to Subscriber Organization for Unsubscribed Energy.

**C. Payment Procedures.**

1. Payment for Unsubscribed Energy. By the twentieth (20<sup>th</sup>) Business Day of the calendar month during which the invoice in question was received as provided in Section 2(B)4 of this Contract (but no later than the last Business Day of such calendar month if there are less than twenty Business Days in such month), Company shall pay Subscriber Organization the amount owing for the Unsubscribed Energy for the Production Month covered by such invoice as shown on such invoice, or provide to Subscriber Organization an itemized statement of its objections to all or any portion of such invoice and pay any undisputed amount.
2. Late Payments. Notwithstanding all or any portion of such invoice in dispute, any payment for the Unsubscribed Energy not made to Subscriber Organization by the payment deadline established in the preceding paragraph shall accrue simple interest at the Prime Rate for the period from that payment deadline until the outstanding interest and invoiced Unsubscribed Energy amount (or amount due to Subscriber Organization if determined to be less than the invoiced Unsubscribed Energy amount) are paid in full. Partial payments for Unsubscribed Energy shall be applied first to outstanding interest and then to outstanding invoice amount for the Unsubscribed Energy.
3. Payment for Subscribed Energy. The sole means of payment for each Subscriber's Subscriber Allocation during the Production Month covered by the invoice, shall be by a Bill Credit on such Subscriber's retail electric bill for all undisputed amounts. Because not all of Company's customers have the same billing cycle, the timing of the appearance of the Bill Credit will vary with the Subscriber's billing cycle, but Company shall cause the Bill Credit to appear on each Subscriber's retail electric bill no later than two (2) billing cycles for such Subscriber following the date Company makes payment to Subscriber Organization for Unsubscribed Energy on the corresponding invoice. The Production Month upon which the Bill Credit is based shall not necessarily match the billing period for the retail electric service bill in which the Bill Credit is applied.
4. For purposes of applying the Bill Credit to each Subscriber's retail electric bill, the Company shall be entitled to rely exclusively on the Monthly Subscription Information as timely entered by the Subscriber Organization via the CBRE Online Portal as set forth in Sections 2(B)1 and 2(B)2 of this Contract.
5. Error In Allocation. If there is a breach, error or changed circumstances resulting in some production from the CBRE Facility being assigned in excess of a Subscriber's allowable Subscriber Allocation under the CBRE Tariff, then the Company may treat this excess as Unsubscribed Energy and not provide a Bill Credit to any Subscriber for any such excess production. Payment to the Subscriber Organization for such Unsubscribed Energy shall only

MAUI ELECTRIC COMPANY, LIMITED



occur if no corresponding Bill Credit is made to a Subscriber, or if already allocated, if such allocation is corrected and withdrawn from such Subscriber, the intent of the parties herein is to ensure that no production from the CBRE Facility is double-counted to any Subscriber and/or Subscriber Organization.

**D. Adjusting Bill Credit Rate for Unsubscribed Energy.**

1. The amount the Company shall pay for the Unsubscribed Energy produced and exported by the CBRE Facility during a particular Production Month shall be determined as follows:
  - a. For the first six (6) Production Months from and including the Commercial Operations Date, Company shall pay Subscriber Organization for Unsubscribed Energy at the Bill Credit Rate.
  - b. Beginning with the seventh Production Month following the Commercial Operations Date, the price to be paid to Subscriber Organization for Unsubscribed Energy shall be recalculated as follows:
    - i. If the Unsubscribed Energy as of the last Day of such Production Month, as recalculated to account for purchases and transfers as set forth in Section 2(B)2 of this Contract, does not exceed 15% of the total of the renewable energy accepted by Company during such Production Month in accordance with this Contract, Company shall pay Subscriber Organization the Bill Credit Rate for the Unsubscribed Energy accepted by Company during such Production Month.
    - ii. However, if the Unsubscribed Energy as of the last Day of such Production Month, as recalculated to account for purchases and transfers as set forth in Section 2(B)2 of this Contract, exceeds 15% of the total of the renewable energy accepted by Company during such Production Month in accordance with this Contract, the price Company shall pay Subscriber Organization for the Unsubscribed Energy accepted by Company during such Production Month shall be discounted by the percentage of Unsubscribed Energy. For example, if the Unsubscribed Energy is 40%, the Bill Credit Rate shall be discounted by 40% for Unsubscribed Energy accepted by the Company during such Production Month.
2. The CBRE Facility shall be required to have a minimum of four (4) individual Subscribers at all times. For a period of six (6) Production Months following the Commercial Operations Date, the Subscriber Organization shall incur no payment reduction for Unsubscribed Energy if the CBRE Facility should fall below this minimum number of Subscribers. Effective after six (6) Production Months, the following shall be placed into effect for the remainder of the term of the CBRE Facility:
  - a. If the CBRE Facility does not have the minimum 4 individual Subscribers for any Production Month, the unmet percentage of Subscribers to the minimum number of four (4) required Subscribers shall reduce the Subscriber Organization's Bill Credit Rate used for compensation for Unsubscribed Energy delivered shall be reduced by such percentage. For example, if the CBRE Facility has only 3 Subscribers for any given month, the unmet number of Subscribers is 1 and the percentage to the 4 minimum Subscribers required will be 25% and the Subscriber Organization's Credit Rate for the next month will be reduced by 25%.
  - b. If the Subscriber Organization's Unsubscribed Energy for the CBRE Facility is also greater than 15% in such month, the Bill Credit Rate for compensation for Unsubscribed Energy

MAUI ELECTRIC COMPANY, LIMITED

delivered in the next month shall be reduced by the sum of the percentage determined from sub-part D.2.a. above plus the percentage of Unsubscribed Energy for that month.

- c. If the Subscriber Organization does not have a minimum of four (4) individual Subscribers but does not have any Unsubscribed Energy, the CBRE Facility shall be subject to equivalent liquidated damages as specified below. Continued failure to achieve the minimum 4 Subscribers for over one year could result in termination and removal from the CBRE Program in accordance with the CBRE Tariff.

Method to Determine Payment Reduction for Failure to Maintain Minimum Number of Subscribers. The percentage determined in sub-part D.2.a. above shall be multiplied by the applicable kWh delivered in such month and such amount shall be multiplied by the applicable Credit Rate (the sub-part D.2.a. percentage \* the applicable Bill Credit Rate) to equal a dollar amount liquidated damages for the Subscriber Organization's failure to maintain the requisite number of Subscribers for any given month.

3. Residential Customer Requirement. 40% of the Contract Capacity of the CBRE Facility shall be reserved for individual subscriptions for residential Subscribers (as defined in the CBRE Tariff). For a period of six (6) Production Months following the Commercial Operations Date, the Subscriber Organization shall incur no payment reduction if it should fall below this minimum percentage of residential Subscribers. Effective after six (6) Production Months, the following shall be placed into effect for the remainder of the term of the CBRE Facility

- a. If the CBRE Facility does not have the minimum 40% residential Subscribers for any month, the difference in percentage between the CBRE Facility's actual residential Subscriber percentage and the 40% minimum shall reduce the Subscriber Organization's Bill Credit Rate for compensation for Unsubscribed Energy delivered by a factor equal to one-fourth (0.25) of such percentage difference. For example, if the CBRE Facility's residential Subscriber percentage is 30%, the difference, 10%, from the 40% minimum requirement, shall be multiplied by 0.25 ( $10\% * 0.25 = 2.5\%$ ). The 2.5% result shall reduce the Bill Credit Rate for Unsubscribed Energy for that month by such percentage.
- b. If the Subscriber Organization's Unsubscribed Energy for the CBRE Facility is also greater than 15% in such month, the compensation for Unsubscribed Energy delivered in that month shall be reduced by the sum of the percentage payment reduction for the unmet residential Subscriber percentage plus the percentage of Unsubscribed Energy for that month.
- c. If the Subscriber Organization does not have the required minimum percentage of residential Subscribers but does not have any Unsubscribed Energy, the CBRE Facility shall be subject to an equivalent penalty as specified below. Continued failure to achieve this minimum percentage of residential Subscribers for more than one year could result in termination and removal from the CBRE Program in accordance with the CBRE Tariff.

Method to Determine Payment Reduction for Failure to Maintain Minimum Residential Subscribers. The percentage determined in sub-part D.3.a. above shall be multiplied by the applicable kWh delivered in such month and such amount shall be multiplied by the applicable Credit Rate (the sub-part D.3.a. percentage \* the applicable Bill Credit Rate) to equal a dollar amount liquidated damages for the Subscriber Organization's failure to maintain the requisite percentage of residential Subscribers for any given month.

- E. Company's Obligation to Provide Curtailed Energy Data.** By the fifth (5th) Business Day of each calendar month, Company shall provide Subscriber Organization, with a written report as set forth in Attachment C to this Contract (the "Curtailed Report") identifying each Curtailment Event during the preceding calendar month. The Curtailment Report will include the start and end time of each Curtailment Event and the reason for curtailment. The Curtailment Report shall not include curtailment instituted by Subscriber Organization or curtailment for scheduled maintenance.
- F. Limitations Period.** All Subscriber Organization claims for adjustments shall be submitted to the Company within three years of the end of the calendar month covered by the invoice on which the adjustment amount in question was invoiced or should have been invoiced. Claims not submitted to the Company by the end of such three-year period shall be deemed to have been waived.
- G. Company's Billing Records.** Subscriber Organization, after giving reasonable advance written notice to Company, shall have the right during Company's normal working hours on Business Days to review all billing, metering and related records necessary to verify the accuracy of the data provided by Company regarding payments and credits for the exported energy produced by the CBRE Facility. Company shall maintain such records for a period of not less than thirty-six (36) months.
- H. Subscriber Organization Responsibility for Billing Inaccuracies.** The correction of any allocation of previously-applied Bill Credits among Subscribers or payments to the Subscriber Organization for Unsubscribed Energy, pertaining to a particular month due to any inaccuracy reflected in such Monthly Subscription Information with regard to a Subscriber's Subscription in the CBRE Facility and the beneficial share of renewable energy exported by the CBRE Facility, or the share of Unsubscribed Energy, shall be the full responsibility of the Subscriber Organization, unless such inaccuracies are caused by the Company.

### 3. HOUSE POWER.

The Company will sell House Power to the CBRE Facility under the rate schedule in force for the class of customer to which the Subscriber Organization belongs. A separate meter to record energy delivered to the CBRE Facility may be installed by the Company. The Subscriber Organization shall be solely responsible for arranging retail electric service exclusively from the Company in accordance with the Company's Electric Rate Book. The Subscriber Organization shall obtain House Power solely through separately metered retail service and shall not obtain House Power through any other means and waives any regulatory or other legal claim or right to the contrary. Because the Subscriber Organization must make all energy produced by the CBRE Facility available to the Company, the CBRE Facility may not use the energy it generates to be consumed by it. It may not net-out or use energy it generates for House Power. The Parties acknowledge and agree that the performance of their respective obligations with respect to House Power shall be separate from this Contract and shall be interpreted independently of the Parties' respective obligations under this Contract. Notwithstanding any other provision in this Contract, nothing with respect to the arrangements for House Power shall alter or modify the Subscriber Organization's or the Company's rights, duties and obligations under this Contract. This Contract shall not be construed to create any rights between the Subscriber Organization and the Company with respect to the arrangements for House Power.

### 4. METERING REQUIREMENTS, CHARGES AND TESTING.

- A.** Company shall install, operate and maintain for the benefit of the CBRE Facility a revenue metering package suitable for measuring the export of renewable energy (AC) produced by the CBRE Facility in kilowatts and kilowatt-hours on a time-of-day basis and reactive power flow in kilovars and true root mean square kilovar-hours (the "Production Meter"). The metering point for the

MAUI ELECTRIC COMPANY, LIMITED

Production Meter shall be as close as possible to the Point of Interconnection as allowed by Company.

Subscriber Organization, subject to Company review and approval, shall purchase, install, and maintain the infrastructure and other related equipment ("Meter Infrastructure") including meter housing, socket replacement and rewiring as required to install the Production Meter and any additional service meter(s), including such meters for measuring House Power. Subscriber Organization shall install the Meter Infrastructure in adherence with requirements set forth in the latest edition of the Company's Electric Service Installation Manual (ESIM). Company shall test the Production Meter prior to installation and at the request and expense of the Subscriber Organization.

Subscriber Organization shall reimburse Company for the costs reasonably incurred for the purchase and installation of the Production Meter. Subscriber Organization shall be responsible for the ongoing costs incurred by Company to operate, maintain (including maintenance replacements) and test the Production Meter during the Term.

- B. Metering Charge per Month: \$25.00.** Subscriber Organization shall be charged each month during the Term an administrative metering fee of a \$25.00 for the Production Meter. The administrative metering fee is addition to the costs associated with the purchase, installation, maintenance and testing of the Production Meter and Meter Infrastructure.
- C. Meter Testing.** Company shall provide at least twenty-four (24) hours' notice to Subscriber Organization prior to any test it may perform on the Production Meter or metering equipment. Subscriber Organization may request tests in addition to the every fifth-year test and Subscriber Organization shall pay the cost of such tests. Company may perform tests in addition to the fifth-year test and Company shall pay the cost of such tests. If any of the meters or metering equipment is found to be inaccurate at any time, as determined by testing in accordance with this Section, Company shall promptly cause such equipment to be made accurate, and the period of inaccuracy, as well as an estimate for correct meter readings, shall be determined as provided in Company's Tariff Rule No.11[Billing Error, Meter Tests and Adjustment for Meter Errors].

**5. [RESERVED]**

- 6. INTERCONNECTION AGREEMENT; REQUIREMENTS.** The Subscriber Organization must sign the Company's Interconnection Agreement and comply with all of the terms and conditions of that Interconnection Agreement except as otherwise specified in this Contract. In the event of any inconsistency or conflict between the terms and provisions of this Contract and the Interconnection Agreement, the terms and provisions of the Interconnection Agreement shall control.

**7. CBRE TARIFF REQUIREMENTS.**

- A.** The Subscriber Organization shall comply with and assure that the requirements of the CBRE Framework and CBRE Tariff applicable to the CBRE Facility are met.
- B.** Subscriber Organization shall require all prospective Subscribers to execute a Subscription Agreement as a precondition to enrollment as a Subscriber in the CBRE Facility. The Subscription Agreement must satisfy the requirements of the CBRE Tariff, CBRE Framework, this Contract and any additional guidance from the PUC. Prior to executing the Subscription Agreement, the Subscriber Organization shall make to the Subscriber the disclosures required under the Disclosure

Checklist (Appendix II to the CBRE Tariff). A copy of the Disclosure Checklist signed by both the Subscriber Organization and the Subscriber shall be attached to the executed Subscription Agreement. The Subscriber Organization shall also disclose to the Subscriber that a failure to pay such Subscriber's monthly retail electric bill that results in Company issuance of a disconnection notice will result in forfeiture of Bill Credits for the duration of such disconnection. For each Subscriber, there must be a completed and fully executed Subscriber Agency Agreement and Consent Form (Appendix I to the CBRE Tariff), which is delivered to the Company prior to the Commercial Operations Date, or prior to adding each Subscriber.

**C. Funds Received From Subscribers Prior to the Commercial Operations Date.** Any payments made to Subscriber Organization by Subscribers prior to the Commercial Operations Date shall be deposited into an escrow account ("Pre-COD Escrow") and may not be withdrawn from the Pre-COD Escrow by the Subscriber Organization until the Commercial Operations Date. The Pre-COD Escrow must conform to the CBRE Tariff, CBRE Framework, applicable Laws and any additional guidance from the PUC.

**D. Subscriber Organization Fees.** Subscriber Organization shall pay to Company the following fees:

- \$250 Application Fee
- All applicable late fees for failure to meet Commercial Operations Date
- All applicable interconnection costs, fees and expenses, including costs associated with acquisition and installation of the Production Meter
- All applicable costs for the operation, maintenance and testing of the Production Meter
- \$5/kW AC Program Administration Fee (annually), from the Commercial Operations Date
- \$25.00 (monthly) Production Meter Administration Fee
- Such other fees as the PUC may establish for the CBRE Program

If Company does not set off the amount of these fees against Company payments to Subscriber Organization for Unsubscribed Energy, Company shall invoice Subscriber Organization for payment to Company of the foregoing fees. Subscriber Organization shall make payment to Company within 15 Days of Subscriber Organization's receipt of such invoice.

**E. Compliance.** The Subscriber Organization shall be responsible for ensuring that the equipment installed at the CBRE Facility meets all applicable codes, standards, and regulatory requirements at the time of installation and throughout its operation.

Subscriber Organization shall comply with all of the rules stated in the Company's applicable electric tariff rules related to the CBRE Program, as the same may be revised from time to time, and this Contract, as may be amended from time to time, as allowed by an amendment to this Contract approved, or deemed approved, by the PUC. In the event of any conflict between the terms of this Contract and Company's electric tariff rules related to the CBRE Program, the provisions of the tariff shall control.

**F. Project Completion.**

1. The Subscriber Organization shall achieve the Commercial Operations Date for the CBRE Facility within eighteen (18) months from the execution date of this Contract, as the same may be extended as provided herein or in the CBRE Tariff (the “Commercial Operations Date Deadline”), which shall in no event be later than December 1, 2024, unless permitted by the CBRE Tariff. The Commercial Operations Date Deadline shall be extended day-for-day for a CBRE Facility that, in the Company's determination, has suffered a Force Majeure event (as set forth Section 21(j) of the Interconnection Agreement) prior to the Commercial Operations Date, or for any delay caused by Company.
2. Notwithstanding the foregoing, a local-government moratorium to issuing a permit may extend the 18-month Project Completion period for no more than an additional 6 months. Failure to seek a permit, delay in seeking a permit, or permit-processing time not subject to a moratorium is not included in this 6-month extension.
3. If Substantial Progress has been achieved, but the Commercial Operations Date has not been achieved by the Commercial Operations Date Deadline, and Subscriber Organization still intends to complete its CBRE Facility, then the Subscriber Organization shall pay a “late fee” to Company of \$200/day/MW nameplate capacity of the RE System until the CBRE Facility achieves the Commercial Operations Date. For example, if a RE System has a nameplate capacity of 100 kW, and it achieves the Commercial Operations Date 30 Days late, the “late fee” would be \$600. The “late fee” shall be paid to Company before the Commercial Operations Date. However, if Company fails to collect in full such amount by this date, such unpaid amount may be included as part of the actual costs of interconnection under the Interconnection Agreement. All “late fee” payments received by Company will be credited back to offset the costs to the Company ratepayers for the CBRE Program. A prerequisite to showing that Substantial Progress has been achieved in a timely manner is that before the Commercial Operations Date Deadline the Subscriber Organization must submit a signed letter to Company attesting to the fact that Substantial Progress as defined in this Contract has been made, and attach photographs to that letter demonstrating this.
4. If: (1) Substantial Progress has not been achieved by the Commercial Operations Date Deadline, or (2) Subscriber Organization does not wish to complete its CBRE Facility upon the Commercial Operations Date Deadline, or (3) the Commercial Operations Date that is extended due to a permit issuance moratorium is not achieved within six (6) months from the originally required Commercial Operations Date Deadline, then the application for the CBRE Facility and this Contract will be terminated and canceled and the corresponding Interconnection Agreement will be terminated by Company without further notice. No additional concurrence from the CBRE IO shall be necessary for such termination. The Application Fee and any other deposits paid by the Subscriber Organization shall be forfeited.
5. After termination, the Subscriber Organization, if it still intends to proceed with the CBRE Facility, must submit a new application and pay any applicable deposit and/or fees which will be subject to the then current CBRE Tariff, Bill Credit Rate and other applicable CBRE requirements for new projects, including CBRE Program capacity availability.

**G. Financial Compliance.**

1. If Company reasonably believes the provisions of this Section 7.G apply to the CBRE Facility, Company shall notify Subscriber Organization in writing and Subscriber Organization shall provide or cause to be provided to Company on a timely basis, all information, including but not limited to information that may be obtained in any audit referred to below (the "Financial Compliance Information"), reasonably requested by Company for purposes of permitting Company and its parent company, Hawaiian Electric Industries, Inc. ("HEI") to comply with the requirements (initial and on-going) of (i) the accounting principles of Financial Accounting Standards Board ("FASB") Accounting Standards Codification 810, Consolidation ("FASB ASC 810"), (ii) FASB ASC 842 Leases ("FASB ASC 842"), (iii) Section 404 of the Sarbanes-Oxley Act of 2002 ("SOX 404") and (iv) all clarifications, interpretations and revisions of and regulations implementing FASB ASC 810, FASB ASC 842, and SOX 404 issued by the FASB, Securities and Exchange Commission, the Public Company Accounting Oversight Board, Emerging Issues Task Force or other Governmental Authorities. In addition, if required by Company in order to meet its compliance obligations, Subscriber Organization shall allow Company or its independent auditor to audit, to the extent reasonably required, Subscriber Organization's financial records, including its system of internal controls over financial reporting; provided, however, that Company shall be responsible for all costs associated with the foregoing, including but not limited to Subscriber Organization's reasonable internal costs. Company shall limit access to such Financial Compliance Information to Company and HEI personnel involved with such compliance matters and restrict any Company or HEI personnel involved in Company's monitoring, dispatch or scheduling of the Subscriber Organization and/or the CBRE Facility, the administration of this Contract, or in developing potential CBRE projects, from having access to such Financial Compliance Information (unless approved in writing in advance by Subscriber Organization).
2. Confidentiality. As a condition to obtaining the Financial Compliance Information, Company shall, and shall cause HEI to, maintain the confidentiality of said Financial Compliance Information pursuant to a mutually agreed to confidentiality and non-disclosure agreement to be executed among Company, HEI and Subscriber Organization.
3. Consolidation. Company does not want to be subject to consolidation as set forth in FASB ASC 810, as issued and amended from time to time by FASB. Company represents that, as of the Effective Date, it is not required to consolidate Subscriber Organization into its financial statements in accordance with FASB ASC 810. If for any reason, at any time during the Term, Company determines, in its sole but good faith discretion, that it is required to consolidate Subscriber Organization into its financial statements in accordance with FASB ASC 810, then Subscriber Organization shall immediately provide audited financial statements (including footnotes) in accordance with U.S. generally accepted accounting principles (and as of the reporting periods Company is required to report thereafter) in order for Company to consolidate and file its financial statements within the reporting deadlines of the Securities and Exchange Commission. Notwithstanding the foregoing requirement that Subscriber Organization provide audited financial statements to Company, the Parties will take all commercially reasonable steps, which may include modification of this Contract to eliminate

the consolidation treatment, while preserving the economic "benefit of the bargain" to both Parties.

- H. **Audits.** The Company reserves the right to inspect the CBRE Facility as necessary to assure the safety and reliability of the system at any time during the Term, and for an additional period of one (1) year thereafter.
- I. **Capacity Limit.** The CBRE Facility must have a nameplate capacity of less than 250 kilowatts of alternating current (AC) .
- J. **No Relocation.** The RE System **[and BESS]** shall be located at the CBRE Facility as shown in its application at all times during the Term.
- K. **Disclosure of Production Information.** The Subscriber Organization acknowledges and agrees that, in order for the Company to carry out its responsibilities in applying Bill Credits to each Subscriber's retail electric bills, the Company may be required and shall be permitted to provide access or otherwise disclose and release to any Subscriber any and all production data related to the RE System **[and BESS]** in its possession and information regarding the total Bill Credits applied by the Company with respect to the CBRE Facility and any information pertaining to a Subscriber's Subscription. Any additional detailed information requested by a Subscriber shall be provided only upon the Subscriber Organization's consent in writing or email to the Company, or unless the Public Utilities Commission or the CBRE IO requests that the Company provide such information to the Subscriber, or as otherwise required by law.
- L. **Disclosure of CBRE Facility Information.** The Subscriber Organization acknowledges and agrees that the Company may publicly disclose the CBRE Facility location, Subscriber Organization, nameplate capacity and production data of the CBRE Facility. Additionally, the Company will periodically provide a bill message to Subscribers clarifying that questions or concerns related to their Subscription should be directed to the Subscriber Organization, including a statement that the Subscriber Organization is solely responsible for resolving any disputes with the Company or the Subscriber about the accuracy of the CBRE Facility data and that the Company is solely responsible for resolving any disputes with the Subscriber about the applicable rate used to determine the amount of the Bill Credit.
- M. **Certain Tax and Securities Law Issues.** The Company makes no warranty or representation concerning the taxable consequences, if any, to Subscriber Organization or its Subscribers with respect to its Bill Credits to the Subscribers for participation in the CBRE Facility. Additionally, the Company makes no warranty or representation concerning the implication of any federal or state securities laws on how Subscriptions to the CBRE Facility are handled.
- N. **Full Cooperation with the PUC.** The Parties agree to fully cooperate with any request for information from the PUC or the CBRE IO pertaining in any way to the CBRE Facility and will provide such information upon request in a timely manner. To the extent to which any request calls for producing a specific Subscriber's Confidential Account Information, Subscriber Energy Usage Data or Bill Credits, such information shall be provided and marked as Confidential Information.
- O. **New Energy Generating Systems.** The RE System must not be built or previously interconnected at the time of application to the CBRE Program.
- P. **Fair Disclosure; Disclosure Checklist.** Prior to the time when any person or entity becomes a Subscriber, the Subscriber Organization will fairly disclose the future costs and benefits of the

MAUI ELECTRIC COMPANY, LIMITED



Subscription and all other matters specified in the Disclosure Checklist and provide to the potential Subscriber a copy of this Contract. The Subscriber Organization shall comply with all other requirements of the PUC and applicable Laws with respect to communications with Subscribers.

**8. REQUIREMENTS APPLICABLE TO SUBSCRIBER ORGANIZATION'S RELATIONSHIP WITH ITS SUBSCRIBERS.**

The Subscriber Organization must comply with all of the following:

**A. Subscriber Information.** The Subscriber Organization shall issue Subscriptions in the CBRE Facility only to eligible retail electric service customers of the Company and provide to the Company the name, account number and service address attributable to each Subscription and the Subscriber Allocation for each Subscriber's Subscription. The Subscriber Organization shall take care to preserve the privacy expectations of the Subscribers, such as not publicly providing a Subscriber's Confidential Account Information, Subscriber Energy Usage Data, or Bill Credits. The Subscriber Organization will not disclose or share such information except as permitted by the Subscriber Agency Agreement and Consent Form executed by Subscriber in connection with Subscriber's acquisition of its Subscription in the CBRE Facility or otherwise unless the Subscriber has provided explicit informed consent or if such disclosure is compelled by Law.

**B. Subscriber Transfer or Exit.**

The transfer, cancellation, termination and/or exit of a Subscriber's interest in the CBRE Facility shall be completed in full accordance with all applicable CBRE Program rules, in addition to any other terms, conditions or requirements imposed by the Subscriber Organization in the Subscriber Agreement, which Subscriber Organization shall ensure is also consistent with and in compliance with applicable CBRE Program rules. The CBRE Rule 29 Tariff requirements shall take precedence over any inconsistent or conflicting provisions found in the Subscriber Agreement.

**C. Updating Subscriber Information.** The Subscriber Organization shall provide to the Company the Monthly Subscriber Information together with any and all updates to the Monthly Subscription Information as provided in Rule 29 Part I: Sections B.10.b.iii and B.11.a.iii.

**D. Responsibility for Verification.** The Subscriber Organization shall verify that each Subscriber is eligible to be a Subscriber in the CBRE Facility and that the CBRE Tariff requirements are met.

**9. EVENTS OF DEFAULT BY SUBSCRIBER ORGANIZATION.** The occurrence of any of the following shall constitute an "Event of Default" by Subscriber Organization:

**A.** If at any time during the Term, Subscriber Organization delivers or attempts to deliver to the Point of Interconnection for sale under this Contract renewable energy that was not produced by the CBRE Facility and Subscriber Organization fails to cease such delivery or attempt to deliver such renewable energy within ten (10) Days after Company's written notice of such delivery or attempt.

**B.** If any representation or warranty made to Company by Subscriber Organization herein is false and misleading in any material respect when made.

**C.** If at any time subsequent to the Commercial Operations Date, Subscriber Organization fails to provide renewable energy to Company for a period of three hundred sixty-five (365) or more

consecutive Days, unless such failure is caused by the inability of Company to accept such renewable energy.

- D. Subscriber Organization becomes insolvent, or makes an assignment for the benefit of creditors; or shall have an order for relief in an involuntary case under the bankruptcy Laws as now or hereafter constituted entered against it, or shall commence a voluntary case under the bankruptcy Laws as now or hereafter constituted, or shall file any petition or answer seeking for itself any arrangement, composition, adjustment, liquidation, dissolution or similar relief to which it may be entitled under any present or future Law; or seeks or consents to or acquiesces in the appointment of or taking possession by, any custodian, trustee, receiver or liquidator of it or of all or a substantial part of its properties or assets; or takes action looking to its dissolution or liquidation, and Subscriber Organization is unable to remedy such actions within one hundred eighty (180) Days of the occurrence of such breach or default.
- E. Other than the events of default specified in Sections 9.(A), (B) and (C) above, Subscriber Organization, by act or omission, materially breaches or defaults on any material covenant, condition or other provision of this Contract, if such breach or default is not cured within thirty (30) Days after written notice of such breach or default from Company; provided, however, that if it is objectively impossible to cure such breach or default within said thirty (30) Day period, then, for so long as Subscriber Organization is making the same effort to cure such breach or default as would be expected of an experienced independent power producer willing and able to exert commercially reasonable efforts to achieve such cure, Subscriber Organization shall have a cure period equal to three hundred sixty five (365) Days beginning on the date of Company's written notice of such breach or default.
- F. Subscriber Organization fails to comply with the terms and conditions or fails to assure compliance with the terms and conditions of the (1) Interconnection Agreement or (2) CBRE Tariff, if such breach or default is not cured within thirty (30) Days after written notice of such breach or default from Company.
- G. Company provides written notice to Subscriber Organization to terminate the Interconnection Agreement upon the conditions stated therein.

#### **10. REMEDIES FOR BREACH.**

- A. In the event of any Event of Default by the Subscriber Organization, then the Company shall have available to it any other remedy provided for in this Contract and any or all of the following remedies which can be used either singularly or cumulatively.
- B. For any Event of Default by the Subscriber Organization:
  - (1) Company shall provide written notice to the Subscriber Organization to remedy the Event of Default within the applicable cure period specified for such Event of Default, if any.
  - (2) If after the cure period, if any, provided for in the Company's notice the Subscriber Organization is still not in compliance with this Contract, then the Company shall have the right to request to terminate the Contract via a Notice of Intent to Terminate and Request for IO Concurrence to the IO (the "Notice to IO").
  - (3) If the CBRE IO concurs with the Company's request to terminate the Contract, the Company shall provide written notice to Subscriber Organization and Subscriber Organization

MAUI ELECTRIC COMPANY, LIMITED

shall have five (5) Business Days to provide proof that Company's and CBRE IO's determination to terminate the Contract is in error.

(4) If the Subscriber Organization fails to provide such proof or if the Company and the CBRE IO reasonably determine that such proof is insufficient to reverse the Company's decision to terminate, Company may proceed to terminate the Contract by providing a written notice of termination to Subscriber Organization. A copy of such notice shall be provided to all Subscribers of the CBRE Facility, the CBRE IO and the PUC.

(5) The termination date in the notice of termination shall not be earlier than thirty (30) Days from the date of such notice.

- C. In the event of an Event of Default by the Subscriber Organization for which the Company sends a written notice pursuant to this Section 10, Company shall also send a copy of the notice as soon as practicable to any financing party for the CBRE Facility whose contact information has been provided to the Company. Any such financing party shall have the right to cure the alleged breach within the cure period provided in Section 9 and Company agrees to accept any such cure as if made by the Subscriber Organization. The Company shall be under no obligation to provide any such financing party with any information contrary to the Data Privacy Commitments set forth in Exhibit 1 to the Subscriber Agency Agreement and Consent Form. The Company shall be under no obligation to provide any such financing party with any information it may have which is confidential to the Subscriber Organization unless the Subscriber Organization has provided written consent to the Company permitting the release to the financing party of such confidential information.
- D. Subscriber Organization acknowledges that Company is a public utility and is relying upon Subscriber Organization's performance of its obligations under this Contract, and that Company and/or its customers may suffer irreparable injury as a result of the failure of Subscriber Organization to perform any of such obligations, whether or not such failure constitutes an Event of Default or otherwise gives rise to one or more of the remedies set forth in this Section 10. Accordingly, the remedies set forth in this Section 10 shall not limit or otherwise affect Company's right to seek specific performance injunctions or other available equitable remedies for Subscriber Organization's failure to perform any of its obligations under this Contract, irrespective of whether such failure constitutes an Event of Default.
- E. In the event of any breach of this Contract by Company, the Subscriber Organization shall provide Company with a written notice of the breach. Company shall have up to thirty (30) Days to cure the breach. If the breach is not cured within the thirty (30) Days, the Subscriber Organization may utilize the procedures set forth in Section 12. If the breach results in Bill Credits not being issued to one or more individual Subscribers, in the absence of a cure by Company within the allowed time following the notice, the applicable Subscriber(s) may also seek a remedy for any past due Bill Credits from the PUC pursuant to the CBRE Tariff.

## 11. LIMITATION OF LIABILITY

- A. Each Party shall at all times indemnify, defend, and save the other Party harmless from any and all damages, losses, claims, including claims and actions relating to injury or death of any person or damage to property, costs and expenses, reasonable attorneys' fees and court costs, arising out of or resulting from the Party's performance of its obligations under this Contract, except to the extent that such damages, losses or claims were caused by the negligence or intentional acts of the other Party.

MAUI ELECTRIC COMPANY, LIMITED

- B. Each Party's liability to the other Party for failure to perform its obligations under this Contract shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any punitive, incidental, indirect, special, or consequential damages of any kind whatsoever, including for loss of business opportunity or profits, regardless of whether such damages were foreseen.
- C. Notwithstanding any other provision of the Contract or this Section 11. with respect to the Company's duties or performance or lack of performance under this Contract, the Company's liability to the Subscriber Organization shall be limited as set forth in the Company's rate book and terms and conditions for electric service, which shall not be affected by the terms of this Contract. There are no third-party beneficiaries of any Company duty under this Contract other than the Company's duty to Subscribers to issue Bill Credits as set forth in this Contract, and the duty to a financing party under Section 10.C. of this Contract.
- D. Indemnification of Company Against Third Party Claims. Subscriber Organization shall indemnify, defend, and hold harmless Company, its successors, permitted assigns, affiliates, controlling persons, directors, officers, employees, agents, contractors, subcontractors and the employees of any of them (collectively referred to as an "Indemnified Company Party"), from and against any Losses suffered, incurred or sustained by any Indemnified Company Party due to any Claim (whether or not well founded, meritorious or unmeritorious) by a third party not controlled by, or under common ownership and/or control with, Company relating to (i) the Subscriber Agreement between Subscriber Organization and its Subscribers or (ii) Subscriber Organization's development, permitting, construction, ownership, operation and/or maintenance of the CBRE Facility.

## 12. DISPUTE RESOLUTION.

- A. Each Party agrees to attempt to resolve all disputes arising hereunder promptly, equitably and in a good faith manner.
- B. If a dispute arises under this Contract between the Parties which cannot be resolved by the Parties within thirty (30) Days after written notice of the dispute to the other Party, then the Parties shall mediate the dispute with the CBRE IO for resolution, which shall be non-binding upon the Parties.
- C. If the Parties still cannot resolve the dispute even after mediation with the CBRE IO, either Party may refer the dispute for resolution to the PUC, which shall maintain continuing jurisdiction over this Contract.

13. **ENVIRONMENTAL CREDITS.** Included in the purchase and sale of renewable energy are all of the Environmental Credits associated with the renewable energy. Company will not reimburse Subscriber Organization for any taxes or fees imposed on Subscriber Organization including, but not limited to, State of Hawai'i general excise tax. To the extent not prohibited by law, Company shall have the sole and exclusive right to use the renewable energy purchased hereunder to meet RPS and any Environmental Credit shall be the property of Company; provided, however, that such Environmental Credits shall be to the benefit of Company's ratepayers in that the value must be credited "above the line." Subscriber Organization shall use all commercially reasonable efforts to ensure such Environmental Credits are vested in Company, and shall execute all documents, including, but not limited to, documents transferring such Environmental Credits, without further compensation; provided, however, that Company agrees to pay for all reasonable costs associated with such efforts and/or documentation.

## 14. REPRESENTATIONS AND WARRANTIES.

MAUI ELECTRIC COMPANY, LIMITED

Order No. 38038 filed October 25, 2021, Docket 2015-0389

Transmittal Letter dated November 4, 2021.

- A.** Company and Subscriber Organization represent and warrant, respectively, that:
- (1) Each respective Party has all necessary right, power and authority to execute, deliver and perform this Contract.
  - (2) The execution, delivery and performance of this Contract by each respective Party will not result in a violation of any Laws, or conflict with, or result in a breach of, or cause a default under, any agreement or instrument to which such Party is also a party or by which it is bound. No consent of any person or entity not a Party to this Contract, other than governmental agencies whose approval is necessary for construction of the CBRE Facility and interconnection facilities, is required for such execution, delivery and performance by either Party.
- B.** Subscriber Organization represents, warrants and covenants that:
- (1) Subscriber Organization has obtained all Land Rights necessary for the construction, ownership, operation and maintenance of the CBRE Facility during the Term, and Subscriber Organization shall maintain such Land Rights in effect throughout the Term.
  - (2) As of the commencement of construction, Subscriber Organization shall have obtained all permits or approvals from any applicable governmental agency necessary for the construction, ownership, operation and maintenance of the CBRE Facility and all interconnection facilities.
  - (3) Subscriber Organization warrants that the CBRE Facility complies with all applicable federal and state Laws, including but not limited to (a) all applicable securities Laws and shall continue to be in compliance for the duration of the Term; (b) complies with all applicable Laws concerning the dissemination of personally identifiable information, and shall continue to be in compliance for the longer of (i) the Term and (ii) for as long as Subscriber Organization continues to hold or otherwise have access to any personally identifiable information of Subscribers or customers of Company; (c) complies with all applicable Laws concerning consumer protection, and shall continue to be in compliance for the duration of the Term; (d) complies with all applicable Laws and regulations concerning renewable energy grid interconnections, and shall continue to be in compliance for the duration of the Term.

**15. MISCELLANEOUS.** The "Miscellaneous" provisions set forth in Section 21 of the Interconnection Agreement between the Parties addressing the following issues are incorporated into this Contract and are fully applicable to this Contract as if set forth in full herein. Where the Interconnection Agreement in the "Miscellaneous" section uses the term "Agreement," this shall mean this Contract for purposes of the Contract.

- Governing Law and Regulatory Authority.
- Amendment; Modification or Waiver.
- Notices.
- Assignment.
- Binding Effect

MAUI ELECTRIC COMPANY, LIMITED.

- Relationship of Parties
- Force Majeure
- Non-Warranty
- Confidential Information
- Execution of Agreement; Multiple Counterparts

**16. TERM and TERMINATION.** The Term shall be the same as for the Interconnection Agreement applicable to the CBRE Facility, and each shall begin when signed by the Parties and end twenty (20) years after the Commercial Operations Date unless otherwise provided for in this Contract. In the event of termination, or early termination of this Contract, applicable provisions shall continue in effect after termination to the extent necessary to enforce and complete the duties, obligations or responsibilities of the Parties arising prior to termination and, as applicable, to provide for final billings and adjustments related to the period prior to termination, repayment of any money due and owing to either Party pursuant to this Contract. The Parties acknowledge that this Contract and the Interconnection Agreement are interdependent agreements and one cannot continue if the other is terminated. Provisions in this Contract permit Company to terminate this Contract and provisions in the Interconnection Agreement permit Company and/or Subscriber Organization to terminate the Interconnection Agreement. Accordingly, if either agreement is terminated pursuant to its terms, the other agreement will likewise be terminated, subject to the provisions, terms and conditions of such agreement, including, by way of example, the first sentence of this section.

**17. SIGNATURES**

IN WITNESS WHEREOF, the Parties hereto have caused this Contract to be executed by their duly authorized representatives. This Contract is effective as of the Effective Date set forth above.

[Subscriber Organization]

[Hawaiian Electric Company, Inc.

Hawai'i Electric Light Company, Inc.

Maui Electric Company, Limited], a Hawai'i corporation

By: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

## ATTACHMENT A

### Schedule of Defined Terms

"Base Load Unit" means a generating unit that is normally on-line twenty-four (24) hours a Day. This includes any unit that is scheduled to be on-line continuously for a given Day because a unit which is normally a Base Load Unit is on maintenance or otherwise temporarily out of service.

"BESS" means the battery energy storage system that is a portion of the CBRE Facility used to facilitate the storing of renewable energy and the charging of renewable energy from RE System, and the discharging of renewable energy to, the Company System, as described in Attachment A to the Interconnection Agreement. **[DRAFTING NOTE: REMOVE IF PROJECT DOES NOT INCLUDE BESS]**

"Bill Credit" shall mean the dollar amount credited by the Company to each Subscriber on the Subscriber's retail electric service bill, which represents the Subscriber's beneficial share of renewable energy produced by the CBRE Facility and exported to the Company, and offsetting Subscriber's current renewable energy usage on such service bill.

"Bill Credit Rate" shall mean the then current applicable "Credit Rate" as determined by the CBRE Tariff. The CBRE Tariff prescribes a specific Credit Rate in the event that CBRE Small Project Phase 2 Capacity (as defined in the CBRE Tariff) is not filled for any island and a competitive credit rate procurement ("CCRP") mechanism to set the Credit Rate if there are more applications for CBRE Small Project Phase 2 Capacity than is available for any island.

"Business Day" means any Day that is not a Saturday, a Sunday, or a federal or Hawai'i state holiday.

"CBRE Facility" shall mean the facility that produces the renewable energy that is the subject of this Contract and includes all equipment, improvements, infrastructure and other tangible assets necessary to connect to the Production Meter and all contract rights, easements, rights of way, surface use agreements and other interests or rights in real estate reasonably necessary for the construction, operation, and maintenance of the RE System **[and BESS]** for the Term.

"CBRE Framework" means the Phase 1 CBRE Framework, as amended and supplemented by the Phase 2 CBRE Framework.

"CBRE IO" means the Independent Observer contracted with the Company but answering to the PUC to carry out the responsibilities assigned to the Independent Observer under the Phase 2 CBRE Framework.

"CBRE Online Portal" is the interactive, internet website-based interface maintained by or on behalf of the Company through which the Subscriber Organization may establish qualifications, provide information and complete documents necessary for acceptance in the CBRE Program, and may enter or change the Monthly Subscription Information reflecting updated information for each Subscriber, including any changes to any Subscriber's name, account number, address, and Subscriber Allocation. For Phase One of the CBRE Program, the CBRE Online Portal will be a manually administered application form-based process managed by Company until the CBRE Online Portal is online and ready for commercial operation. The CBRE Online Portal should be completed in time for the commencement of Phase Two of the CBRE Program.

A-1

MAUI ELECTRIC COMPANY, LIMITED

"CBRE Tariff" means the Hawai'i Community-Based Renewable Energy tariff approved by the PUC as Tariff Rule 29, on \_\_\_\_\_, based on the PUC's Phase 2 CBRE Framework.

"Commercial Operations": The CBRE Facility shall be considered to have achieved Commercial Operations on the first Day of the calendar month following the date on which all of the following conditions have been satisfied: (a) Subscriber Organization has completed construction of the CBRE Facility in accordance with the requirements set forth in the Interconnection Agreement; (b) Company testing of the RE System **[and BESS]** has taken place and the Company has determined the RE System **[and BESS]** to be fully operational, and (c) Subscriber Organization has completed all other Interconnection Agreement requirements and processes and (d) Subscriber Organization has provided Company with written notice that Subscriber Organization is ready to declare the Commercial Operations Date.

"Commercial Operations Date" shall mean the date on which the CBRE Facility first achieves Commercial Operations.

"Company System" means the electric system owned and operated by Company (to include any non-utility owned facilities) consisting of power plants, transmission and distribution lines, and related equipment for the production and delivery of electric power to the public.

"Company System Operator": Authorized representative of Company responsible for Company dispatch and curtailment of renewable energy generation interconnected to the Company System.

"Curtailed Energy": An estimate of possible CBRE Facility production during periods that output is restricted due to a Curtailment Event.

"Curtailment Event" means the temporary curtailment, interruption or reduction of deliveries of electric energy from the Facility initiated by Company as a result of circumstances described in Sections 1.A and 1.C of Attachment B (Curtailment Block) of this Contract. A Curtailment Event shall commence at the time the Facility receives the curtailment signal from the Company System Operator and shall end at the time the Facility receives the curtailment control signal from the Company System Operator to end the curtailment.

"Curtailment Report" means the monthly report of Curtailed Energy in the form of Attachment C to this Contract.

"Day" means a calendar day.

"Disclosure Checklist" means the Disclosure Checklist required to be completed by Subscriber Organization with all Subscribers, the form of which is included in the CBRE Tariff.



"Environmental Credits" means any environmental credit, offset, or other benefit allocated, assigned or otherwise awarded by any city, state or federal governmental agency or court, international agency, or non-governmental renewable energy certificate accounting and verification organization to Company or Subscriber Organization based in whole or in part on the fact that the RE System is a non-fossil fuel facility. Such Environmental Credits shall include, without limitation, the non-energy attributes of renewable energy including, but not limited to, any avoided emissions of pollutants to the air, soil, or water such as sulfur dioxide, nitrogen oxides, carbon monoxide, particulate matter, and hazardous air pollutants; any other pollutant that is now or may in the future be regulated under the pollution control laws of the United States; and avoided emissions of carbon dioxide and any other greenhouse gas, along with the renewable energy certificate reporting rights to these avoided emissions, but in all cases shall not mean tax credits.

"Excess Energy Conditions" means an operating condition on the Company System that may occur when Company has more energy available than is required to meet the load on the Company System at any point in time and the generating assets interconnected with the Company System are operating at or near their minimum levels, taking into consideration factors such as the need to maintain system reliability and stability under changing system conditions and configurations, the need for downward regulating reserves, the terms and conditions of power purchase agreements for base-loaded firm capacity or scheduled energy, and the normal minimum loading levels of such units.

"Forced Outage" means an unplanned unit shutdown caused by factors such as automatic or programmed protective trips and operator-initiated trips due to equipment malfunction.

"Good Engineering and Operating Practices" shall have the meaning and meet all requirements set forth in Section 19 of the Interconnection Agreement.

"House Power" shall mean the electricity needed to assist in the operation of the CBRE Facility including system performance monitoring and associated communications, except for energy directly required for the local control and safe operation of the RE System **[and BESS]**. It also means other electricity used by the CBRE Facility, such as for perimeter lighting, a visitor's center or any other structures or facilities at the CBRE Facility site.

"Interconnection Agreement" shall mean the Interconnection Agreement required to be executed by the Subscriber Organization concurrently with this Contract.

"Land Rights": All easements, rights of way, licenses, leases, surface use agreements and other interests or rights in real estate.

"Laws": All federal, state and local laws, rules, regulations, orders, ordinances, permit conditions and other governmental actions.

Monthly Subscription Information" shall mean the information stored within the CBRE Online Portal, as timely entered or changed by the Subscriber Organization via the CBRE Online Portal, setting forth the name, account number and service address each Subscriber holding Subscriptions in the CBRE Facility, and the Subscriber Allocation applicable to each such Subscriber's Subscription, reflecting each Subscriber's allocable portion of renewable energy produced by the CBRE Facility during a particular Production Month.

"Pay-As-You-Go" refers to any lease or subscription interest in a CBRE project or its energy output in which a Subscriber does not make any up-front payment (except for fixed administrative or other costs not based on the level of Subscriber's interest) to the Subscriber Organization for Subscriber's interest and instead makes periodic, e.g., monthly, payments to the Subscriber Organization for Subscriber's interest, with such payment to be commensurate with the extent of the Subscriber's interest in the CBRE project. The payment for the Subscriber's interest in the Pay-As-You-Go model does not include other payments that may be necessary from a Subscriber to the Subscriber Organization, such as operations and maintenance, insurance and other cost items that may be specified in the Subscriber Agreement between Subscriber and Subscriber Organization for a particular CBRE project

"Pay-Up-Front" refers to any asset-type interest in a CBRE project or its energy output where the Subscriber is required to make an up-front payment to the Subscriber Organization for Subscriber's interest and thereafter is not required to make further periodic payments to the Subscriber Organization for Subscriber's interest in the CBRE project. The payment for the Subscriber's interest in the Pay-Up-Front model does not include other payments that may be necessary from a Subscriber to the Subscriber Organization, such as operations and maintenance, insurance and other cost items that may be specified in the Subscriber Agreement between Subscriber and Subscriber Organization for a particular CBRE project.

"Phase 1 CBRE Framework" means that certain "Community-Based Renewable Energy – A Program Framework" issued by the PUC and attached as Attachment A to that certain Decision and Order No. 35137, filed December 22, 2017, in Docket No. 2015-0389, portions of which are applicable to Phase 2 of the CBRE Program as specified in the CBRE Tariff.

"Phase 2 CBRE Framework" means that certain Order No. 37070, filed April 9, 2020, in Docket No. 2015-0389. The Phase 2 CBRE Framework provides the basis and framework for Phase 2 of the CBRE Program and is implemented by the CBRE Tariff.

"Point of Interconnection" shall be the point of interconnection as shown on the Single Line Diagram attached as Exhibit A to the Interconnection Agreement.

"Prime Rate" shall mean the current "U.S. Prime Rate" of interest, as published from time to time by The Wall Street Journal in the "Money Rates" section of its Western Edition Newspaper. The Prime Rate shall change without notice with each change in the U.S. Prime Rate reported by The Wall Street Journal, as of the date such change is reported.

"Production Meter" shall mean the meter which will record the renewable energy produced by the CBRE Facility and exported to the Company at the Point of Interconnection and which will be reported on the Subscriber Organization's monthly invoice to the Company.

"Production Month" shall mean the calendar month during which electrical energy is produced by the CBRE Facility and exported to the Company at the Production Meter.

"RE System" shall mean the electrical energy generating portion of the CBRE Facility to be located at the CBRE Facility, together with all materials, equipment systems, structures, features and improvements.

"Subscribed Energy" means renewable energy produced by CBRE Facility that is attributable to the Subscribers' Subscriptions and exported to the Company at the Point of Interconnection on or after the Commercial Operations Date.

"Subscriber" means a retail customer of the Company who owns one or more Subscriptions of a CBRE Facility interconnected with the Company.

"Subscriber Agency Agreement and Consent Form" means the agreement between Subscriber Organization and Subscriber, the form of which is included in the CBRE Tariff.

"Subscriber Allocation" shall mean, for each Subscriber, such Subscriber's percentage interest in the total nameplate capacity of the RE System, reflecting each Subscriber's allocable portion of renewable energy exported by the CBRE Facility in a particular Production Month.

"Subscriber's Confidential Account Information" consists of the Subscriber's name, account number, service address, telephone number, email address, web site URL, information on Subscriber participation in other distributed generation serving the premises of the Subscriber, and Subscriber specific Bill Credit(s).

"Subscriber Organization" is identified above and shall mean the organization whose purpose is to operate or otherwise manage the CBRE Facility for its Subscribers.

"Subscriber's Energy Usage Data" refers to data collected from the utility Subscriber meters that reflects the quantity, quality, or timing of electric usage or renewable energy production attributable to the Subscriber for the service address and account number identified for participation in the CBRE Facility.

"Subscription" or "Subscription Agreement" means the contract between a Subscriber and the Subscriber Organization.

"Substantial Progress" means that on or before the last Day of the 18-month period (including day-for-day extensions) to achieve the Commercial Operations Date, the Subscriber Organization has achieved all of the following: (1) Installed one-hundred percent (100%) of the RE System foundation (including pier, helical screw, ballasts, or similar) to enable mounting of the nameplate capacity as collectively set forth in Interconnection Agreement for the CBRE Facility site; (2) Built, or otherwise has in place, a permanent drivable (road) surface on the parcel or parcels of land associated with the CBRE Facility so that Company on a 24 hour a day, seven days a week, basis can access its equipment, including but not limited to lines, poles, transformers, billing meters, underground facilities and other facilities, but excluding production meters. The drivable road surface needs to be reasonably sufficient to support operation and maintenance vehicles; and (3) Built, or otherwise has in place, a permanent fence surrounding the entirety of the CBRE Facility location.

"Term" means the term of this Contract which shall be the same as the Interconnection Agreement applicable to the CBRE Facility, and shall begin when this Contract is signed by the Parties and end twenty (20) years after the Commercial Operations Date unless otherwise provided for in this Contract.

"Unsubscribed Energy" means the renewable energy produced by the CBRE Facility and exported to the Company at Point of Interconnection that is not associated with any Subscriber Subscription and therefore not allocated to a Subscriber.

**ATTACHMENT B**  
**CURTAILMENT BLOCK**

1. Curtailement.

- A. General. Company may require the Subscriber Organization to temporarily curtail, interrupt or reduce deliveries of electric energy when necessary in order for Company to construct, install, maintain, repair, replace, remove, investigate, test or inspect any of its equipment or any part of the Company System including, but not limited to, accommodating the installation and/or acceptance test of non-utility owned facilities to Company System; or if Company determines that such curtailment, interruption or reduction is necessary because of a system emergency, Forced Outage, operating conditions on the Company System; or the inability to accept deliveries of electric energy due to Excess Energy Conditions; or if either the CBRE Facility does not operate in compliance with Good Engineering and Operating Practices or acceptance of electric energy from the Subscriber Organization by Company would require Company to operate the Company System outside of Good Engineering and Operating Practices, which in this case shall include, but not be limited to, excessive system frequency fluctuations or excessive voltage deviations, and any situation that the Company System Operator determines, at his or her sole discretion using Good Engineering and Operating Practices, could place in jeopardy the reliability of the Company System. In the event that Company initiates a Curtailment Event pursuant to this Section 1.A (General), Company shall not be obligated to accept or pay for any electric energy from the Subscriber Organization except for such electric energy that Company notifies the Subscriber Organization that it is able to take during the duration of a Curtailment Event.
- B. Reasonable Steps. Company shall take all reasonable steps (such as reducing the output of Base Load Units, including its own Base Load Units, during light loading conditions, taking into consideration factors such as the need to maintain the reliability and stability of the Company System under changing system conditions, forecasted variability of weather conditions and configurations, the need for downward regulating reserves, the terms and conditions of power purchase agreements for firm capacity Base Load Units or scheduled electric energy, and the normal minimum loading levels of such units) to minimize the number and duration of curtailments, interruptions or reductions, subject to and in accordance with Section 2 (Curtailement Methodology) and Section 3 (Curtailement Responsibilities) below.
- C. Personnel and System Safety. Notwithstanding any other provisions of this Contract, if at any time Company reasonably determines that the CBRE Facility may endanger Company's personnel, and/or the continued operation of the CBRE Facility may endanger the integrity of the Company System or have an adverse effect on Company's other customers' electric service, Company shall have the right to curtail or disconnect the CBRE Facility from the Company System, as determined in the sole discretion of the Company System Operator. The CBRE Facility shall immediately comply with the dispatch

B-1

instruction, which may be initiated through remote control, and shall remain curtailed or disconnected, as the case may be, until such time as Company is satisfied that the condition(s) referred to above have been corrected, and Company shall not be obligated to accept or pay for any electric energy from the Subscriber Organization except for such electric energy as is accepted by Company from the Subscriber Organization during such period. If Company curtails or disconnects the CBRE Facility from the Company System for personnel or system safety reasons, it shall as soon as practicable notify the Subscriber Organization by telephone, and thereafter confirm in writing, the reasons for the curtailment or disconnection.

2. Curtailment Methodology.

- A. Pursuant to Sections 1.A (General) and 1.C (Personnel and System Safety) of this Attachment B (Curtailment Block), Company may at times have limited ability to integrate energy produced by the Subscriber Organization into the Company System for engineering and/or operating reasons and may be required to curtail energy deliveries by the Subscriber Organization. When a curtailment control signal is received by the CBRE Facility the corresponding action (e.g., decrease in the CBRE Facility's output) shall be initiated without delay. As conditions warrant, Company System Operator shall end or reduce the curtailment when Company reasonably determines that the reason for the curtailment is no longer in existence.
- B. When Company determines that curtailment of energy becomes necessary for reasons other than those directly attributable to the CBRE Facility, curtailments shall be made to the extent possible in reverse chronological order of the chronological seniority dates determined by Company for the power purchase agreements, with deliveries under the power purchase agreements with the most recent chronological seniority date being the first curtailed, and deliveries under the power purchase agreement with the earliest chronological seniority date being the last curtailed. Small generation projects (such as photovoltaic net energy metering projects, feed-in tariff projects, etc.) that are allowed to be installed without curtailment controls will not be curtailed before the CBRE Facility. When Company determines that curtailment of energy becomes necessary for engineering and/or operating reasons that are directly attributable to the CBRE Facility, reverse chronological curtailment order may not apply.
- C. The chronological seniority date of the CBRE Facility shall be determined as follows:
- (1) Curtailment Block: Eligibility and Inclusion Criteria. The CBRE Facility shall be included in a group of renewable as-available energy projects that Company will, to the extent possible, treat as a single "block" (designated for convenience of reference as "Curtailment Block") for purposes of implementing curtailment in reverse chronological order. All of the renewable energy projects that achieve Commercial Operations and that satisfy the criteria for "small projects" for Phase 2 of the CBRE Program under Order No. 37070 filed on April 9, 2020 in Docket No. 2015-0389 ("Block Eligible Projects") shall be included in the Curtailment Block.

B-2

MAUI ELECTRIC COMPANY, LIMITED

- (2) Lead Project and Determination of Curtailment Block Chronological Seniority Date. The Lead Project shall be the first of the aforementioned Block Eligible Projects that achieves "commercial operations" under the Standard Form Contract. The chronological seniority date for the Curtailment Block shall be the "commercial operations date" under the Standard Form Contract for the Lead Project. If the CBRE Facility is the Lead Project, the terms "commercial operations" and "commercial operations date" when used in this Section 2.C(2) (Lead Project and Determination of Curtailment Block Chronological Seniority Date) shall mean respectively, Commercial Operations and the Commercial Operations Date as defined in this Contract.
- D. When curtailments are being implemented in reverse chronological order, the Company may implement curtailment of Block Eligible Projects in increments (i.e., some Block Eligible Projects may be curtailed while others are not) in order to manage the impact on the Company System. In such case, the size of such increment, and which Block Eligible Projects to include in such increment, shall be determined by the Company System Operator. Company System Operator shall, to the extent possible, rotate the Block Eligible Projects sequentially after each Curtailment Event with the objective of treating equitably each Block Eligible Project in terms of curtailment.
- E. If the CBRE Facility is unable to receive the curtailment signal from the Company System Operator, provision must be made for Subscriber Organization to be able to institute via local controls, within 30 minutes (or such other period as Company accepts in writing) of the verbal directive by the Company System Operator, such raising and lowering of curtailment limits as directed by the Company System Operator.
- F. If the direct transfer trip is unavailable, due to loss of communication link, RTU failure, or other event resulting in the loss of the remote control by the Company, provision must be made for the Subscriber Organization to trip the main circuit breaker.
3. Curtailment Responsibilities. In the event that Company initiates a Curtailment Event pursuant to this Contract, Company shall not be obligated to accept any electric energy from Subscriber Organization except for such electric energy that Company notifies Subscriber Organization that it is able to take during the duration of a Curtailment Event. Company shall not be liable to Subscriber Organization for any curtailments unless such curtailment was in violation of this Contract. Subscriber Organization shall not override Company's curtailment.

**ATTACHMENT C**  
**MONTHLY CURTAILMENT REPORT**

NAME OF CBRE FACILITY / SUBSCRIBER ORGANIZATION: [Facility Name / SO]

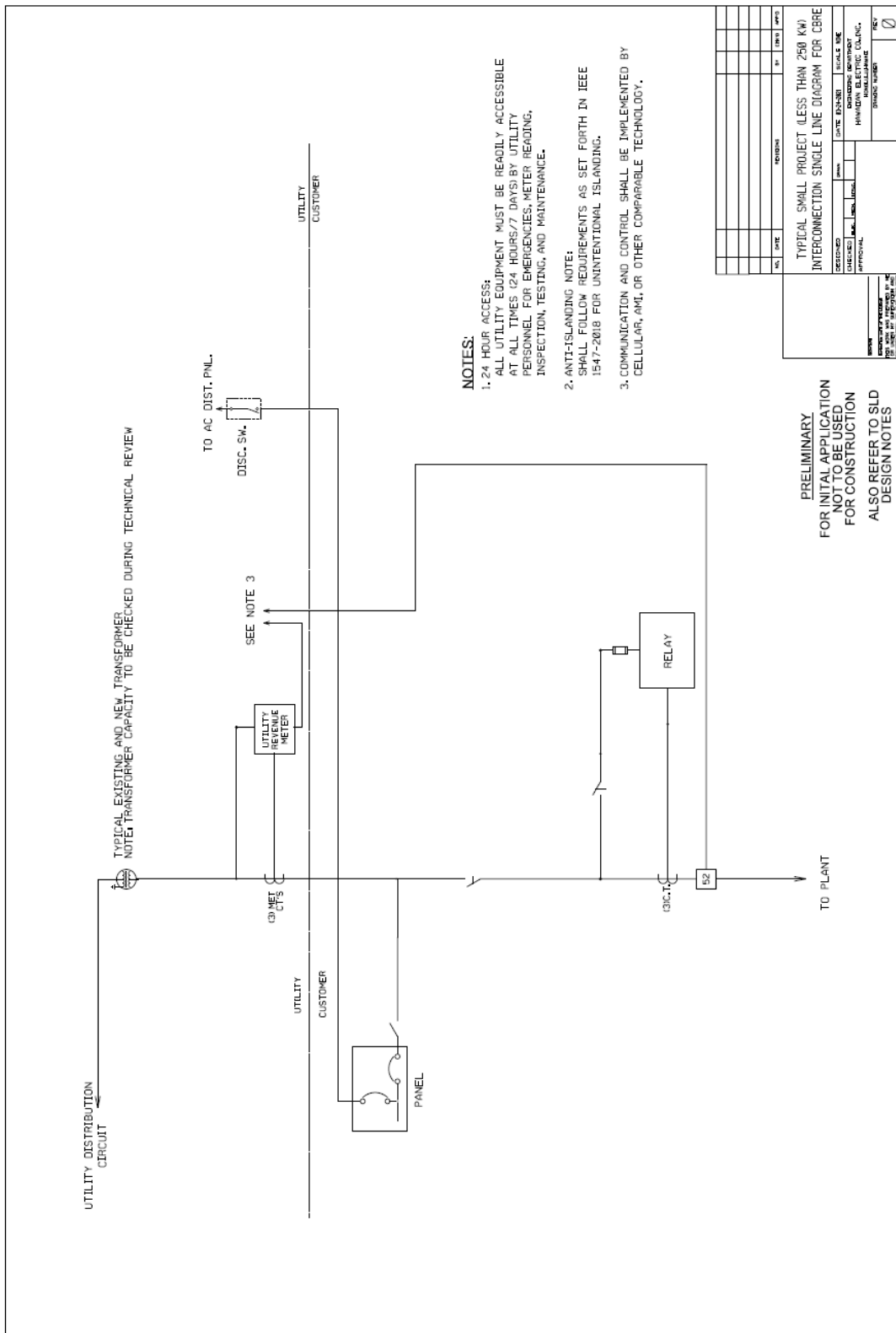
REPORT PERIOD: [MM/DD/YEAR] to [MM/DD/YEAR]

Event Date	Start Time	End Time	Reason for Curtailment



**APPENDIX V**

**DISTRIBUTION INTERCONNECT SINGLE LINE DIAGRAM FOR CBRE SMALL PROJECTS**



- NOTES:**
1. 24 HOUR ACCESS:  
ALL UTILITY EQUIPMENT MUST BE READILY ACCESSIBLE AT ALL TIMES (24 HOURS/7 DAYS) BY UTILITY PERSONNEL FOR EMERGENCIES, METER READING, INSPECTION, TESTING, AND MAINTENANCE.
  2. ANTI-ISLANDING NOTE:  
SHALL FOLLOW REQUIREMENTS AS SET FORTH IN IEEE 1547-2018 FOR UNINTENTIONAL ISLANDING.
  3. COMMUNICATION AND CONTROL SHALL BE IMPLEMENTED BY CELLULAR, AML, OR OTHER COMPARABLE TECHNOLOGY.

PRELIMINARY  
FOR INITIAL APPLICATION  
NOT TO BE USED  
FOR CONSTRUCTION  
ALSO REFER TO SLD  
DESIGN NOTES

NO.	DATE	DESCRIPTION	BY	INVS	APPV

TYPICAL SMALL PROJECT (LESS THAN 250 KW)  
INTERCONNECTION SINGLE LINE DIAGRAM FOR CBRE

DESIGNED	DATE DESIGNED	SCALE	BY
CHECKED	DATE CHECKED	BY	DATE
APPROVAL	DATE	BY	DATE

MAUI ELECTRIC COMPANY  
1000 W. MAUI AVENUE, SUITE 200  
HONOLULU, HI 96813  
PHONE: (808) 943-8888  
FAX: (808) 943-8889  
WWW.MAUIELECTRIC.COM

**APPENDIX VI**  
**HAWAIIAN ELECTRIC  
CBRE PROGRAM PHASE 2**  
**SUBSCRIBER'S VERIFICATION  
OF  
LOW- TO MODERATE-INCOME INCOME STATUS**

I, \_\_\_\_\_, hereby make this verification from my personal knowledge and information to confirm my eligibility to qualify as a Low- to Moderate-Income ("LMI") customer eligible to participate in the Community Based Renewable Energy ("CBRE") projects for LMI subscribers.

1. I am a customer of [Hawaiian Electric Company, Inc.][Maui Electric Company, Ltd.][Hawaii Electric Light Company, Inc.] with an account for electric service for at least three months. My account number is \_\_\_\_\_.

2. My place of residence is \_\_\_\_\_  
\_\_\_\_\_ and my account is associated with this address.

3. I consider my household (the family unit residing at the place of residence identified in item 2) to be of low to moderate income status under any applicable county, state, or federal guidelines known and/or verified by me and accordingly consider myself eligible to participate as a LMI subscriber in CBRE projects ; and

Form: CBRE Subscriber's Verification of  
Low- to Moderate-Income Status  
Ver. 08252021

MAUI ELECTRIC COMPANY, LIMITED

4. I choose to verify my CBRE LMI subscriber eligibility by confirming: [CHOOSE ONE]

I am a recipient or participant in one of the qualifying LMI programs listed below (please specify in item 4 below);

Qualifying Programs:

- Supplemental Nutrition Assistance Program (SNAP)
- Low Income Home Energy Assistance Program (LIHEAP)
- Housing Choice Voucher Program (Section 8)
- Hawaii Med-Quest Program
- Weatherization Assistance Program (WAP)
- Lifeline Support for Affordable Communications (Federal)
- Lifeline Support for Affordable Communications (State)
- Child Care Connection Hawaii
- Preschool Open Doors
- National School Lunch Program (NSLP)
- Community Eligibility Provision (CEP) of the NSLP
- Hawaii Head Start
- Early Head Start
- Supplemental Security Income (SSI)
- Children's Health Insurance Program (CHIP)
- Women, Infants and Children (WIC)
- Temporary Assistance for Needy Families (TANF)
- Temporary Assistance for Other Needy Families (TAONF)
- Hawaii Energy Affordability and Accessibility Program
- Any verified government (Hawaii State or Federal) program providing services to LMI persons or households
- Spectrum Internet Assist Program
- Hawaiian Telcom Internet Kokua Program

- Any verified government (Hawaii State or Federal) or Hawaii non-profit program serving Asset Limited Income Constrained Employed (ALICE)<sup>1</sup> persons or households

Or:

- I reside in a zip code identified by Hawaii Energy as qualifying for LMI Status (as such eligibility is defined by Hawaii Energy at the time of this certification) and [Enter zip code of residence if not already identified in item 2 above: \_\_\_\_\_];

Or:

- The combined income of my household qualifies as low- and moderate-income under U.S. Housing and Urban Development (HUD) guidelines.

5. If I checked the first box in item 4 above, the Qualifying Program which I participate in or receive benefits from is: \_\_\_\_\_.

If requested by the Subscriber Organization who is receiving this verification, a copy of the documentation verifying my participation in this program is attached.

6. I understand that this information will be used to confirm my eligibility to qualify as an LMI Subscriber and participate in CBRE program projects with subscriptions available for LMI customers. If I do not qualify as an LMI customer, I understand that I may still participate in other CBRE program projects that are not reserved for LMI customers.

---

<sup>1</sup> Aloha United Way designation for employed but asset limited or income constrained persons. Certain AUW sponsored or supported programs may target or provide eligibility for participation in programs designed for ALICE designees.

7. I understand that I may be asked to confirm my statements made in this verification to confirm my LMI Subscriber status. I agree to cooperate with the Subscriber Organization and the Hawaiian Electric Companies in this regard.

8. I have made these statements and provided qualifying recipient or program participation documents specified above to the best of my ability and understand them to be true and correct.

DATED: \_\_\_\_\_.

\_\_\_\_\_  
Print Name: \_\_\_\_\_

**Subscriber Organization Acknowledgment of Receipt**

Received by:

\_\_\_\_\_  
Subscriber Organization

By: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**APPENDIX VII**

**HAWAIIAN ELECTRIC COMPANIES<sup>1</sup>  
CBRE PROGRAM PHASE 2**

**VERIFICATION  
TO CONFIRM  
LMI ANCHOR TENANT QUALIFICATION**

I, \_\_\_\_\_, am the \_\_\_\_\_ of \_\_\_\_\_ (the "Company"), and am duly qualified and authorized to complete this verification.

1. I hereby confirm, for and on behalf of the Company the organization's eligibility to qualify as a Low- to Moderate-Income ("LMI") Anchor Tenant Subscriber eligible to participate in the Community Based Renewable Energy ("CBRE") projects for LMI Subscribers.

2. Company is a customer of the Hawaiian Electric Companies with an account for electric service for at least three months. Company's account number is \_\_\_\_\_.

3. The address associated with this account is \_\_\_\_\_.

<sup>1</sup> "Hawaiian Electric Companies" means, individually or collectively, as applicable, Hawaiian Electric Company, Maui Electric Company, Ltd., Hawaii Electric Light Corporation, Inc., each a Hawaii corporation, and its affiliates and agents.

Form: Verification To Confirm  
Low- to Moderate-Income Anchor Tenant Qualification  
Ver. 08252021

MAUI ELECTRIC COMPANY, LIMITED

4. If different from the address above, Company's office address is \_\_\_\_\_

---

5. Company is [CHOOSE ONE]:

governmental or quasi-governmental agency;

Or:

501(c)(3) non-profit organization

6. If requested by the Subscriber Organization, I have provided verification of Company's statements above to the Subscriber Organization.

7. I understand that this information will be used to confirm Company's eligibility to qualify as an LMI Anchor Tenant Subscriber and participate in CBRE program projects with subscriptions available for only for LMI customers. If Company does not qualify as an LMI Anchor Tenant Subscriber, Company understands that it may still participate in other CBRE program projects that are not reserved for LMI customers.

8. Company understands that it may be asked to confirm the statements made in this verification to confirm Company's LMI Anchor Tenant Subscriber status and that it may be further requested to provide, for inspection and review only, copies of relevant confirming documents to confirm Company's LMI Subscriber status. Company will cooperate with the Subscriber Organization and Hawaiian Electric in this regard.

Form: Verification To Confirm  
Low- to Moderate-Income Anchor Tenant Qualification  
Ver. 08252021

MAUI ELECTRIC COMPANY, LIMITED

Order No. 38038 filed October 25, 2021, Docket 2015-0389  
Transmittal Letter dated November 4, 2021.

9. I have made these statements and provided any verifying documents confirming such statements for and on behalf of the Company to the best of my ability and understand them to be true and correct.

Further, Affiant sayeth naught.

\_\_\_\_\_  
Print Name: \_\_\_\_\_  
Date: \_\_\_\_\_

\_\_\_\_\_  
**Subscriber Organization Acknowledgement of Receipt**

RECEIVED BY:

\_\_\_\_\_  
Subscriber Organization

By: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Form: Verification To Confirm  
Low- to Moderate-Income Anchor Tenant Qualification  
Ver. 08252021

MAUI ELECTRIC COMPANY, LIMITED

Order No. 38038 filed October 25, 2021, Docket 2015-0389  
Transmittal Letter dated November 4, 2021.



**APPENDIX VIII**

**SIMPLIFIED INTERCONNECTION REQUIREMENTS STUDY (IRS) SCOPE AND PROCESS**

<b>Island</b>	O`ahu, Maui, Hawai`i Island	
<b>Size</b>	<250kW	
<b>kV of Interconnecting Line</b>	Connecting to 4kV, 12kV	
<b>Technical Reviews</b>	<p>After Completeness Review of Subscriber Organization Application: Initial Technical Review (ITR)</p> <p>If results of ITR identify the need for further analysis: Supplemental Review (SR)</p> <p>SR will determine if an IRS is required and its specific scope – for Small Projects, the scope will be limited to a Simplified IRS</p>	
<b>Hosting Capacity</b>	Available Hosting Capacity on Circuit to Accommodate Project	No Hosting Capacity on Circuit to Accommodate Project
<b>Scope</b>	<p>Secondary System<sup>1</sup> Only:</p> <ul style="list-style-type: none"> <li>o Steady State – Thermal and Voltage Analysis<sup>2</sup></li> <li>o Transformer Loading Analysis<sup>3</sup></li> </ul>	<p>Primary System<sup>4</sup> and/or Secondary System:</p> <ul style="list-style-type: none"> <li>• Steady State – Thermal and Voltage Analysis<sup>2</sup></li> <li>• Transformer Loading Analysis<sup>3</sup></li> </ul>
<b>IRS Fee</b>	\$2,000 flat fee for the study <sup>5</sup>	
<b>Schedule</b>	(Costs of identified mitigation necessary to interconnect the studied Project, if required, are not included) 90 days maximum <sup>6</sup>	
<b>Who Performs the IRS</b>	(Simplified IRS to commence after SO agrees to Simplified IRS terms and pays the IRS Fee) Hawaiian Electric	
<b>Reference Single Line Diagram</b>	(using information provided by Subscriber Organization in its Application) Typical Small Project (Less than 250 kW) Interconnection Single Line Diagram for CBRE (see Rule 29 Appendix XIII)	
<b>Mitigations</b>	Results of the Simplified IRS may identify mitigation measures caused by the Project that will be necessary to interconnect the Project, the costs of which will be the Subscriber Organization’s responsibility <sup>7</sup>	

<sup>1</sup> The utility system between the service transformer and the customer meter

<sup>2</sup> Steady state analysis (point in time) focused on thermal and voltage issues, e.g., whether the Project will cause heat issues on the line and/or voltage issues

<sup>3</sup> Transformer load analysis focused on whether the Project, together with the load already on the secondary system, requires an additional or upgraded transformer in order to accept the Project.

<sup>4</sup> The utility system between the service transformer and substation transformer

<sup>5</sup> Quoted Fee for Simplified IRS for CBRE Phase 2 only

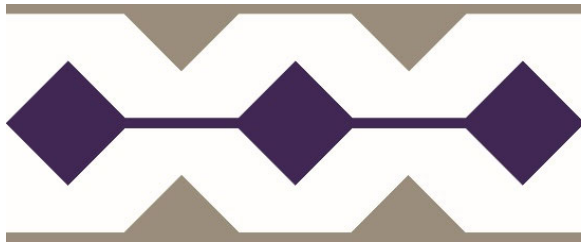
<sup>6</sup> Assuming all information in Subscriber Organization’s application regarding the Project are complete and no changes to the Project are made by Subscriber Organization

<sup>7</sup> Identified issues not caused by the Project will be mitigated, if necessary to interconnect the Project, at Hawaiian Electric cost as a System Upgrade

MAUI ELECTRIC COMPANY, LIMITED

## EXHIBIT 2

Draft Request for Proposals (RFP) for CBRE Projects  
for Molokai



**Maui  
Electric**

**DRAFT**

**REQUEST FOR PROPOSALS**

**FOR**

**COMMUNITY-BASED RENEWABLE ENERGY PROJECTS**

**ISLAND OF MOLOKA‘I**

NOVEMBER 4, 2021

Docket No. 2015-0389

This Request for Proposals (“RFP”) is a DRAFT only. Maui Electric Company, Ltd. (“Maui Electric” or “Company”) will employ a competitive bidding process to select renewable energy projects including Community Based Renewable Energy consistent with the State of Hawai‘i Public Utilities Commission’s (“PUC”) Competitive Bidding Framework. Under the Competitive Bidding Framework, Maui Electric filed the initial draft RFP with the PUC. The proposed final RFP is being submitted to the PUC for approval and is subject to further revision based upon direction received from the PUC. After approval by the PUC, Maui Electric will issue the final RFP.

## Table of Contents

Chapter 1: Introduction and General Information .....	1
1.1 Authority and Purpose of the Request for Proposals .....	2
1.2 Scope of the RFP .....	2
1.3 Competitive Bidding Framework .....	4
1.4 Role of the Independent Observer .....	5
1.5 Communications Between the Company and Proposers – Code of Conduct Procedures Manual.....	5
1.6 Company Contact for Proposals .....	6
1.7 Proposal Submission Requirements.....	6
1.8 Proposal Fee.....	7
1.9 Procedures for Affiliate Proposals .....	8
1.10 Dispute Resolution Process.....	9
1.11 No Protest or Appeal.....	10
1.12 Modification or Cancellation of the Solicitation Process .....	10
Chapter 2: Resource Needs and Requirements .....	10
2.1 Performance Standards .....	10
2.2 Distribution-Level System Information.....	11
2.3 Interconnection to the Company System .....	12
Chapter 3: Instructions to Proposers .....	13
3.1 Schedule for the Proposal Process .....	13
3.2 Company RFP Website/Electronic Procurement Platform.....	14
3.3 Information Exchange.....	15
3.4 Preparation of Proposals .....	15
3.5 Organization of the Proposal .....	16
3.6 Proposal Limitations .....	16
3.7 Proposal Compliance and Bases for Disqualification.....	17
3.8 Power Purchase Agreement .....	17
3.9 Pricing Requirements.....	18
3.10 Project Description.....	18
3.11 Sites Identified by the Company.....	19
3.12 Confidentiality .....	20

3.13	Credit Requirements .....	21
Chapter 4: Evaluation Process and Evaluation Criteria.....		21
4.1	Proposal Evaluation and Selection Process .....	22
4.2	Eligibility Requirements Assessment .....	24
4.3	Threshold Requirement Assessment.....	25
4.4	Initial Evaluation – Price and Non-Price Analysis .....	28
4.5	Selection of a Priority List .....	35
4.6	Best and Final Offer (BAFO) .....	35
4.7	Detailed Evaluation.....	36
4.8	Selection of the Final Award Group .....	37
Chapter 5: Post Evaluation Process .....		38
5.1	Project Interconnection Process.....	38
5.2	Contract Execution Process .....	40
5.3	Community Outreach and Engagement.....	40
5.4	RESERVED.....	42
5.5	PUC Approval.....	42
5.6	Facility In-Service.....	42

## List of Appendices

Appendix A	Definitions
Appendix B	Proposer's Response Package / Project Interconnection Data Request
Appendix C	Code of Conduct Procedures Manual
Appendix D	PowerAdvocate User Information
Appendix E	Mutual Confidentiality and Non-Disclosure Agreement
Appendix F	Description of Available Sites
Appendix G	RESERVED
Appendix H	Interconnection Facilities and Cost Information
Appendix I	RESERVED
Appendix J	Rule 29 Tariff
Appendix K	Model PV Mid-Tier Standard Form Contract for Renewable Dispatchable Generation (Mid-Tier SFC)
Appendix K-1	RESERVED
Appendix K-2	RESERVED
Appendix K-3	Project Specific Addendum (PSA) for Mid-Tier SFC, Projects Located on Moloka'i
Appendix K-4	Attachment COS to the Project Specific Addendum for Mid-Tier SFC: Company-Owned Site (for Moloka'i only)
Appendix K-5	Attachment DCC to the Project Specific Addendum for Mid-Tier SFC: DC Coupled Storage

## **Chapter 1: Introduction and General Information**

Maui Electric Company, Ltd. (“Maui Electric” or the “Company”) seeks proposals for Community-Based Renewable Energy (“CBRE”) projects, also referred to as shared solar,<sup>1</sup> for the Maui Electric System on the island of Moloka‘i in accordance with this Request for Proposals (“RFP”).

Affiliates may submit a Proposal in response to this RFP subject to the requirements of this RFP. The Company will not be submitting a Self-Build Proposal in response to this RFP, though it reserves the right to do so in future solicitations.

In this RFP, the Company seeks new variable photovoltaic (“PV”) dispatchable generation projects (with a Battery Energy Storage System (“BESS”)) of at least 250 kW. The total amount of CBRE generation sought in this RFP is 2.75 MW. Each Project will be limited to 250 kW or larger, up to and including 2.5 MW (“Mid-Tier Project”). Mid-Tier Projects will utilize a pre-approved standard form contract in the form of Appendix K (“Mid-Tier SFC”).

Each successful Proposer will provide PV generation and a BESS to the Company pursuant to the terms of a Mid-Tier SFC. Mid-Tier Projects selected in this RFP will not be subject to further PUC review and approval.

The Company’s Mid-Tier SFC employs an innovative contracting mechanism which is very different than traditional PPA structures. Proposers are instructed to thoroughly review the Mid-Tier SFC attached as Appendix K. The structure of the Mid-Tier SFC intends to provide payments to the Proposer by the Company on a monthly lump sum basis, based upon the energy potential of the Facility, regardless of the actual energy dispatched. In exchange, the utility maintains full dispatch control of the Facility as needed. Under the Mid-Tier SFC, each Facility must meet certain requirements to receive the full lump sum payment each month. These requirements ensure that each plant is available to the Company for dispatch to meet system needs.

The Company will evaluate Proposals using the evaluation and selection process described in Chapter 4. The Company will evaluate and select Proposals based on both price and non-price factors that impact the Company, its customers, and communities affected by the proposed Projects. The number of Projects that the Company may acquire from this RFP depends on, among other things, the quality and cost-effectiveness of bids received in response to this RFP; economic comparison to other RFP responses; updates to the Company’s forecasts; distribution availability; and changes to regulatory or legal requirements. If attractive Proposals are received

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<sup>1</sup> In response to some confusion in the community over the acronym “CBRE” that the Companies have experienced during their latest efforts to publicize the CBRE Program, the Companies are introducing the more descriptive term “shared solar” for the CBRE Program in an effort to alleviate any further confusion in the community. The Companies intent is to use both terms, “CBRE” in regulatory filings and “shared solar” in marketing and other Company literature to refer to the Community-Based Renewable Energy Program first introduced by the CBRE Framework. The term “shared solar” will be used even though the CBRE Program is not necessarily limited to PV projects only.

that will provide energy and energy storage in excess of the targeted amounts, the Company will consider selecting such Proposal(s) if benefits to customers are demonstrated.

All requirements necessary to submit a Proposal(s) are stated in this RFP. A description of the technical requirements for Proposers is included in the body of this RFP, Appendix B, and in the Mid-Tier SFC attached as Appendix K.

All capitalized terms used in this RFP shall have the meaning set forth in the glossary of defined terms attached as Appendix A. Capitalized terms that are not included in Appendix A shall have the meaning ascribed in this RFP.

## **1.1 Authority and Purpose of the Request for Proposals**

- 1.1.1 This RFP is issued in response to Order No. 37070 issued on April 9, 2020, Order No. 37139 issued on May 14, 2020, Order No. 37879 issued on July 27, 2021, and Order No. 38038 issued on October 25, 2021 in Docket No. 2015-0389 as part of a procurement process established by the PUC.
- 1.1.2 This RFP is subject to Decision and Order (“D&O”) No. 23121 in Docket No. 03-0372 (To Investigate Competitive Bidding for New Generating Capacity in Hawai‘i), which sets forth the PUC’s Framework for Competitive Bidding (“Framework” or “Competitive Bidding Framework”).

## **1.2 Scope of the RFP**

- 1.2.1 Proposals submitted in response to this RFP shall meet the requirements identified in Part II and III of Tariff Rule No. 29, Community-Based Renewable Energy Program Phase 2, attached as Appendix J.
- 1.2.2 The Company will only accept Proposals for PV generation paired with BESS Projects (“Paired Projects”).
- 1.2.3 At least 40% of the Project’s capacity must be reserved for residential Subscribers with unsubscribed RDG compensation subject to the requirements in Attachment C of the applicable Mid-Tier SFC. The capacity allocations (%) identified in the Proposal submission will be used in the RFP evaluation process and therefore Proposers will be held to their provided value.
- 1.2.4 Preference will be given to Projects whose Subscriber portion reserves an amount greater than 40% of Project capacity for residential customers and/or any additional amount of Project capacity dedicated to Low- and Moderate-Income Customers (“LMI Customers”), as defined in Tariff Rule No. 29 in Appendix J.
- 1.2.5 Each Proposal submitted in response to this RFP must represent a Project that is capable of meeting the requirements of this RFP without having to rely on the completion or implementation of any other Project, or without having to rely on a proposed change in law, rule, or regulation.



- 1.2.6 Proposals that will require system upgrades and the construction of which, in the reasonable judgment of the Company (in consultation with the Independent Observer), creates a significant risk that their Project's Guaranteed Commercial Operations Date ("GCOD") will not be met will not be considered in this RFP.
- 1.2.7 Projects submitted in response to this RFP must be located on the Island of Moloka'i.
- 1.2.8 Proposers will determine their Project Site. Proposers have the option of submitting a Proposal using potential Sites offered and described in Section 3.11. Proposers must locate all Project infrastructure within areas of their Site that are outside the 3.2 feet sea level rise exposure area (SLR-XA) as described in the Hawai'i Sea Level Rise Vulnerability and Adaptation Report (2017)<sup>2</sup> and are not located within a Tsunami Evacuation Zone.<sup>3</sup> All equipment required for a Proposer's project must be sited within the Proposer's project site with no assumptions that any equipment will be sited on Company property unless specified by the Company.
- 1.2.9 Projects must interconnect to the Company's System at the distribution level (12 kV or lower) and must be equal to 250 kW when interconnecting to distribution circuits. Projects greater than 250 kW, up to and including 2.5 MW, must interconnect at the Pala'au Generating Station.
- 1.2.10 Projects submitted in response to this RFP must be 250 kW or larger. No single point of failure from the Facility shall result in a decrease in net electrical output greater than 2.2 MW AC.
- 1.2.11 Contracts for Projects selected through this RFP must use the Mid-Tier SFC, as described in Section 3.8. Under the Mid-Tier SFC, the Company shall maintain exclusive rights to fully direct dispatch of the Facility, subject to availability of the resource and Section 1.2.12 below. The term of the Mid-Tier SFC will be 20 years.
- 1.2.12 The BESS component of a Paired Project will be charged during periods when full potential export of the generation component is not being dispatched by the Company. Stored energy in the BESS may be used to export energy to the Company subject to Company dispatch. The BESS component of a Paired Project must be sized to support the Facility's Allowed Capacity (in MW) for a minimum of four (4) continuous hours throughout the term of the Mid-Tier SFC.

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<sup>2</sup> Hawai'i Climate Change Mitigation and Adaptation Commission. 2017. Hawai'i Sea Level Rise Vulnerability and Adaptation Report. Prepared by Tetra Tech, Inc. and the State of Hawai'i Department of Land and Natural Resources, Office of Conservation and Coastal Lands, under the State of Hawai'i Department of Land and Natural Resources Contract No: 64064. This report is available at: [https://climateadaptation.hawaii.gov/wp-content/uploads/2017/12/SLR-Report\\_Dec2017.pdf](https://climateadaptation.hawaii.gov/wp-content/uploads/2017/12/SLR-Report_Dec2017.pdf)

<sup>3</sup> See Hawai'i Sea Level Rise Viewer at <https://www.pacioos.hawaii.edu/shoreline/slr-hawaii/>, and National Oceanic and Atmospheric Administration (NOAA) interactive map in partnership with the State of Hawai'i at <https://tsunami.coast.noaa.gov/#/>. Projects infrastructure must be outside the "Tsunami Evacuation Zone" (but not necessary to be outside the "Extreme Tsunami Evacuation Zone").

For example, for a 2 MW facility, the BESS component must be able to store and discharge at least 8 MWh of energy at 2 MW maximum export in a single charging/discharging cycle throughout the term of the Mid-Tier SFC.

- 1.2.13 All Paired Projects must be able to be charged from the grid at the direction of the Company after the 5-year Investment Tax Credit (“ITC”) recapture period has lapsed. Paired Projects that are incapable of claiming the ITC must be capable of being 100% charged from the grid from the GCOD.
- 1.2.14 The amount of energy discharged from a BESS component in a year will be limited to the energy storage contract capacity (in MWh) multiplied by the number of Days in that year. A BESS component may be dispatched more than once per Day, subject to such discharge energy limitations.
- 1.2.15 Proposals must specify a GCOD no later than August 31, 2026. Preference will be given to Proposals that specify an earlier GCOD in both the price and non-price evaluation. A Proposer’s GCOD set forth in its Proposal will be the GCOD in any resulting Mid-Tier SFC if such Proposal is selected to the Final Award Group. Proposers will not be able to request a change in the GCOD set forth in their Proposals. Proposals that propose an earlier GCOD will be scored higher during the Initial Evaluation phase (see Chapter 4).
- 1.2.16 If selected, Proposers will be responsible for all costs throughout the term of the Mid-Tier SFC, including but not limited to Project development, completion of an Interconnection Requirements Study (“IRS”), land acquisition, permitting, financing, construction of the Facility and all Interconnection Facilities, and the operation and maintenance (“O&M”) of the Facility.
- 1.2.17 If selected, Proposers will be solely responsible for the decommissioning of the Project and the restoration of the Site upon the expiration of the Mid-Tier SFC, as described in Attachment G, Section 7 of the Mid-Tier SFC.
- 1.2.18 If selected, Proposers shall pursue all available applicable federal and state tax credits. Proposal pricing must be set to incorporate the benefit of such available federal tax credits. However, to mitigate the risk on Proposers due solely to potential changes to the state’s tax credit law before a selected project reaches commercial operations, Proposal pricing shall be set without including any state tax credits. If a Proposal is selected, the Mid-Tier SFC for the project will require the Proposer to pursue the maximum available state tax credit and remit tax credit proceeds to the Company for customers’ benefit as described in Attachment J of the Mid-Tier SFC. The Mid-Tier SFC will also provide that the Proposer will be responsible for payment of liquidated damages for failure to pursue the state tax credit.

### **1.3 Competitive Bidding Framework**

Consistent with the Framework, this RFP outlines the Company’s requirements in relation to the resources being solicited and the procedures for conducting the RFP

process. It also includes information and instructions to prospective Proposers participating in and responding to this RFP.

#### **1.4 Role of the Independent Observer**

1.4.1 Part III.C.1 of the Framework sets forth the circumstances under which an Independent Observer is required in a competitive bidding process. The Independent Observer will advise and monitor all phases of the RFP process and will coordinate with PUC staff throughout the RFP process to ensure that the RFP is undertaken in a fair and unbiased manner. In particular, the Company will review and discuss with the Independent Observer decisions regarding the evaluation, disqualification, non-selection, and selection of Proposals.

1.4.2 The role of the Independent Observer, as described in the Framework, will include but is not limited to:

- Monitor all steps in the competitive bidding process
- Monitor communications (and communications protocols) with Proposers
- Monitor adherence to the Company's Code of Conduct
- Submit comments and recommendations, if any, to the PUC concerning the RFP
- Review the Company's Proposal evaluation methodology, models, criteria, and assumptions
- Review the Company's evaluation of Proposals
- Advise the Company on its decision-making
- Participate in dispute resolution as set forth in Section 1.10
- Report to the PUC on monitoring results during each stage of the competitive bidding process
- Provide an overall assessment of whether the goals of the RFP were achieved

1.4.3 The Independent Observer for this RFP is: **Arroyo Seco Consulting**.

#### **1.5 Communications Between the Company and Proposers – Code of Conduct Procedures Manual**

1.5.1 Communications and other procedures under this RFP are governed by the "Code of Conduct Procedures Manual," (also referred to as the "Procedures Manual") developed by the Company as required by the Framework, and attached as Appendix C.

1.5.2 All pre-Proposal communication with prospective Proposers will be conducted via the Company's RFP website, Electronic Procurement Platform, and/or electronic mail ("Email") through the address specified in Section 1.6 (the "RFP Email Address"). Phone communication or face-to-face meetings will not be supported. Frequently asked questions submitted by prospective Proposers and the answers to those questions may be posted on the Company's RFP website. The Company reserves the right to respond only to comments and questions it deems are appropriate and relevant to the RFP. Proposers shall submit questions no later than fifteen Days before the Proposal Due Date (RFP Schedule in Section 3.1, Table 1). The Company will endeavor to respond to all questions no later than five Days before the Proposal Due Date.

- 1.5.3 After Proposals have been submitted, the Company may contact individual Proposers for purposes of clarifying their Proposal(s).
- 1.5.4 Any confidential information deemed by the Company, in its sole discretion, to be appropriate to share, will only be transmitted to the requesting party after receipt of a fully executed CBRE Mutual Confidentiality and Non-Disclosure Agreement (“CBRE NDA”) (see Appendix E).
- 1.5.5 Except as expressly permitted and in the manner prescribed in the Procedures Manual, any unsolicited contact by a Proposer or prospective Proposer with personnel of the Company pertaining to this RFP is prohibited.

## **1.6 Company Contact for Proposals**

The primary contact for this RFP is:

Joseph Streeter  
Energy Contract Manager  
Hawaiian Electric Company, Inc.

RFP Email Address: [cbrrfp@hawaiianelectric.com](mailto:cbrrfp@hawaiianelectric.com)

## **1.7 Proposal Submission Requirements**

- 1.7.1 All Proposals must be prepared and submitted in accordance with the procedures and format specified in the RFP. Proposers are required to respond to all questions and provide all information requested in the RFP, as applicable, and only via the communication methods specified in the RFP.
- 1.7.2 Detailed requirements regarding the form, submission, organization and information for the Proposal are set forth in Chapter 3 and Appendix B.
- 1.7.3 Proposals must not rely on any information that is not contained within the Proposal itself in demonstrating compliance for any requirement in this RFP.
- 1.7.4 In submitting a Proposal in response to this RFP, each Proposer certifies that the Proposal has been submitted in good faith and without fraud or collusion with any other unaffiliated person or entity. The Proposer shall acknowledge this in the Response Package submitted with its Proposal. Furthermore, in executing the CBRE NDA provided as Appendix E, the Proposer agrees on behalf of its Representatives (as defined in the CBRE NDA) that the Company’s negotiating positions will not be shared with other Proposers or their respective Representatives.

In addition, in submitting a Proposal, a Proposer will be required to provide Company with its legal counsel’s written certification in the form attached as Appendix B Attachment 1 certifying in relevant part that irrespective of any Proposer’s direction, waiver, or request to the contrary, that the attorney will not share a Proposer’s confidential information associated with such Proposer with others, including but not

limited to, such information such as a Proposer’s or Company’s negotiating positions. If legal counsel represents multiple unaffiliated Proposers whose Proposals are selected for the Final Award Group, such counsel will also be required to submit a similar certification at the conclusion of power purchase agreement negotiations that he or she has not shared a Proposer’s confidential information or the Company’s confidential information associated with such Proposer with others, including but not limited to, such information as a Proposer’s or Company’s negotiating positions.

- 1.7.5 All Proposals must be submitted via the Electronic Procurement Platform by 2:00 pm Hawai‘i Standard Time (“HST”) on the Proposal Due Date shown in the RFP Schedule in Section 3.1, Table 1. No hard copies of these Proposals will be accepted by the Company.

It is the Proposer’s sole responsibility to ensure that complete and accurate information has been submitted on time and consistent with the instructions of this RFP. With this assurance, Company shall be entitled to rely upon the completeness and accuracy of every Proposal. Any errors identified by the Proposer or Company after the Proposal Due Date has passed may jeopardize further consideration and success of the Proposal. If an error or errors are later identified, Company, in consultation with the Independent Observer, may permit the error(s) to be corrected without further revision to the Proposal, or may require Proposer to adhere to terms of the Proposal as submitted without correction. Additionally, and in Company’s sole discretion, if such error(s) would materially affect the Priority List or Final Award Group, Company reserves the right, in consultation with the Independent Observer, to remove or disqualify a Proposal upon discovery of the material error(s). The Proposer of such Proposal shall bear the full responsibility for such error(s) and shall have no recourse against Company’s decision to address Proposal error(s), including removal or disqualification. The Energy Contract Manager, in consultation with the Independent Observer, will confirm that the IPP and Affiliate Proposers were submitted by the IPP and Affiliate Proposal Due Date shown in Section 3.1, Table 1. The Electronic Procurement Platform automatically closes to further submissions after the IPP and Affiliate Proposal Due Date shown in Section 3.1, Table 1.

**1.8 Proposal Fee**

- 1.8.1 IPP and Affiliate proposers are required to tender a non-refundable Proposal Fee, based on the size of the proposed Project, for each Proposal submitted.

<b>Project Size</b>	<b>Proposal Fee</b>
250 kW and larger, and less than 1 MW	\$1,000
1 MW and larger, up to and including 2.5 MW	\$2,000

- 1.8.2 Proposers may submit up to two (2) variations of their Proposal, one of which is the base variation of the Proposal, under a single Proposal Fee.
- 1.8.3 Variations of pricing terms or Facility size can be offered. Variations which propose a different Site will not be considered and will be deemed a separate Proposal, and a separate Proposal Fee must be paid for each such Proposal. All unique information for each variation of a Proposal, no matter how minor such variation is, must be clearly identified and separated by following the instructions in Appendix B Section 4.
- 1.8.4 The Proposal Fee must be in the form of a cashier's check from a U.S.-chartered bank made payable to "Maui Electric Company, Ltd." and must be delivered and received by the Company by 2:00 pm (HST) on the Proposal Due Date shown in the RFP Schedule in Section 3.1, Table 1. The cashier's check should include a reference to the Proposal(s) for which the Proposal Fee is being provided. Proposers must identify in the Proposal Response Package (instructions in Appendix B Section 1.3.1) the delivery information for its Proposal Fee. Proposers are strongly encouraged to utilize a delivery service method that provides proof of delivery to validate delivery date and time.

If the Proposal Fee is delivered by U.S. Postal Service (with registered, certified, receipt verification), the Proposer shall address it to:

Joseph Streeter  
Energy Contract Manager  
Hawaiian Electric Company, Inc.  
Mail Code CP21-IU  
PO Box 2750  
Honolulu, Hawai'i 96840

If the Proposal Fee is delivered by other courier services, the Proposer shall address it to:

Hawaiian Electric Company, Inc  
Ward Receiving  
Attention: Joseph Streeter, Energy Contract Manager  
Mail Code CP21-IU  
799 S. King St.  
Honolulu, Hawai'i 96813

Due to COVID-19 prevention measures, Proposal Fees cannot be delivered in person.

## **1.9 Procedures for Affiliate Proposals**

- 1.9.1 The Competitive Bidding Framework allows the Company and its Affiliates the opportunity to submit Proposals<sup>4</sup> to RFPs issued by the Company. The Company will NOT be providing a Self-Build Option in response to this RFP but reserves the right to do so in future solicitations. Requirements for Company Self-Build ("Self-Build Option" or

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<sup>4</sup> A Proposal will also be treated as an Affiliate Proposal if the Affiliate is a partner for the Proposal.

“SBO”) and Affiliate Proposals are specified in the Code of Conduct (“CBRE Code of Conduct”) required under the Framework and implemented by certain rules and procedures found in the Procedures Manual submitted to the PUC in Docket No. 2015-0389 on July 9, 2020. The CBRE Code of Conduct will apply to all CBRE Phase 2 RFPs regardless of whether the Company submits a SBO. A copy of the Procedures Manual is attached as Appendix C.

Affiliate Proposals are also subject to any applicable Affiliate Transaction Requirements issued by the PUC in Decision and Order No. 35962 on December 19, 2018, and subsequently modified by Order No. 36112, issued on January 24, 2019, in Docket No. 2018-0065. However, for Affiliate Proposals for Mid-Tier Projects, the PUC will not require an additional review pursuant to the Affiliate Transaction Requirements, but will hold Affiliate Proposals to the terms of their Proposal. Affiliate Proposals will be treated identically to IPP Proposals and must be submitted electronically through the Electronic Procurement Platform by the IPP and Affiliate Proposal Due Date in RFP Section 3.1, Table 2.

## **1.10 Dispute Resolution Process**

- 1.10.1 If disputes arise under the RFP, the provisions of Section 1.10 and the dispute resolution process established in the Framework will control (see Part V of the Framework).
- 1.10.2 Proposers who challenge or contest any aspect of the RFP process must first attempt to resolve their concerns with the Company and the Independent Observer (“Initial Meeting”). The Independent Observer will seek to work cooperatively with the parties to resolve any disputes or pending issues and may offer to mediate the Initial Meeting to resolve disputes prior to such issues being presented to the PUC.
- 1.10.3 Any and all disputes arising out of or relating to the RFP which remain unresolved for a period of twenty (20) Days after the Initial Meeting takes place may, upon the agreement of the Proposer and the Company, be submitted to confidential Mediation in Honolulu, Hawai‘i, pursuant to and in accordance with the Mediation Rules, Procedures, and Protocols of Dispute Prevention Resolution, Inc. (“DPR”) (or its successor) or, in its absence, the American Arbitration Association then in effect (“Mediation”). The Mediation will be administered by DPR. If the parties agree to submit the dispute to Mediation, the Proposer and the Company shall each pay fifty percent (50%) of the cost of the Mediation (i.e., the fees and expenses charged by the mediator and DPR) and shall otherwise each bear their own Mediation costs and attorney’s fees.
- 1.10.4 If settlement of the dispute is not reached within sixty (60) Days after commencement of the Mediation, or if after the Initial Meeting, the parties do not agree to submit any unresolved disputes to Mediation, then as provided in the Framework, the Proposer may submit the dispute to the PUC in accordance with the Framework.
- 1.10.5 In accordance with the Framework, the PUC will serve as the arbiter of last resort for any disputes relating to this RFP involving Proposers. The PUC will use an informal expedited dispute resolution process to resolve the dispute within thirty (30) Days, as

described in Parts III.B.8 and V of the Framework.<sup>5</sup> There will be no right to hearing or appeal from this informal expedited dispute resolution process.

- 1.10.6 If any Proposer initiates a dispute resolution process for any dispute or claim arising under or relating to this RFP, other than that permitted by the Framework and Section 1.10 of this RFP (e.g., a court proceeding), then such Proposer shall be responsible for any and all attorneys' fees and costs that may be incurred by the Company or the PUC in order to resolve such claim.

### **1.11 No Protest or Appeal**

Subject to Section 1.10, no Proposer or other person will have the right to protest or appeal any award or disqualification of a Project made by the Company.

By submitting a Proposal in response to the RFP, the Proposer expressly agrees to the terms and conditions set forth in this RFP.

### **1.12 Modification or Cancellation of the Solicitation Process**

- 1.12.1 Unless otherwise expressly prohibited, the Company may, at any time up to the final execution of a Mid-Tier SFC, as may be applicable, in consultation with the Independent Observer, postpone, withdraw, and/or cancel any requirement, term, or condition of this RFP, including deferral of the award of any contract, and/or cancellation of the award all together, all of which will be without any liability to the Company.
- 1.12.2 The Company may modify this RFP subject to requirements of the Framework, whereby the modified RFP will be reviewed by the Independent Observer and submitted to the PUC thirty (30) Days prior to its issuance, unless the PUC directs otherwise (see Framework Part IV.B.10). The Company will follow the same procedure with regard to any potential postponement, withdrawal, or cancellation of the RFP or any portion thereof.

## **Chapter 2: Resource Needs and Requirements**

### **2.1 Performance Standards**

Proposals must meet the attributes set forth in this RFP, the technical requirements identified in Appendix I of Rule 14H, and the requirements of the Mid-Tier SFC. This RFP, Rule 14H, and the Mid-Tier SFC set forth the minimum requirements that all Proposals must satisfy to be eligible for consideration in this RFP. If there is a conflict

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<sup>5</sup> The informal expedited dispute resolution process does not apply to PUC review of contracts that result from the RFP. See Decision and Order No. 23121 at 34-35. Further, the informal expedited dispute resolution process does not apply to the Framework's process relating to issuance of a draft and final RFP, and/or to the PUC approval of the RFP because: (1) the Framework (and the RFP) set forth specific processes whereby interested parties may provide input through the submission of comments; and (2) the Framework's dispute resolution process applies to "Bidders" and there are no "Bidders" at this stage in the RFP process.



between the Performance Standards in Rule 14H and the Mid-Tier SFC, the contract terms will control. Additional Performance Standards may be required based on the results of the IRS.

Facilities that are 1 MW or larger must be able to operate in grid-forming mode when directed by the Company as defined in the Mid-Tier SFC.

Black start capability<sup>6</sup> is required for Paired Projects that are 1 MW or larger. For these facilities, the ability to startup without requiring energy from the grid (Black start capability) is also required including energization of the interconnection transformers. The company may use the facility to assist in system restoration, based upon energy availability and BESS state of charge.

For facilities from 250 kW and less than 1 MW, grid-forming and black start capability are preferred but not required. These capabilities are given preference as part of the non-price criteria, Locational Value for Community Resilience, in Section 4.4.2 in this RFP.

- 2.1.1 For Paired Projects, the functionality and characteristics of the BESS must be maintained throughout the term of the Mid-Tier SFC. To be clear, Proposers may not propose any degradation for either capacity or efficiency in their Proposals.

## 2.2 Distribution-Level System Information

Proposers are encouraged to use the Locational Value Maps located at <https://www.hawaiianelectric.com/clean-energy-hawaii/integration-tools-and-resources/locational-value-maps> to determine circuit capacity. However, while the Locational Value Map provides information regarding an initial assessment of the potential MW hosting capacity for distribution level circuits, these numbers should only be used as a screening tool to select a circuit that will provide a higher likelihood of interconnection. This is because the methodology used to develop these hosting capacity numbers is geared towards smaller distributed energy resources (“DER”) and does not include the scenario of a larger DER interconnecting at one point. As a result, load flow analyses are required to confirm the impact to line capacities and voltage limits. Detailed load flow analyses will be performed as part of the project selection process. Prior to submitting a proposal, Proposers are encouraged to inquire about the viability of interconnecting a proposed Project at a specific location. Direct questions to the RFP Email Address in Section 1.6.

- 2.2.1 A detailed IRS, when performed, may reveal other adverse system impacts that may further limit a Project’s ability to interconnect and/or further limit the net output of the Facility without upgrades.

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<sup>6</sup> The ability to start itself and provide power to the Company's grid without relying on any services or energy from the Company's grid in order to assist the grid in recovering from a total or partial shutdown. During such a total or partial shutdown of the grid, the Project may experience step changes in load and other transient and dynamic conditions as it picks up load without support from other resources on the system during start-up (if the Project remains connected) or while connecting to the loads the Project is picking up (not the start-up and connecting of the Facility itself).

## 2.3 Interconnection to the Company System

The Proposer must provide information pertaining to the design, development, and construction of the Interconnection Facilities. Interconnection Facilities includes both: (1) Seller-Owned Interconnection Facilities; and (2) Company-Owned Interconnection Facilities.

- 2.3.1 All Proposals must include a description and conceptual or schematic diagrams of the Proposer's plan to transmit power from the Facility to the Company System. The proposed Interconnection Facilities must be compatible with the Company System. In the design, Projects must adequately consider Company requirements to address impacts on the performance and reliability of the Company System.

For Projects that are exactly 250 kW, Project single line diagram(s) must be submitted with the Proposal submission. For Projects that are greater than 250 kW, a completed Project Interconnection Data Request worksheet (see Appendix B, Attachment 2) and a single line diagram must be submitted with the Proposal submission. Additional information is required to be submitted for all Project sizes within 30 days of selection to the Final Award Group as described in Section 5.1.

- 2.3.1.1 In addition to the Performance Standards and findings of the IRS, the design of the Interconnection Facilities, including power rating, Point(s) of Interconnection with the Company System, and scheme of interconnection, must meet Company standards. The Company will provide its construction standards and procedures to the Proposer (Engineer, Procure, Construct Specifications for Hawaiian Electric Power Lines and Substations) if requested via the communication methods identified in Section 1.5 and upon the execution of a CBRE NDA as specified in Section 3.12.1. These specifications are intended to illustrate the scope of work typically required to administer and perform the design and construction of a Maui Electric substation and power line.
- 2.3.1.2 Interconnection Facilities must be designed such that it meets or exceeds the applicable single line diagram in Appendix H.
- 2.3.2 Tariff Rule No. 19 establishes provisions for Interconnection and Transmission Upgrades and can be found at <https://www.hawaiianelectric.com/billing-and-payment/rates-and-regulations/>. While the Moloka'i System does not have a traditional Transmission System, the tariff provisions are intended to simplify the rules regarding who pays for, installs, owns, and operates interconnection facilities in the context of competitive bidding. The Company will be responsible for building all Company-Owned Interconnection Facilities for a selected Project.
- 2.3.3 The Proposer shall be responsible for all costs required to interconnect a Project to the Company System, including all Seller-Owned Interconnection Facilities and Company-Owned Interconnection Facilities, regardless of who is responsible for building such facilities.
- 2.3.4 Proposers are required to include in their pricing proposal all costs for interconnection and equipment expected to be required to interconnect their Facility to the grid.

Appendix H includes information related to Company-Owned Interconnection Facilities and costs that may be helpful to Proposers. Selected Proposers shall be responsible for the actual final costs of all Seller-Owned Interconnection Facilities and Company-Owned Interconnection Facilities, including certain interconnection costs associated with system upgrades (see Appendix H), whether or not such costs exceed the costs set forth in a Proposer's Proposal. No adjustments will be allowed to the proposed price in a Proposal if actual costs for Interconnection Facilities exceed the amounts proposed.

- 2.3.5 Proposers are required to account for all costs for distribution-level service interconnection for station power in their pricing proposal.
- 2.3.6 All Projects will be screened for general readiness to comply with the requirements for interconnection. Proposals selected to the Final Award Group will be subject to Section 5.1.1. Proposals selected to the Final Award Group may be subject to further study in the form of an IRS. The IRS process is further described in Section 5.1. The results of the completed IRS or as identified through the Detailed Evaluation process, as well as any mitigation measures identified, will be incorporated into the terms and conditions of a final executed Mid-Tier SFC.

### **Chapter 3: Instructions to Proposers**

#### **3.1 Schedule for the Proposal Process**

Table 1 sets forth the proposed schedule for the proposal process (the "RFP Schedule"). The RFP Schedule is subject to PUC approval. The Company reserves the right to revise the RFP Schedule as necessary. Changes to the RFP Schedule prior to the RFP Proposal Due Date will be posted to the RFP website. Changes to the RFP Schedule after the Proposal Due Date will be communicated via Email to the Proposers and posted on the RFP Website.

**Table 1  
Proposed RFP Schedule**

<b>Milestone</b>	<b>Schedule Dates</b>
(1) Draft RFP filed	July 9, 2020
(2) Technical Status Conference	July 29, 2020
(3) Parties and Participants file Comments by	August 12, 2020
(4) Proposed Final RFP filed	September 8, 2020
(5) Updated RFP Draft filed Per Order 37592	March 30, 2021
(6) Parties and Participants file Comments by	April 14, 2021
(7) Proposed Updated RFP filed per Order 37879	August 31, 2021
(8) Proposed Final RFP filed per Order 38038	November 4, 2021 <sup>7</sup>
(9) Final RFP is Issued	November 22, 2021 <sup>8</sup>
(10) IPP and Affiliate Proposal Due Date	February 15, 2022 at 2:00 pm HST
(11) Selection of Priority List	April 20, 2022
(12) BAFOs Due	April 27, 2022
(13) Selection of Final Award Group	August 10, 2022
(14) Contract Execution Start	August 17, 2022

### 3.2 Company RFP Website/Electronic Procurement Platform

3.2.1 The Company has established a website for general information to share with potential Proposers. The RFP website is located at the following link:

<http://www.hawaiianelectric.com/competitivebidding>

The Company will provide general notices, updates, schedules and other information on the RFP website throughout the process. Proposers should check the website frequently to stay abreast of any new developments. This website will also contain the link to the Electronic Procurement Platform employed by the Company for the receipt of Proposals.

“Sourcing Intelligence” developed by Power Advocate is the Electronic Procurement Platform that the Company has licensed and will utilize for the receipt of Proposals in this RFP. Proposers who do not already have an existing account with PowerAdvocate and who intend to submit a Proposal for this RFP will need to register as a “Supplier” with PowerAdvocate.

3.2.2 There are no license fees, costs, or usage fees to Proposers for the use of the Electronic Procurement Platform.

<sup>7</sup> All subsequent dates in the proposed schedule may be modified based on further guidance provided by the PUC.

<sup>8</sup> Per Order 38038, page 6, “These final RFPs and supporting documents for Molokai and Lanai will be approved automatically 10 days after they are filed, unless the Commission orders otherwise..” The schedule reflects the RFP being issued one week after its anticipated approval date.

See [Appendix D](#) for user information on and screenshots of PowerAdvocate's Sourcing Intelligence procurement platform.

### **3.3 Information Exchange**

The PUC conducted a Technical Status Conference on July 29, 2020 to discuss the draft RFP. Parties and Participants had the opportunity to submit comments on the draft RFP. The Company then revised the RFP after considering the comments received and filed a final RFP for PUC review and approval. Subsequently, the PUC issued Order No. 37592 which among other things, directed the Companies to further collaborate with the Parties and Participants. As a result, the Company held several meetings with the Parties and Participants, which helped inform further updates to the RFP that were reflected in the Company's submittal of an updated RFP to the PUC.

Additionally, the Company will hold a prerecorded webinar for CBRE in accordance with the Competitive Bidding Framework for prospective Proposers to learn about the provisions and requirements of this RFP. This prerecorded webinar will be posted to the Company's website within one week of the issuance of the final RFP.

Prospective Proposers may also submit written questions regarding the RFP to the RFP Email Address set forth in [Section 1.6](#). The Company will endeavor to address all questions that will be helpful to prospective Proposers via a Q&A section on the RFP website.

Prospective Proposers should review the RFP Website's Q&A section prior to submission of their Proposal. Duplicate questions will not be answered.

### **3.4 Preparation of Proposals**

- 3.4.1 Each Proposer shall be solely responsible for reviewing the RFP (including all attachments and links) and for thoroughly investigating and informing itself with respect to all matters pertinent to this RFP, the Proposer's Proposal, and the Proposer's anticipated performance under the Mid-Tier SFC. It is the Proposer's responsibility to ensure it understands all requirements of the RFP, to seek clarification if the RFP's requirements or Company's request is not clear, and to ask for any confirmation of receipt of submission of information. Under [Section 1.7.5](#), the Proposer is solely responsible for all errors in its Proposal(s). The Company will not accept any explanation by a Proposer that it was incumbent on the Company to catch any error.
- 3.4.2 Proposers shall rely only on official information provided by the Company in this RFP when preparing their Proposal. The Company will rely only on the information included in the Proposals, and additional information solicited by the Company to Proposers in the format requested, to evaluate the Proposals received. Evaluation will be based on the stated information in this RFP and on information submitted by Proposers in response to this RFP. Proposals must clearly state all capabilities, functionality and characteristics of the Project; must clearly detail plans to be performed; must explain applicability of information; and must provide all referenced material if it is to be considered during the Proposal evaluation. Referencing previous RFP submissions or projects for support will

not be considered. Proposers should not assume that any previous RFP decisions or preferences will also apply to this RFP.

- 3.4.3 Each Proposer shall be solely responsible for, and shall bear all of its costs incurred in the preparation of its Proposal and/or its participation in this RFP, including, but not limited to, all costs incurred with respect to the following: (1) review of the RFP documents; (2) status conference participation; (3) site visits; (4) third-party consultant consultation; and (5) investigation and research relating to its Proposal and this RFP. The Company will not reimburse any Proposer for any such costs, including the selected Proposer(s).
- 3.4.4 Each Proposal must contain the full name and business address of the Proposer and must be signed by an authorized officer or agent<sup>9</sup> of the Proposer.

### **3.5 Organization of the Proposal**

The Proposal must be organized as specified in Appendix B. It is the Proposer's responsibility to ensure the information requested in this RFP is submitted and contained within the defined proposal sections as specified in Appendix B.

### **3.6 Proposal Limitations**

Proposers expressly acknowledge that Proposals are submitted subject to the following limitations:

The RFP does not commit or require the Company to award a contract, pay any costs incurred by a Proposer in the preparation of a Proposal, or procure or contract for products or services of any kind whatsoever. The Company reserves the right, in consultation with the Independent Observer, to accept or reject, in whole or in part, any or all Proposals submitted in response to this RFP, to negotiate with any or all Proposers eligible to be selected for award, or to withdraw or modify this RFP in whole or in part at any time.

- The Company reserves the right, in consultation with the Independent Observer, to request additional information from any or all Proposers relating to their Proposals or to request that Proposers clarify the contents of their Proposals. Proposers who are not responsive to such information requests may be eliminated from further consideration upon consultation with the Independent Observer.
- The Company reserves the right, in consultation with the Independent Observer, to solicit additional Proposals from Proposers after reviewing the initial Proposals. Other than as provided in this RFP, no Proposer will be allowed to alter its Proposal or add new information to a Proposal after the Proposal Due Date.

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<sup>9</sup> Proposer's officer or agent must be authorized to sign the Proposal. Such authorization must be in writing and may be granted via Proposer's organizational documents (i.e., Articles of Incorporation, Articles of Organization, By-laws, etc.), resolution, or similar documentation.

- All material submitted in response to this RFP will become the sole property of the Company, subject to the terms of the CBRE NDA.

### **3.7 Proposal Compliance and Bases for Disqualification**

Proposers may be deemed non-responsive and/or Proposals may not be considered for reasons including, but not limited to, the following:

- Any unsolicited contact by a Proposer or prospective Proposer with personnel of the Company pertaining to this RFP as described in Section 1.5.5.
- Any illegal or undue attempts by or on behalf of the Proposer or others to influence the Proposal Review process.
- The Proposal does not meet one or more of the Eligibility Requirements specified in Section 4.2.
- The Proposal does not meet one or more of the Threshold Requirements specified in Section 4.3.
- The Proposal is deemed to be unacceptable through a fatal flaws analysis as described in Section 4.4.2.
- The Proposer does not respond to a Company request for additional information to clarify the contents of its Proposal within the timelines specified by the Company.
- The Proposal contains misrepresentations or errors.

### **3.8 Power Purchase Agreement**

- 3.8.1 The Power Purchase Agreement for proposals selected under this RFP for Mid-Tier Projects will be in the form of a pre-approved Mid-Tier SFC, attached as Appendix K. The Mid-Tier SFC will be reviewed and pre-approved by the PUC and as a result, will not be negotiable. Appendix K-3 is a Project Specific Addendum for Mid-Tier Projects located on Moloka'i. In addition, Appendix K-4 is provided for use if the Project is on a Company-owned Site and Appendix K-5 is provided for use if the Project is designed with a single inverter system such that the PV System and BESS are "DC Coupled."
- 3.8.2 If selected, any Affiliate Proposers will be required to enter into the Mid-Tier SFC with the Company.
- 3.8.3 In general, under the Mid-Tier SFC, payment to the Seller consists of a Lump Sum Payment component to cover the costs of the Project. In return for the Lump Sum Payment component, the Seller shall guarantee minimum performance and availability metrics to ensure that the Facility is maintained and available for energy storage and dispatch, as well as provide an indication of the available energy in near real-time for the Company's dispatch. Company shall not be obligated to accept, nor shall it be required

to pay for, test energy generated by the Facility during acceptance testing or other test conditions.

- 3.8.4 The Performance Standards identified in Section 2.1 establish the minimum requirements a Proposal must satisfy to be eligible for consideration in this RFP. A proposed Facility's ability to meet these Performance Standards is both a Threshold Requirement and a Non-Price Related Criteria under Sections 4.3 and 4.4.2, respectively. As such, these Performance Standards are non-negotiable.

### **3.9 Pricing Requirements**

- 3.9.1 Proposers must submit pricing for each of their variations associated with each Proposal (if variations as described in Section 1.8.2 and 1.8.3 are submitted). Proposers are responsible for understanding the terms of the Mid-Tier SFC. Pricing cannot be specified as contingent upon other factors (e.g., changes to federal tax policy or receiving all Investment Tax Credits assumed).

- 3.9.2 Escalation in pricing over the term of the Mid-Tier SFC is prohibited.

- 3.9.3 Pricing information must only be identified within specified sections of the Proposal as instructed by this RFP's Appendix B Proposer's Response Package (i.e., Proposal pricing information must be contained within defined Proposal sections of the Proposal submission). Pricing information contained anywhere else in a Proposal will not be considered during the evaluation process.

- 3.9.4 The Proposer's Response Package must include the following for each Proposal (and variation):

- **Lump Sum Payment (\$/year):** Payment amount for full dispatchability of the Facility. Payment will be made in monthly increments.

- 3.9.5 As identified in the Schedule of Defined Terms in the Mid-Tier SFC under "BESS Allocated Portion of the Lump Sum Payment", the allocated portion of the Lump Sum Payment specified for energy storage for the Facility for determining liquidated damages is 50% and shall be a non-negotiable percentage in the Mid-Tier SFC.

### **3.10 Project Description**

- 3.10.1 Proposals are required to provide a Net Energy Potential ("NEP") RFP Projection for the Project. The NEP RFP Projection associated with the proposed Project represents the estimated annual net energy (in MWh) that could be produced by the Facility and delivered to the Point of Interconnection over a ten-year period with a probability of exceedance of 95%. For Paired Projects, the energy generated by the Facility in excess of Company dispatch but below the Facility's Allowed Capacity that is stored in the Facility's BESS component and can later be discharged to the POI considering the BESS Contract Capacity and Maximum Rated Output should be included in the NEP RFP Projection. Any energy in excess of what is allowed to be delivered to the POI and would exceed the BESS Contract Capacity shall be excluded from the Net Energy Potential. To



achieve this objective, the BESS Contract Capacity (MWh) must be at least four times the MW Capacity of the installed PV Capacity. Any energy generated outside of the proposed Facility that is used to charge the BESS component should not be factored into the NEP RFP Projection. Any losses that may be incurred from energy being stored and then discharged from the BESS (round trip efficiency losses) should be excluded from the NEP RFP Projection, but the NEP should consider auxiliary loads in developing the value relative to the POI. The NEP RFP Projection will be used in the RFP evaluation process and therefore Proposers will be held to their provided value.<sup>10</sup>

- 3.10.2 Paired Project Proposals are required to provide a single value Round Trip Efficiency (“RTE”), measured at the Point of Interconnection, that the Facility’s BESS component is required to maintain throughout the term of the Mid-Tier SFC. This RTE value will be used in the RFP evaluation process and therefore Proposers will be held to this provided value as it will become the RTE Performance Metric in Section 2.10 of the Mid-Tier SFC. Please review the Mid-Tier SFC for potential liquidated damages assessed against Seller if the BESS does not maintain the required RTE. The RTE is further specified in Appendix B Section 2.
- 3.10.3 Each Proposer must also agree to provide Project financial information, including proposed Project finance structure information specified in Appendix B. Such information will be used to evaluate Threshold Requirements and non-price criteria (e.g., Financial Viability of Proposer, Financial Strength and Financing Plan, State of Project Development and Schedule) set forth in Sections 4.3 and 4.4.2.
- 3.10.4 The Proposer agrees that no material changes or additions to the Facility from what is submitted in its Proposal will be made without the Proposer first having obtained prior written consent from the Company. Evaluation of all Proposals in this RFP is based on the information submitted in each Proposal at the Proposal Due Date. If any Proposer requests any Proposal information to be changed after that date, the Company, in consultation with the Independent Observer, and in consideration of whether the evaluation is affected, will determine whether the change is permitted.

### **3.11 Sites Identified by the Company**

- 3.11.1 As an alternative to a Site identified by the Proposer, the Company has identified potential Sites where landowners have expressed a willingness to negotiate a lease or purchase of the land to support a renewable energy project. These Sites were identified through a Land RFI. Proposers will be responsible for working directly with the landowner and must secure Site Control with such landowner prior to submitting a

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<sup>10</sup> If a Proposal is selected to the Final Award Group and a Mid-Tier SFC is executed between the Company and the Proposer, the NEP RFP Projection will be further evaluated at several steps throughout the process as set forth in the Mid-Tier SFC, and adjustments to the Lump Sum Payment will be made accordingly. Additionally, because the Company will rely on an accurate representation of the NEP RFP Projection in the RFP evaluation, a one-time liquidated damage as described in the Mid-Tier SFC will be assessed if the First NEP benchmark is less than the Proposer’s NEP RFP Projection. After the Facility has achieved commercial operations, the performance of the Facility will be assessed on a continuing basis against key metrics identified in the Mid-Tier SFC. See Article 2 and Attachment U of the Mid-Tier SFC.

Proposal. Land RFI information is available to interested parties who sign the CBRE NDA. The Land RFI is further described in Appendix F.

Proposers are not required to select a Site identified in the Land RFI and as noted above may propose any Site for a Project.

- 3.11.2 Additionally, a Company-owned Site is being offered to Proposers for their consideration. The available area is approximately 7.2 acres and comprised of 3 unique areas of approximately 5.7, 1.0, and 0.5 acres, each. The Company-owned site is within the Pala‘au Generating Station property west of Kaunakakai town, referred to as the Pala‘au Site, is further described in Appendix F. This is a different and unique site at the Pala‘au Generating Station property from what was offered in the Moloka‘i Variable Renewable Dispatchable Generation Paired with Energy Storage, issued on November 27, 2019.

Proposers proposing to use the Pala‘au Site shall be required to agree to specific terms and conditions for such use as provided for in Attachment COS of the Mid-Tier SFC. Provisions providing for access to the site during construction and thereafter, during commercial operations, will be subject to current Company security policies and procedures, including any additional restrictions due to COVID-19. Physical, communication, and internet security will be required consistent with Company policy. Additional measures may be required to limit or eliminate interference between Seller and Company facilities and infrastructure. Such policies, procedures, and requirements may change as necessary during the term of the Mid-Tier SFC to reflect changes in Company policies or to remain in compliance with current applicable laws, rules, or regulations. Limited sections of Attachment COS (Company-Owned Sites) (Section 4 Subscriber Organization's Investigations of the Company-Owned Site, Section 5 Construction, Maintenance and Interference, Section 7 Hazardous Substances, and Section 8 Archeological and Historical Items) shall be negotiable.

Due to the Company’s COVID-19 travel restrictions, a site visit will not be available at this time. The Company will endeavor to provide as much information as possible to interested potential Proposers, and if conditions related to the ongoing pandemic do not allow for an in-person visit early in the bid submittal period, the Company will provide additional information, which may include photographs and/or video. Information on a potential in-person site visit, or additional information that will be provided, will be posted on the Company’s website.

### **3.12 Confidentiality**

- 3.12.1 Each prospective Proposer must submit an executed CBRE NDA in the form attached as Appendix E by the Proposal Due Date specified in the RFP Schedule in Section 3.1, Table 1. The form of the CBRE NDA is not negotiable and must be applicable to the Company whose System the Proposal is intended to connect to. Information designated as confidential by the Company will be provided on a limited basis, and only those prospective Proposers who have submitted an executed CBRE NDA will be considered. NDAs that were fully executed for prior non-CBRE RFPs will not be accepted. Proposers

must clearly identify all confidential information in their Proposals. However, Proposers should designate as confidential only those portions of their Proposals that genuinely warrant confidential treatment. The Company discourages the practice of marking every page of a Proposal as confidential. The Company will make reasonable efforts to protect any such information that is clearly marked as confidential. Consistent with the terms of the CBRE NDA, the Company reserves the right to share any information, even if marked confidential, to its agents, contractors, or the Independent Observer for the purpose of evaluating the Proposal.

- 3.12.2 Proposers, in submitting any Proposal(s) to Company in response to this RFP, certify that such Proposer has not shared its Proposal(s), or any part thereof, with any other Proposer of a Proposal(s) responsive to this RFP.
- 3.12.3 The Company will request that the PUC issue a Protective Order to protect confidential information provided by Proposers to the Company and to be filed in a proceeding before the PUC. A copy of the Protective Order, once issued by the PUC, will be provided to Proposers. Proposers should be aware that the Company may be required to share certain confidential information contained in Proposals with the PUC, the State of Hawai‘i Department of Commerce and Consumer Affairs, Division of Consumer Advocacy, and the parties to any docket instituted by the PUC, provided that recipients of confidential information have first agreed in writing to abide by the terms of the Protective Order. Notwithstanding the foregoing, no Proposer will be provided with Proposals from any other Proposer, nor will Proposers be provided with any other information contained in such Proposals or provided by or with respect to any other Proposer.

### **3.13 Credit Requirements**

- 3.13.1 Proposers with whom the Company enters into a Mid-Tier SFC must post Development Period Security and Operating Period Security in the form of an irrevocable standby letter of credit from a bank chartered in the United States as required and set forth in Article 14 of the Mid-Tier SFC. Cash, a parent guaranty, or other forms of security will not be accepted in lieu of the irrevocable standby letter of credit.
- 3.13.2 The Development Period Security and Operating Period Security identified in the Mid-Tier SFC are minimum requirements. Proposers shall not propose an amount lower than that set forth in the Mid-Tier SFC.
- 3.13.3 Proposers may be required to provide an irrevocable standby letter of credit in favor of the Company from a bank chartered in the United States in lieu of the required Source Code Escrow in an amount and as required and set forth in Attachment B to the Mid-Tier SFC.

## **Chapter 4: Evaluation Process and Evaluation Criteria**

#### 4.1 Proposal Evaluation and Selection Process

The Company will employ a multi-step evaluation process. Once the Proposals are received, the Proposals will be subject to a consistent and defined review, evaluation, and selection process. This Chapter provides a description of each step of the process, along with the requirements of Proposers at each step. Figure 1 sets forth the flowchart for the proposal evaluation and selection process.

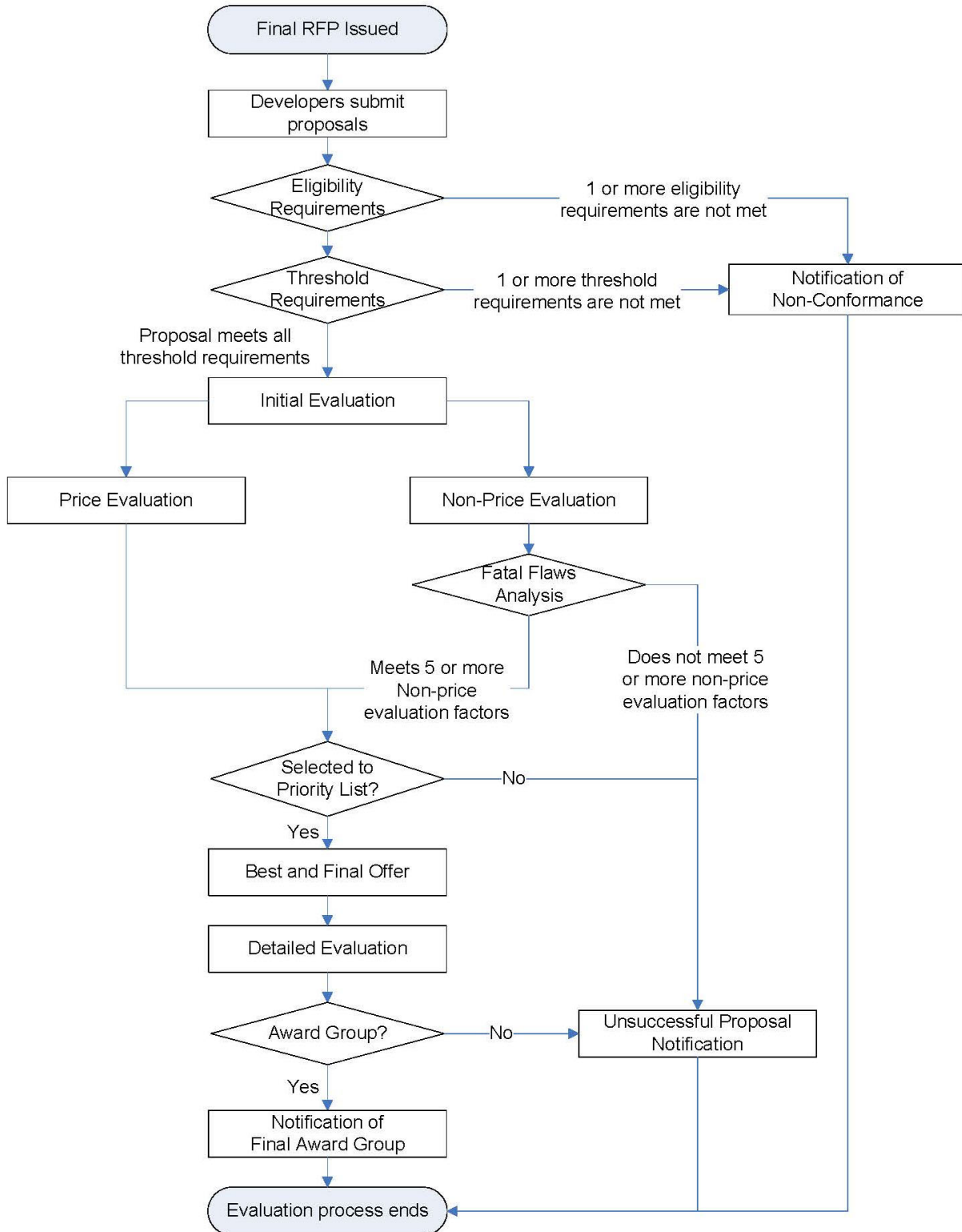
Upon receipt of the Proposals, the Company will review each Proposal submission to determine if it meets the Eligibility Requirements and the Threshold Requirements. The Company, in coordination with the Independent Observer will determine if a Proposer is allowed to cure any aspect of its Proposal or whether the Proposal would be eliminated based on failure to meet either Eligibility or Threshold Requirements.<sup>11</sup> If a Proposer is provided the opportunity to cure any aspect of its Proposal, the Proposer shall be given three (3) business days to cure from the date of notification to cure.<sup>12</sup> Proposals that have successfully met the Eligibility and Threshold Requirements will then enter a two-phase process for Proposal evaluation, which includes the Initial Evaluation resulting in the development of a Priority List, followed by the opportunity for Priority List Proposals to provide Best and Final Offers, and then a Detailed Evaluation process to arrive at a Final Award Group.

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<sup>11</sup> As a general rule, if a Proposer does not include a requested document, inadvertently excludes minor information or provides inconsistencies in its information, it may be given a chance to cure such deficiency. If a Proposer fails to provide material required information in its Proposal and providing the Proposer an opportunity to cure is deemed by the Company, in consultation with the Independent Observer, as an unfair advantage to such Proposer, the Proposal could be classified as non-conforming and eliminated for failure to meet the Eligibility Requirements.

<sup>12</sup> The initial request will be offered three (3) business days to cure. Succeeding inquiries on the deficiencies will be offered cure periods deemed sufficient by the Company and Independent Observer.

**Figure 1 – Evaluation Workflow**



## 4.2 Eligibility Requirements Assessment

Upon receipt of the Proposals, each Proposal will be reviewed to ensure that it meets the following Eligibility Requirements.

- The Proposer is not eligible to participate in this RFP if the Proposer, its parent company, or an affiliate of the Proposer has:
  - defaulted on a current contract with the Company, or
  - had a contract terminated by the Company, or
  - any pending litigation in which the Proposer has made claims against the Company.
- The Proposal, including required uploaded files, must be received on time via the Electronic Procurement Platform.
- The Proposal Fee must be received on or before the Proposal Due Date.
- The Proposal must not contain material omissions.
- The Proposal must be signed and certified by an officer or other authorized person of the Proposer.
- The Proposer must fully execute the CBRE NDA and any other document required pursuant to this RFP.
- The Proposer must provide a Certificate of Vendor Compliance from the Hawai'i Compliance Express dated and issued within 60 days of the date of Proposal submission (a certificate of good standing from the State of Hawai'i Department of Commerce and Consumer Affairs and also federal and Hawai'i state tax clearance certificates for the Proposer may be substituted for the Certificate of Vendor Compliance).
- The Proposal must not be contingent upon changes to existing county, state, or federal laws or regulations.
- The proposed Project must be located on the island of Moloka'i.
- The Proposal must be for a PV project paired with a BESS.
- The proposed project must be 250 kW or larger.
- Projects interconnecting to a distribution circuit (12 kV or lower) must be equal to 250 kW. Projects interconnecting at the Pala'au Generating Station must be 250 kW or larger, up to and including 2.5 MW.
- Projects sited at the Pala'au Generating Station must be 1 MW or larger, up to and including 2.5 MW.
- A minimum of 40% of the Subscriber portion of the Project must be dedicated to residential Subscribers as described in Section 1.2.3.
- No single point of failure from the Facility shall result in a decrease in net electrical output greater than 2.2 MW.
- Project infrastructure and point of interconnection must be located outside the 3.2 feet sea level rise exposure area (SLR-XA) as described in the Hawai'i Sea Level Rise Vulnerability and Adaptation Report (2017), and not located within a Tsunami Evacuation Zone.
- The Proposal must meet the grid-charging requirements of Section 1.2.13.

- The Proposal must specify a GCOD no later than August 31, 2026.
- Proposals for projects that are 1 MW or greater must provide grid-forming and black start capabilities.
- The Proposer shall agree to post Development Period Security and Operating Period Security as described in Section 3.13.

#### 4.3 Threshold Requirement Assessment

Proposals that meet all the Eligibility Requirements will then be evaluated to determine compliance with the Threshold Requirements, which have been designed to screen out Proposals that are insufficiently developed, lack demonstrated technology, or will impose unacceptable execution risk for the Company.

Proposals must provide explanations and contain supporting information demonstrating how and why the Project proposed meets each of the Threshold Requirements. Proposals that fail to provide this information or meet a Threshold Requirement will be eliminated from further consideration upon concurrence with the Independent Observer.

The Threshold Requirements for this RFP are the following:

1. **Site Control:** The Proposal must demonstrate that the Proposer has Site Control for all real property required for the successful implementation of a specific Proposal at a Site not controlled by the Company, including any Interconnection Facilities, with the exception of rights-of-way or easements for the interconnection route, for which the Proposer is responsible. The need for a firm commitment is necessary to ensure that Proposals are indeed realistic and can be relied upon as the Company moves through the remainder of the RFP process. As noted in Appendix B, Section 2.5.4, while land rights are not required with the Proposal for the interconnection route, the Proposal should thoroughly describe the interconnection route and as set forth in Appendix B, Section 2.5.5, the Proposal should identify any rights-of-way or easements that are required for access to the Site or for the interconnection route and describe the plan for obtaining such rights-of-way or easement, including the proposed timeline. In addition, developmental requirements and restrictions such as zoning of the Site and the status of easements must be identified and will be considered in determining whether the Proposal meets the Site Control threshold.

To meet this Site Control requirement, Proposers must do one of the following:

- Provide documentation confirming (1) that the Proposer has an existing legally enforceable right to use and control the Site, either in fee simple or under leasehold for a term at least equal to the term of the Mid-Tier SFC (“Site Control”) as specified in the Proposer’s Proposal (taking into account the timelines set forth in this RFP for selection and execution of a Mid-Tier SFC and PUC approval as applicable), and (2) the applicable zoning for the Site and that such zoning does not prohibit the development of the Site consistent with the Proposal; or

- Provide documentation confirming, at a minimum, (1) that the Proposer has an executed binding letter of intent, memorandum of understanding, option agreement, or similar document with the land owner (a “binding commitment”) which sets forth the general terms of a transaction that would grant the Proposer the required Site Control, and (2) the applicable zoning for the Site and that such zoning does not prohibit the development of the Site consistent with the Proposal. The binding commitment does not need to be exclusive to the Proposer at the time the Proposal is submitted and may be contingent upon selection of the Proposal to the Final Award Group. If multiple Projects are provided a binding commitment for the same Site, the documents granting the binding commitments must not prevent the Company from choosing the Proposal that otherwise would have been selected.
  - **Government/Public Lands Only:** The above two bullet points may not be feasible where government or publicly-owned lands are part of the Site or are required for the successful implementation of the Proposal. In such a case, at a minimum the Proposer must provide a credible and viable plan, including evidence of any steps taken to date, to secure all necessary Site Control for the Proposal, including but not limited to evidence of sufficient progress toward approval by the government agency or other body vested with the authority to grant such approval (as demonstrated by records of the agency). The Proposer will still be required, however, to demonstrate Site Control as required in the Mid-Tier SFC should the Proposal be selected to the Final Award Group.
2. **Performance Standards:** The proposed Facility must be able to meet the performance attributes identified in this RFP and the Performance Standards identified in Section 2.1 of this RFP. Proposals should include sufficient documentation to support the stated claim that the Facility will be able to meet the Performance Standards. The Proposal should include information required to make such a determination in an organized manner to ensure this evaluation can be completed within the evaluation review period.
  3. **Proven Technology:** This criterion is intended as a check to ensure that the technology proposed is viable and can reasonably be relied upon to meet the objectives of this RFP. The Company will only consider Proposals utilizing technologies that have successfully reached commercial operations in commercial applications (i.e., a PPA) at the scale being proposed. Proposals should include any supporting information for the Company to assess the commercial and financial maturity of the technology being proposed as noted in Attachment B, Section 2.12.
  4. **Experience of the Proposer:** The Proposer, its affiliated companies, partners, and/or contractors and consultants on the Proposer’s Project team must have experience in financing, designing, constructing, interconnecting, owning, operating, and maintaining at least one (1) electricity generation project, including all components of the project (i.e., BESS or other attributes), similar in size, scope, technology, and structure to the Project being proposed by Proposer. The Company will consider a Proposer to have reasonably met this Threshold Requirement if the



Proposer can provide sufficient information in its Proposal's RFP Appendix B Section 2.13 tables demonstrating that at least one member of the Proposer's team (identified in the Proposal) has specific experience in each of the following categories: financing, designing, constructing, interconnecting, owning, operating, and maintaining projects similar to the Project being proposed.

5. **Financial Compliance:** The proposed Project must not cause the Company to be subject to consolidation, as set forth in Financial Accounting Standards Board ("FASB") Accounting Standards Codification Topic 810, Consolidation ("ASC 810"), as issued and amended from time to time by FASB. Proposers are required to state to the best of their knowledge, with supporting information to allow the Company to verify such conclusion, that the Proposal will not result in the Seller under the PPA being a Variable Interest Entity ("VIE") and result in the Company being the primary beneficiary of the Seller that would trigger consolidation of the Seller's finances on to the Company's financial statements under FASB ASC 810. The Company will perform a preliminary consolidation assessment based on the Proposals received. The Company reserves the right to allow a Proposal to proceed through the evaluation process through selection of the Priority List and work with the Proposer on this issue prior to or during contract execution. The Company has determined that for purposes of FASB ASC 842, a generation plus BESS facility will be treated as two separate measurements of account. For accounting purposes, the BESS portion (if applicable) will be treated as a lease, while the generation facility will not. As a result, no lease evaluation will be completed as part of the Proposal evaluation.
6. **Community Outreach:** Gaining community support is an important part of a Project's viability and success. A comprehensive community outreach and communications plan ("Community Outreach Plan") is an essential roadmap that guides a developer as they work with various communities and stakeholders to gain their support for a Project. Proposers must include a Community Outreach Plan that describes the Proposer's commitment to work with the neighboring community and stakeholders and to provide them timely Project information during all phases of the Project. The Community Outreach Plan shall include, but not be limited to, the following information: Project description, community scoping (including stakeholders and community concerns), Project benefits, government approvals, development process (including Project schedule), a comprehensive communications plan, and outreach experience.
7. **Cultural Resource Impacts:** Proposers need to be mindful of the Project's potential impacts to historical and cultural resources. Proposers must identify: (1) valued cultural, historical, or natural resources in the area in question, including the extent to which traditional and customary native Hawaiian rights are exercised in the area; (2) the extent to which those resources – including traditional and customary native Hawaiian rights – will be affected or impaired by the proposed action; and (3) the feasible action, if any, to be taken to reasonably protect any identified cultural, historical, or natural resources in the area in question, and the

reasonable protection of traditional and customary native Hawaiian rights in the affected area. Also, Proposers must have already contracted with a consultant with expertise in this field to begin a cultural impact plan for the Project.

#### 4.4 Initial Evaluation – Price and Non-Price Analysis

Proposals that meet both the Eligibility and Threshold Requirements are Eligible Proposals which will then be subject to a price and non-price assessment. Two teams have been established to undertake the Proposal evaluation process: a Price Evaluation Team and Non-Price Evaluation Team. The results of the price and non-price analysis will be a relative ranking and scoring of all Eligible Proposals. Price-related criteria will account for sixty percent (60%) of the total score and non-price-related criteria will account for forty percent (40%) of the total score. The non-price criteria and methodology for applying the criteria are explained in Section 4.4.2.

The Company will employ a closed-bidding process for this solicitation in accordance with Part IV.H.3 of the Framework where the price and non-price evaluation models to be used will not be provided to Proposers. However, the Company will provide the Independent Observer with all necessary information to allow the Independent Observer to understand the evaluation models and to enable the Independent Observer to observe the entire analysis to ensure a fair process.

##### 4.4.1 Initial Evaluation of the Price Related Criteria

For the initial price analysis, a total of 600 points will be awarded. Price related criteria will be based on the GCOD and an equivalent levelized program capacity. An equivalent Levelized Program Capacity Price (\$/MW) will be calculated for each Proposal based on information provided in the Proposal including the Lump Sum Payment (\$/year) and the net nameplate capacity of the Facility (MW) information defined in Section 3.9 of this RFP, and Section 2.0 of Appendix B of this RFP, respectively.

The eligible Proposal with the earliest GCOD will receive 50 points. All other eligible Proposals in that evaluation category will receive points of a proportionate reduction based on the difference between the earliest GCOD and latest acceptable GCOD (August 31, 2026) rounded by months. For example, if the earliest GCOD is March 1, 2024, that Proposal will receive 50 points. The total months between the earliest GCOD and latest acceptable GCOD then becomes 30 months. If another Proposal has a GCOD date of November 1, 2024, it is 9 months later than the earliest GCOD and will then receive  $50 \times (1 - (9/30)) = 35$  points.

The eligible Proposal with the lowest Levelized Program Capacity Price category will receive 550 points. All other eligible Proposals in that evaluation category will receive points based on a proportionate reduction using the percentage by which the Eligible Proposal's Levelized Program Capacity Price exceeds the lowest Levelized Program Capacity Price. For example, if a Proposal's Levelized Program Capacity Price is ten percent (10%) higher than the lowest Levelized Program Capacity Price, the Proposal

will be awarded 495 points (that is, 550 points less 10%). The result of this assessment will be a ranking and scoring of each Proposal (including variations).

#### 4.4.2 Initial Evaluation of the Non-Price Related Criteria

For the non-price analysis, each Proposal will be evaluated on each of the non-price criteria categories set forth below:

1. Community Outreach
2. State of Project Development and Schedule
3. Performance Standards
4. Locational Value for Community Resilience
5. Commitment to Residential Subscriber Participation
6. CBRE Program
7. Environmental Compliance and Permitting Plan
8. Experience and Qualifications
9. Financial Strength and Financing Plan
10. RESERVED
11. Guaranteed Commercial Operations Date
12. Cultural Resource Impacts

Each of the first six criteria – Community Outreach, State of Project Development and Schedule, Performance Standards, Locational Value for Community Resilience, Commitment to Residential Subscriber Participation, and CBRE Program – will be weighted twice as heavily as the others to reflect the impact these categories have to achieve a successful and timely procurement. The non-price criteria are generally scored on a scale of 1 (poor) to 5 (highly preferable). A score of 3 means that a Proposal meets the minimum standard for that criteria.

The total non-price score will be the sum of the scores for each of the individual non-price criteria. The Company will then award non-price evaluation points in accordance with the relative ranking of scores. The Proposal with the highest total non-price score will receive 400 points, and all other Proposals will receive points equal to the Proposal's score divided by the top score, multiplied by 400.

During the non-price criteria evaluation, a fatal flaws analysis will also be conducted such that any Proposal that does not meet the minimum standards level of at least five (5) non-price criteria will be disqualified given that the Proposal has failed to meet the required number of non-price factors that are indicative as to the general feasibility and operational viability of a proposed Project. Non-price criteria numbers 4, 5 and 11 above will be excluded from the fatal flaws analysis.

The Company's evaluation of the non-price criteria will be based on the materials provided by a Proposer in its Proposal. Acceptance of any Proposal into the Final Award Group shall not be assumed or construed to be an endorsement or approval that the materials provided by Proposer are complete, accurate or in compliance with applicable law. The Company assumes no obligation to correct, confirm, or further research any of

the materials submitted by Proposers. Proposers retain sole responsibility to ensure their Proposals are accurate and in compliance with all laws.

The non-price criteria are:

1. **Community Outreach** – Gaining community support is an important part of a Project’s viability and success. An effective Community Outreach Plan will call for early meaningful communications with stakeholders and will reflect a deep understanding and respect for the community’s desire for information to enable them to make informed decisions about future projects in their communities. Therefore, Proposals will be evaluated on the quality of the Community Outreach Plan to inform the Project’s impacted communities.

Proposals should include a Community Outreach Plan that describes the Proposer’s commitment to work with the neighboring community and stakeholders and to provide timely Project information during Project development, construction and operation. The Community Outreach Plan shall include, but not be limited to the following:

- 1) Project description. A thorough description including a map of the location of the Project. This information will help the community understand the impact that the Project may have on the community.
- 2) Community scoping. Identify stakeholders (individuals, community leaders, organizations), community issues and concerns, and community sentiment.
- 3) Project benefits. An explanation of the need for the Project, and, if available, a description of any community benefits outside the provision of renewable energy, such as a plan to support local economic development through local workforce development and ownership strategies. This will help the community to understand how the Project might benefit their community.
- 4) Government approvals. Required government permits and approvals, public hearings and other opportunities for public comment. This information will help the community to understand the level of public scrutiny and participation that might occur for the Project and the opportunities to provide public comments.
- 5) Development process. A Project schedule that identifies key milestones will facilitate the community’s understanding of the development process.
- 6) Communications Plan. A communications plan including a detailed community outreach schedule that will keep the affected communities and stakeholders informed about the Project’s outreach efforts during early Project development period through construction and operations.
- 7) Outreach experience. If available, the Proposer should include past community engagement, support, and outreach of the proposed Project or other similar renewable energy projects, which could be demonstrated through letters of community support, number of interactive community meetings and number of participatory hours from community members.

Preference will be given to Proposers who have already identified established contacts to work with the local community, have used community input to incorporate changes to the final design of the Project and mitigate community concerns, have proposed a community benefits package (including details of the community recipients and benefits package), or have community consultants as part of the Project team doing business in Hawai‘i that have successfully worked with communities in Hawai‘i on the development of two or more energy projects or projects with similar community issues. These criteria are aligned with the Company’s community engagement expectation whereby all developers will be required to engage in community outreach prior to signing a PPA with the Company. This process is also outlined in RFP Section 5.3. Further information and instructions regarding expectations for the Community Outreach Plan are included as Attachment 4 and 5 to Appendix B.

2. **State of Project Development and Schedule** – Projects that are further along in development generally have lower project execution risk and a greater probability of being able to be successfully placed into service prior to the GCOD (specifically identified in each Proposal). At a minimum, Projects should demonstrate how they plan to capture any ITC safe harbor and reach their GCOD specified, including identification of risks and schedule assumptions. (Schedules must identify the IRS completion date and PUC approval dates assumed.) Proposals should also demonstrate, via a detailed critical path schedule, that there is a high likelihood that the Project will be able to reach commercial operations as specified. Proposals shall include a Gantt chart that clearly illustrates the overall schedule and demonstrates achievement of any ITC safe harbor, if applicable, and commercial operations by their specified GCOD. The Gantt chart shall include task durations and dependencies, identify tasks that will be fast tracked, and identifies slack time and contingencies. This criterion will also look at the high-level Project costs set forth in the Proposal including: costs for equipment, construction, engineering, Seller-Owned Interconnection Facilities, Company-Owned Interconnection Facilities, land, annual O&M, the reasonableness of such costs and the assumptions used for such costs. Project costs that do not appear reasonable for a project of the size proposed may result in a lower ranking for this criterion if the Company reasonably determines that the cost information is unrealistic based on prior experience in the market which may result in a risk that the Project can be built on time and for the price proposed by the Proposer. The Company reserves the right to discuss any cost and financial information with a Proposer to ensure the information provided is accurate and correct.
3. **Performance Standards** – The proposed Facility must be able to meet the performance attributes identified in this RFP and the Performance Standards identified in the Mid-Tier SFC. The Company will review the Proposal information received, including design documents and operating procedures materials provided in the Proposal, and evaluate whether the Project as designed is able to meet the Performance Standards identified in the Mid-Tier SFC and in this RFP. At a minimum, in addition to meeting the Performance Standards, the

Proposal should include sufficient documentation, provided in an organized manner, to support the stated claim that the Facility will be able to meet the Performance Standards. The Proposal should include information required to make such a determination in an organized manner to ensure this evaluation can be completed on a timely basis. Preference will be given to Proposals that provide detailed technical and design information showing how each standard can be met by the proposed Facility. Preference will also be provided on facilities that offer additional capabilities (e.g., black-start, grid-forming).

4. **Locational Value for Community Resilience** – The Company has identified that CBRE projects have the potential to support community resilience. For Projects to support community resilience, a BESS with grid-forming and black start capability is needed. Proposals should provide a description of the critical infrastructure or community resilience hubs in proximate location to the proposed Project site that could benefit from the islanding capabilities of the proposed Project.
5. **Commitment to Residential Subscriber Participation** – Proposals will be evaluated on the stated commitments of the Project’s Subscriber Organization to residential Subscribers. At a minimum, Subscriber Organizations will be required to set aside 40% of the Project’s capacity for residential Subscribers. Proposers that commit to reserving a portion larger than 40% of their Project capacity for residential Subscribers will be given more favorable scoring. In addition, Proposals will also be evaluated on the stated commitments of the Project’s Subscriber Organization to LMI Customers. Proposers that commit to reserving a portion of the Project’s capacity for LMI Customers will be given more favorable scoring.
6. **CBRE Program** – Proposals will be evaluated on several facets of the CBRE program being proposed.
  - 1) **Program Offering:** Proposals will be evaluated to give preference to program offerings that provide the most benefits to residential and LMI Customers, as applicable. Financing options, upfront fees, payment over time, public funding options, and other creative approaches will be preferred along with programs that offer higher expected customer level savings, favorable payback periods and mechanisms, and other customer benefits. In addition, Proposals shall describe the extent to which residential Subscribers will be financially responsible for the Facility’s underperformance.
  - 2) **Marketing and Outreach Plans:** Proposals will be evaluated on the proposed strategies and methods to educate, inform, and stimulate the market in order to achieve their target levels of participation.

- 3) **Program Experience:** Proposals will also be evaluated on Proposers documented success in reaching and retaining participation of residential and LMI Customers, as applicable, in other community-based renewable energy programs.
7. **Environmental Compliance and Permitting Plan** – This criterion relates to the potential (short- and long-term) environmental impacts associated with each project, the quality of the plan offered by the Proposer to mitigate and manage any environmental impacts (including any pre-existing environmental conditions), and the plan of Proposers to remain in environmental compliance over the term of the contract. These impacts are reflected on a technology-specific basis. Completing any necessary environmental review and obtaining the required permitting in a timely manner is also important and Proposals will be evaluated on their plan to identify, apply for, and secure the required permits for the Project, any permitting activity that has been completed to date, including having initial discussions with the applicable regulating agencies such as U.S. Fish and Wildlife and the State of Hawai‘i Department of Land and Natural Resources’ Division of Forestry and Wildlife, prior to submitting a Proposal, and the degree of certainty offered by the Proposer in securing the necessary permits.

At a minimum, proposed Projects should be expected to have minimal environmental impact for most areas and Proposals should provide a comprehensive plan to mitigate the identified potential or actual significant environmental impacts to remain in environmental compliance. The proposed mitigation plans should be included in the Project timeline. Preference will be given to Proposals that provide a more detailed plan as well as those that have proactively taken steps to mitigate potential environmental impacts.

Also, this criterion requires that, at a minimum, Proposers should have identified, and disclosed in their Proposal(s) all major permits, approvals, appurtenances and entitlements (including applicable access, rights of way and/or easements) (collectively, the “permits”) required and have a preliminary plan for securing such permits. Preference will be given to Proposals that are able to provide a greater degree of certainty that its plan to secure the required permits is realistic and achievable, or have already received all or a majority of the required permits. The Proposer should disclose all identified (a) discretionary permits required, i.e., those requiring public or contested case hearings and/or review and discretionary approval by an appropriate government agency and (b) ministerial conditions without discretionary approval conditions. In all cases, the Proposer must provide a credible and viable plan to secure all necessary and appropriate permits necessary for the project. For example, if the project is located within an agricultural district, the Proposer shall provide evidence of Proposer’s verification with the appropriate government agency that the project complies with HRS Section 205-2 and Section 205-4.5, relating to solar energy facilities placed on agricultural land, provided, however that where a special use permit (under Section 205-6), exemption (under Section 205-6), or amendment to land use district boundary lines (under Section 205-4) is required to secure such compliance, Proposer shall identify the need for such permit, exemption or

amendment and provide a list of required prerequisites and/or conditions and a realistic timeline necessary to obtain such permit, exemption or amendment satisfactory for Proposer to still meet its designated Guaranteed Commercial Operations Date.

8. **Experience and Qualifications** – Proposals will be evaluated based on the experience of the Proposer in financing, designing, constructing, interconnecting, owning, operating, and maintaining projects (including all components of the project) of similar size, scope and technology. At a minimum, Proposals must show via the table format specified in RFP Appendix B Section 2.13 that at least one (1) member must have specific experience in each of the following categories: financing, designing, constructing, interconnecting, owning, operating, and maintaining at least one electricity generation project including all components of the project similar to the Project being proposed. Preference will be given to Proposers with experience in successfully developing multiple projects that are similar to the one being proposed and/or that have prior experience successfully developing and interconnecting a utility scale project to the Company's System.
9. **Financial Strength and Financing Plan** – This criterion addresses the comprehensiveness and reasonableness of the financial plan for the Project as well as assesses the financial strength and capability of the Proposer to develop the Project. A complete financial plan addresses the following issues: Project ownership, capital cost and capital structure, sources of debt and equity, and evidence that credit-worthy entities are interested in financing the Project. The financial strength of Proposers or their credit support providers will be considered, including their credit ratings. The financing participants are expected to be reasonably strong financially. Developers and their sources of capital that have investment grade credit ratings from a reputable credit rating agency (S&P, Moody's, Fitch) will also be given preference, with those that have higher credit ratings ranked higher.
10. RESERVED
11. **Guaranteed Commercial Operations Date** – Proposers that are able to design for and commit to an earlier GCOD will be given more favorable scoring. Proposers will be held to the GCOD identified in their Proposal. The GCOD will be a Guaranteed Milestone and will be inserted without amendment into the Mid-Tier SFC, as applicable.
12. **Cultural Resource Impacts** – Proposers need to be mindful of the Project's potential impacts to historical and cultural resources. Proposers should have identified (1) valued cultural, historical, or natural resources in the area in question, including the extent to which traditional and customary native Hawaiian rights are exercised in the area; (2) the extent to which those resources – including traditional and customary native Hawaiian rights – will be affected or impaired by



the proposed action; and (3) the feasible action, if any, to be taken to reasonably protect any identified cultural, historical, or natural resources in the area in question, and the reasonable protection of traditional and customary native Hawaiian rights in the affected area.

Also, Proposers should have already contracted with a consultant with expertise in this field to begin a cultural impact plan for the Project. Proposals will be evaluated on the commitment to addressing cultural resource impacts on their Project, if any. Therefore, in order to be evaluated for this criterion, Proposers should, at least, provide the following documentation, as applicable: (1) Proposer's or its consultant's experience with cultural resource impacts on past projects; (2) the status of their cultural impact plan. Proposals will be evaluated on the extent to which their cultural impact plan has been developed, and preference will be given to Proposals that are further along in the process, including but not limited to, whether a mitigation/action plan has been provided that addresses any identified cultural resource issues, or a date for when such a plan will be available has been identified, or any portions of such plan have been completed.

#### **4.5 Selection of a Priority List**

At the conclusion of both the price and non-price analysis, a total score will be calculated for each Proposal using the 60% price-related criteria / 40% non-price-related criteria weighting outlined above. The price and non-price analysis, and the summation of both price and non-price scores described above, will result in a ranking of Proposals.

The Company will determine a Priority List from the highest scoring Proposals. The Company will develop the Priority Lists in consultation with the Independent Observer. The Company reserves the right, in consultation with the Independent Observer, to limit the projects allowed for further consideration in the initial evaluation; for example, to projects that fall within 15% of the highest Levelized Project Capacity Price. Selection to the Priority List does not assure an eligible Project's inclusion in the selection of the Final Award Group.

#### **4.6 Best and Final Offer (BAFO)**

4.6.1 The Company will solicit a Best and Final Offer from Proposers selected to the Priority List. Proposers selected to the Priority List will have the opportunity to update (downward only)<sup>13</sup> the pricing elements in their Proposal in order to improve the competitiveness of their Proposal prior to being further assessed in the Detailed Evaluation phase. At this point in the process, updates may only be made to the following pricing element:

- Lump Sum Payment (\$/year) amount

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<sup>13</sup> Proposers will only be allowed to adjust pricing elements downward. No upward adjustment to the pricing elements will be permitted or considered. All other characteristics of the Proposal and Facility capabilities must remain valid and unchanged (e.g., NEP, GCOD, etc.)

Proposers will not be allowed to increase their price<sup>14</sup> but may elect to maintain the same pricing submitted in their original Proposal. Proposers will not be allowed to make any other changes to their Proposal during the Best and Final Offer.

- 4.6.2 If a Proposer does not propose improvements to their pricing elements during the Best and Final Offer solicitation, the original Proposal pricing elements will be deemed its Best and Final Offer.<sup>15</sup>

#### 4.7 Detailed Evaluation

The Best and Final Offers of the Priority List Proposals will be further assessed in the Detailed Evaluation to identify the Proposals selected to the Final Award Group.

The detailed evaluation process will consist of assessment of combinations of Proposals from the Priority List. Using the forecast and planning assumptions developed for the Company's Integrated Grid Planning process in Docket No. 2019-0165 submitted on August 3, 2021, a capacity expansion model will be used to determine a simplified proxy of benefits and value of proposals of the CBRE portfolio based on the process utilized in the DER docket, (Docket No. 2019-0323) (i.e., a resource plan with and without the CBRE portfolio). Proposals will be compared to this proxy value to determine if the proposed projects will provide cost effective value to customers.

Due to computational limitations, all Proposals from a Priority List may not be evaluated simultaneously. The ranking developed in the Initial Evaluation can be used to screen the Proposals in the Detailed Evaluation to those that provide the highest potential benefit to the system.

The proxy evaluation will evaluate the benefits and costs of integrating the CBRE portfolio onto the Company's System which includes:

1. The cost to dispatch the CBRE RFP portfolio and the energy under the Mid-Tier SFC;
2. The fuel cost savings (benefits) and any other direct savings (Subscriber Organization savings from dispatchable fossil fuel savings, where applicable) resulting from the displacement of generation, including consideration of round-trip efficiencies for facilities with a BESS; and
3. The estimated increase (or decrease) in operating cost, if any, incurred by the Company to maintain system reliability; and
4. The cost of imputed debt, if applicable.

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<sup>14</sup> Proposers will not be allowed to increase the pricing in their Proposals to address interconnection and/or system upgrade costs or for any other reason.

<sup>15</sup> The Company reserves the right, in consultation with the Independent Observer, to adjust the parameters of the BAFO, in the unlikely event that system needs have evolved in a way that the Proposals received do not fully address.

As noted, if applicable, the Company will take into account the cost of rebalancing its capital structure resulting from any debt or imputed debt impacts associated with each Proposal (including any costs to be incurred by the Company, as described above, that are necessary in implementing the Proposal). The Company proposes to use the imputed debt methodology published by S&P that is applicable to the Proposal being evaluated. S&P views long-term PPAs as creating fixed, debt-like financial obligations that represent substitutes for debt-financed capital investments in generation capacity. By adjusting financial measures to incorporate PPA-fixed obligations, greater comparability of utilities that finance and build generation capacity and those that purchase capacity to satisfy new load are achieved.

During the Detailed Evaluation and before the Proposals advance to the Final Award Group, the Company will perform load flow analyses to determine if certain Projects or combinations of Projects introduce circuit constraints that will factor into the selection process. This is to address the possibility that even though sufficient line capacity was identified for an individual Project, Projects that are in close proximity with each other could introduce additional circuit constraints. The Projects selected must not have any additional constraints imposed based on the Load Flow Analysis to advance to the Final Award Group. However, the Company reserves the right, in consultation with the Independent Observer, to allow minor modifications (i.e., downsize project) to a Proposal to avoid such additional constraints. If such modification resulted in a reduced size of the Facility, the pricing proposed would also need to be revised. Under no circumstances would a Proposer be allowed to increase their price as a result of such minor modification.

Also, in the Detailed Evaluation, other factors will be validated to ensure that the final combination of Projects provides the contemplated benefits that the Company seeks. The Company will consider the implementation of a combination of Projects, including consideration of the geographic diversity, program implementation, resource diversity, interconnection complexity, and flexibility and latitude of operation control of the Projects.

The Company may complete additional analyses of Projects, in consultation with the Independent Observer, if the time and capability exist to perform such analyses.

Projects interconnecting to distribution circuits may be subject to the Technical Review process of Rule 14H. The Company may consider a Project's performance through this process in the Detailed Evaluation.

#### **4.8 Selection of the Final Award Group**

Based on the results of the Detailed Evaluation and review of the results with the Independent Observer, the Company will select a Final Award Group. Mid-Tier Projects selected to the Final Award Group will execute a Mid-Tier SFC with the Company in the form of Appendix K. All Proposers will be notified at this stage of the evaluation process whether their Proposal is included in the Final Award Group.

Selection to the Final Award Group does not guarantee execution of a Mid-Tier SFC.

Further, if at any time during the evaluation process it is discovered that a Proposer's Proposal contains incorrect or misrepresented information that has a material effect on any of the evaluation processes, including selection of the Priority List or the Final Award Group, the Company reserves the right, in consultation with the Independent Observer, to disqualify the Proposer from the RFP.

Following any removal of a proposal from the Final Award Group, either by disqualification noted immediately above, or via any other removal or withdrawal of a proposal, including failure to reach agreement to the Mid-Tier SFC, the Company, taking into consideration the timing of such removal and the current status of the Company's needs under the RFP, in consultation with and concurrence from the Independent Observer, will review the Priority List to determine (1) if another proposal should be added to the Final Award Group; or (2) if the remaining proposals in the Final Award Group should remain unchanged.

## **Chapter 5: Post Evaluation Process**

### **5.1 Project Interconnection Process**

#### **5.1.1 Interconnection Modeling Process**

A summary of the model requirements and impact study scope can be found in Appendix B, Attachment 6.

For Projects that are exactly 250 kW, a complete package of Project Interconnection Data Request worksheets, Project three line diagram(s), and an equipment list must be provided within 30 days after selection to the Final Award Group. If requested by the Company, models for equipment and controls (see Appendix B, Attachments 3 and 6), list(s) to clearly identify the components and respective files (for inverters and power plant controller), and complete documentation with instructions must also be submitted within 30 days after selection to the Final Award Group (see Section 2.11 of Appendix B). In addition, updated single line diagram(s) shall be submitted within 30 days after selection to the Final Award Group.

For all Projects greater than 250 kW in size (regardless of whether an IRS is required), Project three line diagram(s), models for equipment and controls (see Appendix B, Attachments 3 and 6), list(s) to clearly identify the components and respective files (for inverters and power plant controller), and complete documentation with instructions shall be submitted for each Proposal within 30 days after selection to the Final Award Group (see Section 2.11 of Appendix B). In addition, updated Project Interconnection Data Request worksheets and single line diagram(s) shall be submitted within 30 days after selection to the Final Award Group.

Preparation of the models, documentation, and related information, and may take longer than 30 days, and Proposers shall allow adequate time for this submittal requirement.

If required for the project (see Appendix B, Attachment 6), PSSE Generic models, PSSE User models, and ASPEN models shall be configured to represent all of the functional equipment with settings in place to comply with the Company's performance requirements. These must be checked for functionality by the Proposer or its vendors and consultants prior to submission to the Company. Similarly, fully accurate PSCAD models shall be submitted in a condition that complies with the PSCAD modeling guidelines provided by the Company. Overlaid validation plots of PSSE Generic models, PSSE User models, and PSCAD models shall be submitted as described in the Project Interconnection Data Request worksheets to ensure compatible responses from each model.

If the Company determines that an IRS is not required, the Company will provide an Interconnection Modeling Letter Agreement for each selected Project, with a statement of required deposit for individual work for: (a) a technical model checkout for each project, and (b) any considerations that are specific to a particular project and location. After proposals and models are submitted, the Company will inspect the data packages for general completeness. For any incomplete submissions, a list of missing or non-functional items will be provided. Proposers will be given 15 Days to resolve data and modeling deficiencies. The Company, in consultation with the Independent Observer, may remove Proposals if their submission requirements are deemed incomplete for the lack of requested models and validation plots.

The technical model checkouts will be conducted first. Upon identification of any functional problems or deficiencies, corrective action shall be taken immediately and on an interactive basis so that the problems or deficiencies can be resolved within 15 Days, including re-submission of data and updated models, or the Project shall be deemed withdrawn. At the discretion of the Company and provided that there is a demonstration of good faith action to minimize delay that would affect the schedule, a second round of model checkout and problem solving may proceed. Thereafter, any notice that a Project is deemed withdrawn for lack of completeness shall be final. Subject to consultation with the Independent Observer, failure to provide all requested material within the time(s) specified, or changes to the data provided after the due date(s), shall result in elimination from consideration.

#### 5.1.2 Interconnection Requirements Study Process

The Detailed Evaluation process or Appendix III of Rule 14H shall determine the need for an IRS. Upon notification of selection to the Final Award Group, and subject to Rule 14H, the Company will provide an IRS Letter Agreement (in lieu of an Interconnection Modeling Letter Agreement) for each selected project, with a statement of required deposit for individual and prorated work as part of an IRS Scope for: (1) a System Impact Study that will involve (a) technical model checkout for each project, (b) any considerations that are specific to a particular project and location, and (c) system impact analyses of the projects as a group; and (2) a Facility Study that includes the Interconnection cost and schedule, including cost of any required system upgrades. After proposals and models are submitted, the Company will inspect the data packages for general completeness. For any incomplete submissions, a list of missing or non-

functional items will be provided. Proposers will be given 15 Days to resolve data and modeling deficiencies. The Company, in consultation with the Independent Observer, may remove Proposals if their submission requirements are deemed incomplete for the lack of requested models and validation plots.

The technical model checkouts will be conducted first. Upon identification of any functional problems or deficiencies, corrective action shall be taken immediately and on an interactive basis so that the problems or deficiencies can be resolved within 15 Days, including re-submission of data and updated models, or the Project shall be deemed withdrawn. At the discretion of the Company and provided that there is a demonstration of good faith action to minimize delay that would affect the schedule, a second round of model checkout and problem solving may proceed. Thereafter, any notice that a Project is deemed withdrawn for lack of completeness shall be final. Subject to consultation with the Independent Observer, failure to provide all requested material within the time(s) specified, or changes to the data provided after the due date(s), shall result in elimination from consideration.

Proposers shall be responsible for the cost of the IRS, under separate agreements for the System Impact Study and the Facility Study. The overall IRS will provide information including, but not limited to, an estimated cost and schedule for the required Interconnection Facilities for a particular Project and any required mitigation measures. Proposers will be responsible for the actual final costs of all Seller-Owned Interconnection Facilities and Company-Owned Interconnection Facilities. Upon reviewing the results of the IRS, Detailed Evaluation or Technical Review process, if required, pursuant to Rule 14H, Appendix III, Proposers will have the opportunity to declare the Mid-Tier SFC null and void in the event that the estimated interconnection costs and schedule for the Project are higher than what was estimated in the Project Proposal.

## **5.2 Contract Execution Process**

Within five (5) business days of being notified by the Company of its intent to execute a Mid-Tier SFC, Proposers selected for the Final Award Group will be required to indicate, in writing to the Company's primary contact for this RFP, whether they intend to proceed with their Proposals. Proposers who elect to remain in the Final Award Group will be required to keep their Proposal valid through the award period.

The Company intends to execute the Mid-Tier SFC and later amend the Mid-Tier SFC to include the results of the IRS.

## **5.3 Community Outreach and Engagement**

The public meeting and comment solicitation process described in this section and Section 28 of the Mid-Tier SFC (Community Outreach) do not represent the only community outreach and engagement activities that can or should be performed by a Proposer.

The Company will publicly announce the Final Award Group no more than five (5) business days after the notification is given to Proposers who are selected to the Final Award Group. Selected Proposers shall not disclose their selection to the public before the Company publicly announces the Final Award Group selection.

On the next business day after the Company notifies a Proposer they were selected, each Proposer shall provide the Company with links to their Project website, which the Company will post on the Company's website. Each Proposer will launch a Project website that will go-live on the day the Company publicly announces the Final Award Group selection. Information on what should be included on the Project website is identified in Appendix B.

Within five (5) business days of notification of selection to the Final Award Group, Proposers must provide the Company with an updated comprehensive Community Outreach Plan to work with and inform neighboring communities and stakeholders and to provide them timely information during all phases of the Project. The Community Outreach Plan shall include but not be limited to the following information: Project description, Project stakeholders, community concerns and Proposer's efforts to address such concerns, Project benefits, government approvals, Project schedule, and a comprehensive communications plan. The Proposer's Community Outreach Plan shall be a public document identified on the Proposer's Project website for the term of the Mid-Tier SFC and made available to the public upon request. As an option, Proposers may provide their updated Community Outreach Plan and website information to the Company for review and feedback. If provided at least 30 days prior to the dates required, the Company will endeavor to review such information and provide feedback on the information before it is made available to the public. Details on the Community Outreach Plan can be found in Appendix B, Attachments 4 and 5.

Prior to the execution date of the Mid-Tier SFC, Proposers shall also host a public meeting in the community where the proposed Project is to be located for community and neighborhood groups in and around the vicinity of the Project Site that provided the neighboring community, stakeholders and the general public with: (i) a reasonable opportunity to learn about the proposed Project, and (ii) an opportunity to engage in a dialogue about concerns, mitigation measures, and potential community benefits of the proposed Project. The Proposer shall collect all public comments, and then provide the Company copies of all comments received in their original, unedited form. Proposers shall notify the public at least three weeks in advance of the meeting. The Company shall be informed of the meeting. The Company has provided Proposers with detailed instructions regarding the community meeting requirement after the selection of the Final Award Group (Attachment 4 to Appendix B). (For example, notice will be published in county and regional newspapers/media, as well as media with statewide distribution. The Proposer will be directed to notify certain individuals and organizations. The Proposer will be provided templates to use for the public meeting notices, agenda, and presentation.) Proposers must also comply with any other requirement set forth in the Mid-Tier SFC relating to Community Outreach.

The Proposer shall be responsible for community outreach and engagement for the Project, and that the public meeting and comment solicitation process described in this section do not represent the only community outreach and engagement activities that can or should be performed.

**5.4 RESERVED**

**5.5 PUC Approval**

Selected Mid-Tier Projects will execute a Mid-Tier SFC with the Company which will not be subject to further regulatory review and approval.

**5.6 Facility In-Service**

In order to facilitate the timely commissioning of the projects selected through this RFP, the Company requires the following be included with the 60% design drawings: relay settings and protection coordination study, including fuse selection and ac/dc schematic trip scheme.

For the Company to test the Facility, coordination between the Company and Project is required. Drawings must be approved by the Company prior to testing. The entire Facility must be ready for testing to commence. Piecemeal testing will not be allowed. Communication infrastructure and equipment must be tested by the IPP and ready for operation prior to Company testing.

If approved drawings are not available, or if the Facility is otherwise not test ready as scheduled, the Project may lose its place in the queue, with the Company retaining the flexibility to adjust scheduling as it sees fit. If tests are not completed within the allotted scheduled testing time, the Project will be moved to the end of the Company's testing queue. The IPP will be allowed to cure if successful testing is completed within the allotted scheduled time. No adjustments will be made to the Mid-Tier SFC milestones if tests are not completed within the original allotted time. Liquidated damages for missed milestones will be assessed pursuant to the Mid-Tier SFC.



**DRAFT**  
**REQUEST FOR PROPOSALS**  
**FOR**  
**COMMUNITY-BASED RENEWABLE ENERGY PROJECTS**

**ISLAND OF MOLOKA‘I**

NOVEMBER 4, 2021

Docket No. 2015-0389

*Appendix A – Definitions*



**Maui  
Electric**

“Affiliate” means any person or entity that possesses an “affiliated interest” in a utility as defined by section 269-19.5, Hawai‘i Revised Statutes (“HRS”), including a utility’s parent holding company but excluding a utility’s subsidiary or parent which is also a regulated utility.

“Allowed Capacity” has the meaning set forth in the Mid-Tier SFC.

“Battery Energy Storage System” or “BESS” has the meaning set forth in the Mid-Tier SFC.

"BESS Contract Capacity" has the meaning set forth in the Mid-Tier SFC.

“Best and Final Offer” or “BAFO” means the final offer from a Proposer, as further described in Section 4.6 and elsewhere in this RFP.

“CBRE NDA” means the Mutual Confidentiality and Non-Disclosure Agreement attached to this RFP as Appendix E.

“Code of Conduct” means the code of conduct approved by the PUC in Docket No. 03-0372 (Decision and Order No. 23614, August 28, 2007) with respect to a Self-Build Option. An updated code of conduct was submitted to the PUC in Docket No. 2015-0389 on July 9, 2020.

“Code of Conduct Procedures Manual” or “Procedures Manual” means the manual approved by the PUC, which was put in place to address and to safeguard against preferential treatment or preferential access to information in a Hawaiian Electric, Maui Electric, or Hawai‘i Electric Light RFP process. The Procedures Manual is attached as Appendix C to this RFP.

“Commercial Operations” has the meaning set forth in the Mid-Tier SFC.

“Community Outreach Plan” is a community outreach and communication plan described in Section 4.3 and 4.4.2 of this RFP.

“Company” means Maui Electric Company, Ltd., a Hawai‘i corporation.

“Company-Owned Interconnection Facilities” has the meaning set forth in Section 1.A of Attachment G of the Mid-Tier SFC.

“Competitive Bidding Framework” or “Framework” means the Framework for Competitive Bidding contained in Decision and Order No. 23121 issued by the Public Utilities Commission on December 8, 2006, and any subsequent orders providing for modifications from those set forth in Order No. 23121 issued December 8, 2006.

“Consumer Advocate” means the Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs of the State of Hawai‘i.

“Day” means a calendar day, unless the term “business day” is used, which means calendar day excluding weekends and federal and State of Hawai‘i holidays.

“Development Period Security” has the meaning set forth in Section 14.2 of the Mid-Tier SFC.

“Dispatchable” means the ability to turn on or turn off a generating resource at the request of the utility’s system operators, or the ability to increase or decrease the output of a generating resource from moment to moment in response to signals from a utility’s Automatic Generation Control System, Energy Management System or similar control system, or at the request of the utility’s system operators.

“Electronic Procurement Platform” means the third-party web-based sourcing platform that will be used for the intake of Proposals and associated electronic information, storage and handling of Proposer information, and communication.

“Eligibility Requirements” has the meaning set forth in Section 4.2 of this RFP.

“Eligible Proposals” means Proposals that meet both the Eligibility and Threshold Requirements.

“Energy Contract Manager” is the primary Company contact for this RFP.

“Evaluation Team” means agents of the Company who evaluate Proposals.

“Facility” has the meaning set forth in the Mid-Tier SFC.

“Facility Study” means a study to develop the interconnection facilities cost and schedule estimate including the cost associated with the design and construction of the Company-owned interconnection facilities.

“Final Award Group” means the group of Proposers selected by the Company from the Priority List, with which the Company will begin contract negotiations, based on the results of the Company’s detailed evaluation.

“Greenhouse Gas” or “GHG” are gases that contribute to the greenhouse gas effect and trap heat in the atmosphere.

“Guaranteed Commercial Operations Date” or “GCOD” means the date by which the Proposer guarantees that the Facility will first achieve Commercial Operations.

“Hawaiian Electric” means Hawaiian Electric Company, Inc., a Hawai‘i corporation.

“Hawaiian Electric Companies” or “Companies” means Hawaiian Electric Company, Inc. and its subsidiaries, Hawai‘i Electric Light Company, Inc. and Maui Electric Company, Limited.

“HRS” means the Hawai‘i Revised Statutes as of the date of this Request for Proposals.

“Imputed Debt” means adjustments to the debt amounts reported on financial statements prepared under generally accepted accounting principles (“GAAP”). Certain obligations do not meet the GAAP criteria of “debt” but have debt-like characteristics; therefore, credit rating agencies “impute debt and interest” in evaluating the financial ratios of a company.

“Independent Observer” has the meaning set forth in Section 1.4 of this RFP.

“Independent Power Producer” or “IPP” means an entity that owns or operates an electricity generating facility that is not included in the Company’s rate base.

“Interconnection Facilities” means the equipment and devices required to permit a Facility to operate in parallel with, and deliver electric energy to, the Company System (in accordance with applicable provisions of the Commission’s General Order No. 7, Company tariffs, operational practices, interconnection requirements studies, and planning criteria), such as, but not limited to, transmission and distribution lines, transformers, switches, and circuit breakers. Interconnection Facilities includes Company-Owned Interconnection Facilities and Seller-Owned Interconnection Facilities.

“Interconnection Requirements Study” or “IRS” means a study, performed in accordance with the terms of the IRS Letter Agreement, to assess, among other things, (1) the system requirements and equipment requirements to interconnect the Facility with the Company System, (2) the Performance Standards of the Facility, and (3) an estimate of interconnection costs and project schedule for interconnection of the Facility.

“kV” means kilovolt.

“Land RFI” refers to a Request for Information activity conducted by the Company to identify interested parties willing to make land available for utility-scale renewable energy projects and gather relevant property information.

“Levelized Program Capacity Price” means a calculation (\$/MW) used for comparison of Proposals based on information provided in the Proposal submission in this RFP.

“Low- and Moderate-Income Customer” or “LMI Customer” is as defined in Tariff Rule No. 29 in Appendix J.

“Lump Sum Payment” has the meaning set forth in the Mid-Tier SFC Contract. It may also be referred to as a monthly Lump Sum Payment to reflect the portion of the payment made each month.

“Maui Electric” means Maui Electric Company, Ltd., a Hawai‘i corporation.

“Maui Electric System” or “System” means the electric system owned and operated by Maui Electric on the island of Moloka‘i (including any non-utility owned facilities) consisting of power plants, transmission and distribution lines, and related equipment for the production and delivery of electric power to the public.

“Maximum Rated Output” has the meaning set forth in the Mid-Tier SFC.

“Mediation” means the confidential mediation conducted in Honolulu, Hawai‘i, pursuant to and in accordance with the Mediation Rules, Procedures, and Protocols of Dispute Prevention Resolution, Inc. (or its successor) or, in its absence, the American Arbitration Association then in effect.

“Mid-Tier Project” means a project between 250 kW and 2.5 MW, inclusive.

“Mid-Tier Standard Form Contract” or “Mid-Tier SFC” means the pre-approved standard form contract that will be used for projects between 250 kW and 2.5 MW, inclusive, in the form of Appendix K of this RFP.

“MW” means megawatt.

“MWh” means megawatt hour.

“NEP” means Net Energy Potential.

“NEP RFP Projection” has the meaning set forth in the Mid-Tier SFC.

“Non-Price Evaluation Team” means Employees and consultants of the Company who evaluate the Proposal non-price related criteria as set forth in Section 4.4 of this RFP. Non-Price Evaluation Team members will not include any Shared Resources and will be solely made up of Company RFP Team Members.

“O&M” means operation and maintenance.

“Operating Period Security” has the meaning set forth in Section 14.4 of the Mid-Tier SFC.

“Paired Projects” means a Project proposed that incorporates both an energy generation component and an energy storage component as part of its Facility.

“Performance Standards” means the various performance standards for the operation of the Facility to the Company as set forth in Section 3 of Appendix B, as such standards may be revised from time to time pursuant to Article 23 of the Mid-Tier SFC, and as described in Chapter 2 of this RFP.

“Point of Interconnection” or “POI” has the meaning set forth in the Mid-Tier SFC.

“Power Purchase Agreement” or “PPA” means an agreement between an electric utility company and the developer of a renewable energy generation facility to sell the power generated by the facility to the electric utility company.

“Price Evaluation Team” means Employees and consultants of the Company who evaluate the Proposal price related criteria as set forth in Section 4.4 of this RFP. Price Evaluation Team members will not include any Shared Resources and will be solely made up of Company RFP Team Members.

“Priority List” means the group of Proposals selected by Maui Electric as described in Section 4.5 of this RFP.

“Project” means a Facility proposed to Maui Electric by a Proposer pursuant to this RFP.

“Proposal” means a proposal submitted to Maui Electric by a Proposer pursuant to this RFP.

“Proposal Due Date” means the date stated in RFP Schedule - Row 6 for the Self-Build Proposal and Row 7 for the IPP and Affiliate Proposal of this RFP.

“Proposal Fee” means the non-refundable fee for each proposal submitted as set forth in Section 1.8 of this RFP.

“Proposer” means a person or entity that submits a Proposal to Maui Electric pursuant to this RFP.

“Proposer’s Response Package” means the form in which the Proposal should be submitted, which is attached as Appendix B to this RFP.

“PUC” means the State of Hawai‘i Public Utilities Commission.

“Renewable Portfolio Standards” or “RPS” means the Hawai‘i law that mandates that the Company and its subsidiaries generate or purchase certain amounts of their net electricity sales over time from qualified renewable resources. The RPS requirements in Hawai‘i are currently codified in HRS §§ 269-91 through 269-95.

“Request for Proposals” or “RFP” means a request for Proposals issued pursuant to a competitive bidding process authorized, reviewed, and approved by the PUC.

“RFP Schedule” means the schedule set forth in Table 1, Section 3.1 of this RFP.

“Self-Build Option” or “SBO” means a Proposal submitted by the Company that is responsive to the resource need identified in the RFP, as required by Section VI of the Framework.

“Self-Build Team” means agents of the Company who develop Self-Build Option proposals.

“Seller” means the entity that the Company is contracting with, as set forth in the Mid-Tier SFC.

“Seller-Owned Interconnection Facilities” has the meaning set forth in the Mid-Tier SFC.

“Site” means the parcel of real property on which the Facility, or any portion thereof, will be constructed and located, together with any Land Rights reasonably necessary for the construction, ownership, operation and maintenance of the Facility.

“Site Control” has the meaning set forth in Section 4.3 of this RFP.

“Threshold Requirements” has the meaning set forth in Section 4.3 of this RFP.

Any capitalized term not defined in this RFP has the meaning set forth in the Mid-Tier SFC.

**DRAFT**  
**REQUEST FOR PROPOSALS**  
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**COMMUNITY-BASED RENEWABLE ENERGY PROJECTS**

**ISLAND OF MOLOKA‘I**

NOVEMBER 4, 2021

Docket No. 2015-0389

*Appendix B – Proposer’s Response Package /  
Project Interconnection Data Request*



**Maui  
Electric**

## 1.0 GENERAL INSTRUCTIONS TO PROPOSERS

Sourcing Intelligence®, developed by PowerAdvocate®, is the Electronic Procurement Platform that the Company has licensed and will utilize for the RFP process. All Proposals and all relevant information must be submitted via the Electronic Procurement Platform, in the manner described in this RFP.

Proposers must adhere to the response structure and file naming conventions identified in this Appendix for the Proposer's response package. Information submitted in the wrong location/section or submitted through communication means not specifically identified by the Company will not be considered by the Company.

Proposers must provide a response for every item. If input/submission items in the RFP are not applicable to a specific Proposer or Proposal variation, Proposers must clearly mark such items as "N/A" (Not Applicable) and provide a brief explanation.

Proposers must clearly identify all confidential information in their Proposals, as described in more detail in Section 3.12 Confidentiality of the RFP.

All information (including attachments) must be provided in English. All financial information must be provided in U.S. Dollars and using U.S. credit ratings.

It is the Proposer's sole responsibility to notify the Company of any conflicting requirements, ambiguities, omission of information, or the need for clarification prior to submitting a Proposal.

The RFP will be conducted as a "Sealed Bid" event within Sourcing Intelligence, meaning the Company will not be able to see or access any of the Proposer's submitted information until after the event closes.

### 1.1 ELECTRONIC PROCUREMENT PLATFORM

To access the RFP event, the Proposer must register as a "Supplier"<sup>1</sup> on Sourcing Intelligence (Electronic Procurement Platform). One Proposal may be submitted with each Supplier registration. Minor variations, as defined in Section 1.8.2 and 1.8.3 of this RFP may be submitted along with the Proposal under the same registration.

If a Proposer is already registered on Sourcing Intelligence, the Proposer may use their current login information to submit their first Proposal. Two variations of a Proposal, one variation of which is the base variation of the Proposal, may be submitted together as a Proposal by following the instructions outlined in this Appendix (see Section 4 below). If the Proposer chooses to submit more than one Proposal, the Proposer must register as a new "Supplier" on Sourcing Intelligence for each additional Proposal.

Each registration will require a unique username, unique Email address, and unique Company name. Proposers that require multiple registrations to submit multiple Proposals should use the Company name field to represent the Company name and Proposal number (ex: CompanyNameP1). Proposers may use shorthand or clear

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<sup>1</sup> The language in Appendix B sometimes refers to "Energy Contract Managers" as "Bid Event Coordinator" and to "Proposers" as "Suppliers" (Bid Event Coordinator and Supplier are terms used by PowerAdvocate).



abbreviations. The unique Email address used to create the PowerAdvocate account does not necessarily have to match the Email address specified in Section 2.2.1 below. For example, if the Proposer is submitting multiple Proposals, all of the Proposer's Proposals could specify the same primary point of contact Email address if that is what the Proposer requests contact through for all their proposals.

Proposers can register for an account on Sourcing Intelligence by clicking on the "Registration" button (located in the top right corner of the webpage) on the PowerAdvocate website at the following address:

[www.poweradvocate.com](http://www.poweradvocate.com)

The Proposer's use of the Electronic Procurement Platform is governed by PowerAdvocate's Terms of Use. By registering as a "Supplier" on the Electronic Procurement Platform, the Proposer acknowledges that the Proposer has read these Terms of Use and accepts and agrees that, each time the Proposer uses the Electronic Procurement Platform, the Proposer will be bound by the Terms of Use then accessible through the link(s) on the PowerAdvocate login page.

Once a Proposer has successfully registered as a "Supplier" with PowerAdvocate, the Proposer shall request access to the subject RFP event from the Company Contact via Email through the RFP Email Address set forth in Section 1.6 of the RFP. The Email request must list the Company Name field and username under which the Proposer has registered with PowerAdvocate. If the Proposer plans to submit multiple Proposals and has registered multiple accounts in accordance with the instructions above, the Email request must contain the Company Name field and username for each account that will be used to submit the Proposals. After being added to the event, the Proposer will see the bid event on their dashboard upon logging into Sourcing Intelligence. Once the RFP event opens, the Proposer may begin submitting their Proposal(s).

After registering and prior to the opening of the RFP, Proposers are encouraged to familiarize themselves with the Electronic Procurement Platform, including tabs, the dashboard, PowerAdvocate Users Guide (RFP Appendix D), etc. Proposers should note that they will not be able to access any bid documents until the event officially opens.

Proposers may contact PowerAdvocate Support for help with registration or modification of registration if desired. Support is available from 8 AM to 8 PM Eastern Time (2 AM to 2 PM Hawai'i Standard Time when daylight savings is in effect) Monday to Friday, except for Holidays posted on the PowerAdvocate website, both by phone (857-453-5800) and by Email ([support@poweradvocate.com](mailto:support@poweradvocate.com)).

Contact information for PowerAdvocate Support can also be found on the bottom border of the PowerAdvocate website: [www.poweradvocate.com](http://www.poweradvocate.com)

Once the RFP event is opened, registered Proposers will have online access to general notices and RFP-related documents via the Electronic Procurement Platform. Proposers should also monitor the RFP Website throughout the RFP event.

## **1.2 PROPOSAL SUBMISSION PROCEDURES**

An Email notification will be sent to all registered Proposers when the event has been opened to receive Proposals.

After logging onto the Electronic Procurement Platform, the RFP will be visible on the Proposer's dashboard with several tabs, including the following:

- “**1. Download Documents**” Documents stored under this tab are provided for the Proposer’s use and information. All documents can be downloaded and/or printed, as required.
- “**2. Upload Documents**” Proposal submission documents requested in Appendix B must be uploaded using this tab.
- Note that “3. Commercial Data”, “4. Technical Data”, and “5. Pricing Data” tabs are NOT USED for this event.

Step-by-step instructions for submitting a complete Proposal are provided below:

1. Proposers must upload their Proposal files, including all required forms and files, to submit a complete Proposal. All files must be uploaded before the respective Proposal Due Date (RFP Section 3.1 Table 1, Item 9 or Item 10).
2. Submit (upload) one consolidated PDF representing your Proposal via the “2. Upload Documents” tab. That Proposal PDF must abide by the format specified in this Appendix B. A MSWord.docx template that outlines the format of this document is available under the “1. Download Documents” tab for the Proposer’s use. **Response information must be provided in the order, format, and manner specified in this Appendix B and must clearly identify and reference the Appendix B section number that the information relates to.**
  - a. Proposers shall use a filename denoting: CompanyName\_Proposal#.pdf.  
(example: AceEnergy\_P1.pdf)
3. Proposal information that cannot be easily consolidated into the PDF file described in Step 2 (such as large-scale drawing files) or files that must remain in native file format (such as computer models and spreadsheets) shall be **uploaded separately but must be referenced from within the main Proposal PDF file** (e.g., “See AceEnergyP1V2\_2.5\_SiteControlMap.kmz”). Such additional files must follow the naming convention below:
  - a. File names must include, in order, Company Name, Proposal number (if more than one Proposal being submitted per Proposer), Variation (if any variations are being submitted), Appendix B section number, and a file descriptor, as shown in the example file name below:  
AceEnergyP1V2\_2.5\_SiteControlMap.kmz  
Proposers may use abbreviations if they are clear and easy to follow.
4. Upload files using the “**2. Upload Documents**” tab on the Electronic Procurement Platform.
  - a. For all documents identify the “Document Type” as “Technical Information.” (Do not identify any documents as “Commercial and Administrative” or “Pricing.”)
  - b. “Reference ID” may be left blank.
  - c. Select “Choose File...” Navigate to and choose the corresponding file from your computer. Select “Open” and then “Submit Document.”

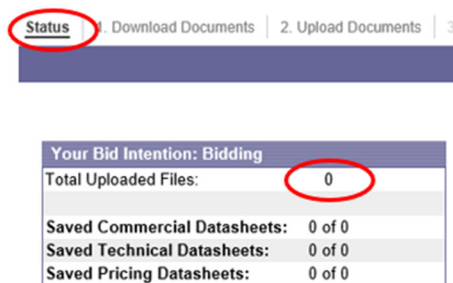
There is no limit to the number or size of files that can be uploaded. Multiple files may be grouped into a .zip archive for upload. (Any zipped files must still adhere to the naming directions in #3 above.) When successfully uploaded, documents will appear under the “Bid Submissions” section on the bottom of the tab's page, organized within the “Technical Information” Document Type. Repeat steps a, b, and c, as required for each file upload.

If a file with the same name is uploaded twice, the Platform will automatically append a unique numerical extension to the Document Name. To delete a file that has been previously uploaded, click on the “X” button in the “Actions” column for the file to be deleted. Do not upload any files prior to the issuance of the Final RFP.

5. The Company will not be responsible for technical problems that interfere with the upload or download of Proposal information. Support is available to answer technical questions about PowerAdvocate’s Sourcing Intelligence from 8 AM to 8 PM Eastern Time (2 AM to 2 PM Hawai‘i Standard Time when daylight savings is in effect) Monday to Friday, except for Holidays posted on the PowerAdvocate website, both by phone (857-453-5800) and by Email (support@poweradvocate.com).
6. Proposers are strongly encouraged to start early and avoid waiting until the last minute to submit the required information. Proposers are allowed to add, modify, and/or delete documents that have been previously submitted any time prior to the event close deadline. For clarity, it is the Proposer’s responsibility to ensure a complete Proposal is uploaded into PowerAdvocate before the Proposal Due Date.
7. Any questions or concerns regarding the RFP, may be submitted to the Company Contact via the RFP Email address provided in Section 1.6 of the RFP. Per RFP Section 1.4.2, the Independent Observer will monitor messages within the bid event. Proposers are responsible for following instructions and uploading documents in their appropriate locations. Documents uploaded in the wrong tab will not be considered by the Company.

### 1.3 PROPOSAL COMPLETION AND CONFIRMATION PROCEDURES

To confirm the submission of all proposal files, in the “Status” tab on the Electronic Procurement Platform, confirm that the “Total Uploaded Files” is the number of expected files to be included in the submission by checking it against your list of submitted files. Example “Status” tab view:



As stated above in Section 1.2, nothing should be uploaded to the Commercial, Technical or Pricing Datasheet tabs. Documents uploaded there will not be included in your Proposal submission.

1.3.1 **Proposal Fee Delivery Information.** Provide the Proposal Fee submission information for this Proposal. Include:

- The Date the Proposal Fee was sent.
- The delivery service used and the tracking number for the parcel.

- The U.S.-chartered bank name that issued the cashier’s check and the check number.

## 2.0 PROPOSAL (BASE VARIATION) SUMMARY TABLE

Base variation Proposal Summary. If proposal variations are submitted, any changes to the summary information for such variations must be specifically identified in a similar table placed in Section 4.2 of this Appendix, as applicable.

To be filled out in its entirety by IPP or Affiliate Proposers:

1	<b>Proposer Name (Company Name)</b>	
2	<b>Parent Company/Owner/Sponsor/Business Affiliation/etc.</b>	
3	<b>Project Name</b>	
4	<b>Net nameplate capacity (MW)<sup>2</sup></b>	
4a	<b>Installed nameplate capacity: the aggregate sum of the net nameplate active power capabilities of all generator and converter equipment (i.e. storage) installed.</b>	
5	<b>Proposed Facility Location Street Address if available, or what City/Area on the island is it near</b>	
6	<b>TMK(s) of Facility Location (use 9-digit TMK format)<sup>3</sup></b>	
7	<b>Point of Interconnection’s Circuit Name</b>	
8	<b>Coordinates for Point of Interconnection (use decimal degrees)<sup>4</sup></b>	
9	<b>Net Energy Potential (NEP) Projection for the Facility (MWh)</b>	
10	<b>Lump Sum Payment (\$/Year)</b>	
11	<b>Does Project include an Energy Storage Component? (Yes/No)</b>	
If the Project includes an Energy Storage Component:		
11a	<b>Project Energy Storage Technology</b>	
11b	<b>AC or DC interconnected with the source energy resource</b>	
11c	<b>Energy Storage Capability for the Facility (MW and MWh)</b>	
11d	<b>Is the Project capable of being 100% charged from the grid after the 5 year ITC</b>	

<sup>2</sup> A Project’s net nameplate capacity is the net maximum instantaneous output (MWac) of the Facility at the point(s) of interconnection, whether that maximum is based on: nameplate power rating of energy generating equipment sizing; expected losses in delivery of power to the point(s) of interconnection; and/or any project control system involved in managing the delivery of power to the point(s) of interconnection. This value, subject to verification by the Company, will determine, how a project is evaluated relative to the terms and requirements of the RFP, including, but not limited to: classification as a Mid-Tier or Large Project, ability to interconnect to a distribution circuit, impact to circuit hosting capacity, and validation of the maximum output levels used to calculate the NEP RFP Projection. For the purposes of calculating the NEP RFP Projection, it should be assumed all energy is being delivered directly to the point(s) of interconnection from the renewable resource as it is generated and never in excess of the Project’s capacity, independent of the existence of any storage device. In the applicable PPA, this value will be the default Contract Capacity.

<sup>3</sup> 9-digit Tax Map Key format: Island Number (1 digit); Zone Number (1 digit); Section Number (1 digit); Plat Number (3 digits, add leading zeros if less than 3 digits); Parcel Number (3 digits, add leading zeros if less than 3 digits).

<sup>4</sup> Decimal degrees (YY.YYYYYY, -XXX.XXXXXX) latitude and longitude coordinates of the Point of Interconnection for the project. If there is more than one interconnection point, specify each.

	<b>recapture period? (Yes/No)</b>	
11e	<b>Is the Project grid-forming and black start capable? (Yes/No)</b>	
12	<b>Proposal Guaranteed Commercial Operations Date (MM/DD/YYYY)</b>	
13	<b>The Proposer hereby certifies that the Project meets all performance attributes identified in Section 2.1 of the RFP? (Yes/No)</b>	
14	<b>The Proposer hereby certifies that the Proposal (including its pricing elements) is not contingent upon changes to existing County, State or Federal laws or regulations. (Yes/No)</b>	
15	<b>The Proposer hereby agrees to provide Development Period Security and Operating Period Security as set forth in the Model Mid-Tier SFC. (Yes/No)</b>	
16	<b>The Proposer hereby certifies under penalties of perjury that this Proposal has been made in good faith and without collusion or fraud with any other person. As used in this certification, the word “person” shall mean any natural person, business partnership, corporation, union, committee, club, or organization, entity, or group of individuals. (Yes/No)</b>	
17	<b>The Proposer hereby certifies that the Proposer, its parent company, or any affiliate of the Proposer has not either defaulted on a current contract with the Company, had a contract terminated by the Company, or has any pending litigation in which the Proposer has made claims against the Company (Yes/No)</b>	

## 2.1 REQUIRED FORMS ACCOMPANYING PROPOSAL PDF

The following forms must accompany each proposal, must be attached to the Proposal PDF, and uploaded via the “2. Upload Documents” tab:

- Document signed by an officer or other Proposer representative **authorizing the submission** of the Proposal
- Fully executed **CBRE Mutual Confidentiality and Non-Disclosure Agreement** (Appendix E to the RFP, may be downloaded from the “1. Download Documents” tab in the Electronic Procurement Platform)
- **Certificate of Vendor Compliance** for the Proposer
  - **Certificate of Good Standing** for the Proposer and **Federal and State tax clearance certificates** for the Proposer may be provided in lieu of the Certificate of Vendor Compliance
- **Certification of Counsel for Proposer**, if applicable. (See Appendix B Attachment 1.)
- For Projects exactly 250 kW: **Project single line diagram(s)**. Note that a complete package of Project Interconnection Data Request worksheets, Project three line diagram(s) and an equipment list shall be submitted within 30 days after selection to the Final Award Group. Additionally, if requested by the Company, models for equipment and controls, list(s) to clearly identify the components and respective files (for inverters and power plant controller), and complete documentation with instructions must also be submitted within 30 days after selection to the Final Award Group as specified in Section 5.1 of the RFP.
- For Projects greater than 250 kW: Completed applicable **Project Interconnection Data Request worksheet** and **project single line diagram(s)**. Note that three line diagram(s), models for equipment

and controls, list(s) identifying components and respective files (for inverters and power plant controller), and complete documentation with instructions as specified in the Project Interconnection Data Request worksheet shall be submitted within 30 days after selection to the Final Award Group as specified in Section 5.1 of the RFP.<sup>5</sup> (See Section 2.11 below)

## 2.2 PROPOSAL SUMMARY/CONTACT INFORMATION

2.2.1 Provide a **primary point of contact** for the Proposal being submitted:

- Name
- Title
- Mailing Address
- Phone Number
- Email Address – this will be the official communication address used during the RFP process

2.2.2 **Executive Summary of Proposal.** The executive summary must include an approach and description of the important elements of the Proposal, including a description if a minor variation to the base variation is being submitted. Refer to Section 1.8.2 and 1.8.3 of the RFP for an explanation of minor variations that are allowed. If a minor variation to the base variation is proposed, a **table summarizing the differences of the minor variation in Section 4 shall be included.**

2.2.3 **Pricing information.** Pricing information must be filled out in the Section 2.0 Proposal Summary Table above. If a minor variation to the base variation is proposed, the minor variation's pricing summary must be identified in a similar pricing table in Sections 4.2.0 below. Proposers must provide pricing information only in those table sections – do not embed pricing information in any other portion of the Proposal PDF.

2.2.4 Provide a **high-level overview of the proposed Facility**, including at a minimum the following information:

- Installed nameplate capacity ( $MW_{AC}$  and  $MW_{DC}$ ) (see Section 2.0 for definition)
- Net nameplate capacity of the Facility at the Point(s) of Interconnection ( $MW_{AC}$ ) (see Section 2.0 for definition)
- Identified Available Circuit Capacity at the Point(s) of Interconnection ( $MW_{AC}$ ). If a Circuit Capacity value is provided, please describe the source of the value (i.e. LVM, Company response to Proposer's inquiry, etc.).
- Number of Generators (PV modules, BESS modules, and inverters)
- Rated Output and Type of each Generator (PV inverter, BESS inverter, Central inverter)
- Generator Facility Design Characteristics

Storage component:

- Technology Type (i.e. lithium ion battery)
- Interconnection type (AC or DC)

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<sup>5</sup> If the Models, lists, respective files and complete documentation are not submitted with the Proposal upload, they shall be submitted via PowerAdvocate's Messaging as attachments within the respective timeframes specified in Section 5.1 of the RFP.

- Maximum Rated Output, as defined in the applicable contract (MW)
- Discharge Duration at Maximum Rated Output (hours)
- BESS energy capacity (MWh); minimum of 4 times the net nameplate capacity
- Storage Energy Capacity (MWh) available at the point of interconnection (i.e. BESS Contract Capacity as defined in the applicable contract)
- Operational Limitations, such as, but not limited to: grid charging limits (with respect to ITC), energy throughput limits (daily, monthly, annually), State of Charge restrictions (min/max SOC while at rest (not charging/discharging)), etc. Proposed Operational Limits cannot be in conflict with the energy discharge requirement in Sections 1.2.13 and 1.2.14 of the RFP. If such a conflict is identified, the Proposal may be disqualified.
- Round Trip Efficiency (“RTE”). Specify a single value (percentage) that the Facility is required to maintain throughout the term of the applicable contract. The RTE must consider and reflect:
  - the technical requirements of the Facility (as further set forth in the applicable contract);
  - that the measurement location of charging and discharged energy is at the point of interconnection;
  - electrical losses associated with the point of interconnection measurement location;
  - any auxiliary and station loads that need to be served by BESS energy during charge and discharge that may not be done at Maximum Rated Output or over a fixed duration; and
  - that the data used to validate the RTE will be captured during a full charge cycle (0%-100% SOC) directly followed by a full discharge cycle (100%-0% SOC).
- Describe any augmentation plans for the storage component to maintain the functionality and characteristics of the storage during the term of the applicable contract. Include any expected interval of augmentation (months/years).
- Estimated useful life of the storage component (including augmentation if used) (years).

## 2.3 FINANCIAL

Provide the following financial information identified below. As specified in the General Instructions in Section 1.0 above, all information (including attachments) must be provided in English, be provided in U.S. Dollars and use U. S. credit ratings.

### 2.3.1 Identification of Equity Participants

2.3.1.1 Who are the **equity participants** in the Project (or the equity partners’ other partners)?

2.3.1.2 Provide an **organizational structure** for the Proposer including any general and limited partners and providers of capital that identifies:

- Associated responsibilities from a financial and legal perspective
- Percentage interest of each party

### 2.3.2 Project Financing

2.3.2.1 **How will the Project be financed** (including construction and term financing)? Address at a minimum:

- The Project’s projected financial structure
- Expected source of debt and equity financing

2.3.2.2 [For IPP and Affiliate Proposals] Identify all **estimated development and capital costs** for, at a minimum:

- Equipment
  - Identify the manufacturer and model number for all major equipment
- Construction
- Engineering
- Seller-Owned Interconnection Facilities
- Company-Owned Interconnection Facilities
- Land
- Annual O&M
- (For Projects that include a storage component) Specify a percentage of the total project cost that is estimated to be attributed to the storage functionality of the Facility. As the storage functionality is treated as a lease, the Company will use the percentage for its preliminary calculation of the lease liability only. This percentage requested for the Company's accounting purposes does not affect nor alter the liquidated damage provisions of the Mid-Tier SFC, as those provisions reflect the benefit the Company seeks from the Project's storage functionality.

2.3.2.3 Discuss and/or provide **supporting information on any project financing guarantees**.

2.3.2.4 Describe any **written commitments obtained from the equity participants**.

2.3.2.5 Describe any **conditions precedent to project financing**, and the Proposer's plan to address them, other than execution of the Power Purchase Agreement or any other applicable project agreements and State of Hawai'i Public Utilities Commission approval of the Power Purchase Agreement and other agreements.

2.3.2.6 Provide any **additional evidence to demonstrate that the Project is financeable**.

2.3.3 Project Financing Experience of the Proposer

Describe **the project financing experience of the Proposer** in securing financing for projects of a similar size (i.e., no less than two-thirds the size) and technology as the one being proposed including the following information for any referenced projects:

- Project Name
- Project Technology
- Project Size
- Location
- Date of Construction and Permanent Financing
- Commercial Operations Date
- Proposer's Role in Financing of the Project
- Off-taker
- Term of the Interconnection Agreement
- Financing Structure
- Major Pricing Terms
- Name(s) of Finance Team Member(s); Time (i.e., years, months) worked on the project and Role/Responsibilities



#### 2.3.4 Evidence of the Proposer's Financial Strength

2.3.4.1 Provide **copies of the Proposer's audited financial statements** (balance sheet, income statement, and statement of cash flows):

- Legal Entity
  - Three (3) most recent fiscal years
  - Quarterly report for the most recent quarter ended
- Parent Company
  - Three (3) most recent fiscal years
  - Quarterly report for the most recent quarter ended

2.3.4.2 Provide the **current credit ratings** for the Proposer (or Parent Company, if not available for Proposer), affiliates, partners, and credit support provider:

- Standard & Poor's
- Moody's
- Fitch

2.3.4.3 Describe any **current credit issues** regarding the Proposer or affiliate entities raised by rating agencies, banks, or accounting firms.

2.3.4.4 Provide any **additional evidence that the Proposer has the financial resources and financial strength** to complete and operate the Project as proposed.

2.3.5 Provide **evidence** that the Proposer can provide **the required securities**.

2.3.5.1 Describe the Proposer's **ability (and/or the ability of its credit support provider) and proposed plans to provide the required securities** including:

- Irrevocable standby letter of credit
- Sources of security
- Description of its credit support provider

#### 2.3.6 Disclosure of Litigation and Disputes

Disclose any **litigation, disputes, and the status of any lawsuits or dispute resolution** related to projects owned or managed by the Proposer or any of its affiliates

2.3.7 State to the best of the Proposer's knowledge: Will the Project result in consolidation of the Developer entity's finances onto the Company's financial statements under FASB 810. Provide supporting information to allow the Company to verify such conclusion.

## 2.4 CONTRACT EXCEPTIONS

2.4.1 The Mid-Tier SFC will be preapproved by the Commission and as a result, modifications may not be proposed to it.

## 2.5 SITE INFORMATION

2.5.1 The Proposal must demonstrate that the Proposer has Site Control for all real property required for the successful implementation of a specific Proposal at a Site not controlled by the Company, including any Interconnection Facilities for which the Proposer is responsible. In addition, developmental requirements and restrictions such as zoning of the Site and the status of easements must be identified. **Proposers must provide documentation set forth in RFP Section 4.3 to prove Site Control.**

2.5.2 Provide a **map of the Project site** that clearly identifies:

- Location of the parcel on which the site is located
- Tax map key number (9-digit format: Island Number (1 digit), Zone Number (1 digit), Section Number (1 digit), Plat Number (3 digits, add leading zeros if less than 3 digits), Parcel Number (3 digits, add leading zeros if less than 3 digits)
- Site boundaries (if the site does not cover the entire parcel)
- Total acreage of the site
- Point(s) of Interconnection
- Relationship of the site to other local infrastructure

2.5.3 Provide a **site layout plan** which illustrates:

- Proposed location of all equipment
- Proposed location of all facilities on the site, including any proposed line extensions

2.5.4 Describe the **interconnection route** and include:

- Site sketches of how the facility will be interconnected to the Company's System (above-ground and/or underground)
- Identify the approximate latitude and longitude of the proposed Point of Interconnection, in decimal degrees format, to six (6) decimal places.
- Description of the rationale for the interconnection route

2.5.5 Identify **any rights-of-way or easements** that are required for access to the site or for interconnection route:

- Describe the status of rights-of-way or easement acquisition
- Describe the plan for securing the necessary rights-of-way or easement, including the proposed timeline

2.5.6 Provide a **description of any critical infrastructure or community resilience hubs** in proximate location to the proposed Project site that could benefit from an islanding capability of the proposed Project and could enhance resilience in the community.

## 2.6 ENVIRONMENTAL COMPLIANCE AND PERMITTING PLAN

Scoring of proposals for the non-price evaluation criteria of this section will be based on the completeness and thoroughness of responses to each of the criteria listed below. The Company recommends that each Proposal incorporate the list below as an outline together with complete and thorough responses to each item in the list. Proposals that closely follow this recommendation will typically be awarded higher scores than proposals that do not.

2.6.1 Describe your **overall land use and environmental permits and approvals strategy** and approach to obtaining successful, positive results from the agencies and authorities having jurisdiction, including:

- Explanation of the conceptual plans for siting
- Studies/assessments
- Permits and approvals
- Gantt format schedule which identifies the sequencing of permit application and approval activities and critical path. (Schedule must be in MM/DD/YY format.)

2.6.2 Discuss the **city zoning and state land use classification**:

- Identify present and required zoning and the ability to site the proposed Project within those zoning allowances.
- Identify present and required land use classifications and the ability to site the proposed Project within those classifications.
- Provide evidence of proper zoning and land use classifications for selected site and interconnection route.
- If changes in the above are required for the proposed Project, provide a plan and timeline to secure the necessary approvals.

2.6.3 Identify all required discretionary and non-discretionary **land use, environmental and construction permits, and approvals** required for development, financing, construction, and operation of the proposed Project, including but not limited to zoning changes, Environmental Assessments, and/or Environmental Impacts Statements.

Provide a **listing of such permits and approvals** indicating:

- Permit Name
- Federal, State, or Local agencies and authorities having jurisdiction over the issuance
- Status of approval and anticipated timeline for seeking and receiving the required permit and/or license
- Explanation of your basis for the assumed timeline
- Explain any situation where a permit or license for one aspect of the Project may influence the timing or permit of another aspect (e.g. a case where one permit is contingent upon completion of another permit or license), if applicable.
- Explain your plans to secure all permits and approvals required for the Project.

2.6.4 Provide a **preliminary environmental assessment of the site** (including any pre-existing environmental conditions) and potential short- and long-term **impacts** associated with, or resulting from, the proposed Project – including direct, indirect, and cumulative impacts associated with development, construction, operation, and maintenance of the proposed Project in every area identified below. Discuss if alternatives have been or will be considered. The assessment shall also include Proposer's short- and long-term plans to mitigate such impacts and explanation of the mitigation strategies for, but not limited to, each of the major environmental areas as presented below:

- Natural Environment
  - Air quality
  - Biology (Natural habitats and ecosystems, flora/fauna/vegetation, and animals, especially if threatened or endangered)
  - Climate
  - Soils
  - Topography and geology

- Land Regulation
  - Land Uses, including any land use restrictions and/or pre-existing environmental conditions/contamination
  - Flood and tsunami hazards
  - Noise
  - Roadways and Traffic
  - Utilities
- Socio-Economic Characteristics
- Aesthetic/Visual Resources
- Solid Waste
- Hazardous Materials
- Water Quality
- Public Safety Services (Police, Fire, Emergency Medical Services)
- Recreation
- Potential Cumulative and Secondary Impacts

2.6.5 Provide a **decommissioning plan**, including:

- Developing and implementing program for recycling to the fullest extent possible, or otherwise properly disposing of installed infrastructure, if any, and
- Demonstrating how restoration of the Site to its original ecological condition is guaranteed in the event of default by the Proposer in the applicable Site Control documentation.

## 2.7 CULTURAL RESOURCE IMPACTS

2.7.1 Provide a **proposal to ensure cultural sites are identified and carefully protected** as part of a cultural impact plan as it pertains to the Project Site and interconnection route. This proposal must include at a minimum:

- An initial analysis that identifies:
  - 1) valued cultural, historical, or natural resources in the area in question, including the extent to which traditional and customary native Hawaiian rights are exercised in the area;
  - 2) the extent to which those resources – including traditional and customary native Hawaiian rights – will be affected or impaired by the proposed action; and
  - 3) the feasible action, if any, to be taken to reasonably protect any identified cultural, historical, or natural resources in the area in question, and the reasonable protection of traditional and customary native Hawaiian rights in the affected area.
- Proposer’s experience with cultural resource impacts on past projects
- Consultant’s experience with cultural resource impacts on past projects (name, firm, relevant experience)
- Status of the cultural impact plan (including, but not limited to: Cultural Impact Assessment, Cultural Landscape Study, Cultural Resource Management Plan, Ethnographic Survey, Consultation on Section 106 Process, and/or Traditional Cultural Property Studies)

## 2.8 COMMUNITY OUTREACH

Gaining community support is an important part of a Project's viability and success. An effective Community Outreach Plan will call for early meaningful communications with stakeholders and will reflect a deep understanding and respect for the community's desire for information. The public meeting and comment solicitation process described in Section 5.3 of the RFP is intended to support that premise and the Commission's desire to increase bid transparency within the RFP process. When developers neglect to demonstrate transparency and a willingness to engage in early and frequent communication with Hawaii's communities, costly and timely challenges to their projects have resulted. In some instances, projects have failed. Incorporating transparency during the competitive bidding phase may seem unconventional, but it has become an essential community expectation. Developers must share information and work with communities to address concerns through careful listening, thoughtful responsiveness, and a commitment to respect the environmental and cultural values of Hawai'i.

2.8.1 Provide a **detailed Community Outreach Plan** to work with and inform neighboring communities and stakeholders and to provide them timely information during all phases of the Project. The plan shall address, but not be limited to, the following items:

- Project description
- Community scoping
- Project benefits
- Government approvals
- Development process
  - Identification of communities and other stakeholders that may be affected by the proposed Project:
    - How will they be affected?
    - What mitigation strategies will the Proposer implement?
  - Comprehensive communication strategy with affected communities and the general public regarding the proposed Project:
    - Describe frequency of communication
    - Provide source of information
    - Identify communication outlets
    - Describe opportunities, if any for affected communities and general public to provide the developer with feedback and comments on the proposed Project
- Outreach experience

Proposers are reminded of RFP Section 3.4.2 including the provision that Proposals must provide all referenced material if it is to be considered during the Proposal evaluation.

2.8.2 Provide any **documentation of local community support or opposition** including any letters from local organizations, newspaper articles, or communications from local officials.

2.8.3 Provide a **description of community outreach efforts** already taken or currently underway, including the names of organizations and stakeholders contacted about the proposed Project.

2.8.4 Describe any anticipated or negotiated investment in the community and other **community benefits** that the Proposer proposes to provide in connection with the Project, along with an estimated value of the community benefits in dollars (including the cost to Proposers providing the benefits and supporting details on how those costs and benefits were derived).

2.8.5 All Proposers selected to the Final Award Group must display the below table of information on their website as described in Section 5.3 of the RFP to provide communities Project information that is of interest to them in a standard format. All information in this table must be included in all community presentations in addition to the Proposer’s project website.

## PROJECT SUMMARY AND COMMUNITY OUTREACH PLAN

*	Proposer Name (Company name)	
*	Parent Company/Owner/Sponsor/Business Affiliation/etc.	
*	Project Name	
*	Net nameplate capacity (MW) (must match Proposal information)	
*	Proposed Facility Location, Street Address if available, or what City/Area on the island it is near	
*	TMK(s) of Facility Location (must match Proposal information)	
*	Point of Interconnection’s Circuit or Substation Name (must match Proposal information)	
*	Project Description (in 200 words or less)	<i>(A description that includes information about the project that will enable the community to understand the impact that the Project might have on the community.)</i>
*	Project site map	<i>(provide a map similar to what was provided in Section 2.5.2)</i>
*	Site layout plan	<i>(provide a layout similar to what was provided in Section 2.5.3)</i>
*	Interconnection route	<i>(provide a map of the route similar to what was provided in Section 2.5.4)</i>
<b>Environmental Compliance and Permitting Plan</b>		
*	Overall land use and environmental permits and approvals strategy	<i>(provide information in level of detail as provided in Section 2.6.1)</i>
*	Gantt format schedule which identifies the sequencing of permit applications and approval activities and critical path. Schedule must be in MM/DD/YY format)	<i>(provide information in level of detail as provided in Section 2.6.1)</i>
*	City Zoning and Land Use Classification	<i>(provide information in level of detail as provided in Section 2.6.2)</i>
*	Discretionary and non-discretionary Land use, environmental and construction permits and approvals	<i>(provide information in level of detail as provided in Section 2.6.3)</i>
*	Listing of Permits and approvals	<i>(provide information in level of detail as provided in Section 2.6.3)</i>

*	Preliminary environmental assessment of the Site (including any pre-existing environmental conditions)	<i>(provide information in level of detail as provided in Section 2.6.4)</i>
<b>Cultural Resource Impacts</b>		
*	Proposer's updated Community Outreach Plan must include a plan that (1) identifies any cultural, historic or natural resources that will be impacted by the Project (2) describes the potential impacts on these resources and (3) identifies measures to mitigate such impacts.	<i>(provide information in level of detail as provided in Section 2.7)</i>
<b>Community Outreach</b>		
*	Detailed Community Outreach Plan	<i>(provide key information from Community Outreach Plan as specified in Section 2.8.1 or provide a link to updated comprehensive Community Outreach Plan)</i>
*	Local community support or opposition	<i>(provide latest comprehensive information)</i>
*	Community outreach efforts	<i>(provide latest comprehensive information)</i>
*	Community benefits	<i>(provide latest comprehensive information)</i>

## 2.9 OPERATIONS AND MAINTENANCE (O&M)

2.9.1 To demonstrate the long-term operational viability of the proposed Project, describe the **planned operations and maintenance**, including:

- Operations and maintenance funding levels, annually, throughout the term of the contract.
- Description of the operational requirements by frequency (daily, weekly, monthly, yearly, as-necessary, run hour interval) and maintenance requirements by frequency (daily, weekly, monthly, yearly, as-necessary, run hour interval).
- A discussion of the staffing levels proposed for the Project and location of such staff. If such staff is offsite, describe response time and ability to control the Project remotely.
- Technology specific maintenance experience records.
- Identification of any O&M providers.
- The expected role of the Proposer (Owner) or outside contractor.
- Scheduling of major maintenance activity.
- Plan for testing equipment.
- Estimated life of Generation and/or Storage Facilities and associated Interconnection Facilities.
- Safety plan, including historical safety records with environmental history records, violations, and compliance plans.
- Security plan.
- Site maintenance plan.
- Substation equipment maintenance plan.

- 2.9.2 State whether the Proposer would **consider 24-hour staffing**. Explain how this would be done.
- 2.9.3 Describe the **Proposer's contingency plan**, including the Proposer's mitigation plans to address failures. Such information should be described in the Proposal to demonstrate the Project's reliability with regard to potential operational issues.
- 2.9.4 Describe if the Proposer will **coordinate their maintenance schedule** for the Project with the Company's annual planned generation maintenance.
- 2.9.5 Describe the **status of any O&M agreements or contracts** that the Proposer is required to secure. Include a discussion of the Proposer's plan for securing a long-term O&M contract.
- 2.9.6 Provide **examples of the Proposer's experience with O&M services** for other similar projects.

## 2.10 PERFORMANCE STANDARDS

- 2.10.1 Design and operating information. Provide a **description of the project design**. Description shall include:
- Configuration description, including conceptual or schematic diagrams.
  - Overview of the Facility Control Systems – central control and inverter- or resource-level control.
  - Diagrams approved by a Professional Electrical Engineer registered in the State of Hawai'i, indicated by the presence of the Engineer's Professional seal on all drawings and documents. Including but not limited to:
    - A single-line diagram, relay list, trip scheme and settings of the generating facility, which identifies the Point of Interconnection, circuit breakers, relays, switches, synchronizing equipment, monitoring equipment, and control and protective devices and schemes.
- 2.10.1.1 Provide the projected **hourly annual energy potential production profile of the Facility<sup>6</sup> (24 hours x 365 days, 8760 generation profile)** for the provided NEP RFP Projection.
- 2.10.1.2 Provide the **sample rate of critical telemetry** (i.e. frequency and voltage) based on inputs to the facility control systems.
- 2.10.1.3 Provide a description of the Facility's **capability to be grid-forming and have black start capability**.
- 2.10.1.4 Provide the explanation of the methodology and underlying **information used to derive the Project's NEP RFP Projection**, including the preliminary design of the Facility and the typical meteorological year file used to estimate the Renewable Resource Baseline, as required in Article 6.6 of the Mid-Tier SFC. The explanation of the methodology should include, but not be limited to, the long-term resource data used, the gross and net generation MWh, and assumptions (loss factors, uncertainty values, any grid or project constraints).

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<sup>6</sup> The projected hourly annual energy production profile is the projected output from the generating facility without curtailment and before any energy is directed to an energy storage component, if one will be provided.



2.10.2 **Capability of Meeting Performance Standards.** The proposed Facility must meet the performance attributes identified in Section 2.1 of the RFP. Provide **confirmation that the proposed Facility will meet the requirements identified** or provide clarification or comments about the Facility's ability to meet the performance standards. Proposals should include sufficient documentation to support the stated claim that the Facility will be able to meet the Performance Standards. The Proposal should include information required to make such a determination in an organized manner to ensure this evaluation can be completed within the evaluation review period.

2.10.3 **Reactive Power Control:** Provide the facility's ability to meet the Reactive Power Control capabilities, including Voltage Regulation at the point of interconnection, required in the Performance Standards, including contribution from the inverters of generation and/or storage and means of coordinating the response. Provide the inverter capability curve(s). Confirm ability to provide reactive power at zero active power.

2.10.4 **Ramp Rate** for Generation Facilities: Confirm the ability to meet the ramp rate requirement specified in the Mid-Tier SFC.

2.10.5 **Undervoltage ride-through:** Provide the facility's terminal voltage level(s) and elapsed time at which the facility will disconnect from the utility system during the disturbance, if any. Confirm the ability to meet ride-through requirements and include supporting documentation regarding inverter design, control parameters, etc.

2.10.6 **Overvoltage ride-through:** Provide the facility's terminal voltage level(s) and elapsed time at which the facility will disconnect from the utility system during the disturbance, if any. Confirm the ability to meet ride-through requirements and include supporting documentation regarding inverter design, control parameters, etc.

2.10.7 **Transient stability ride-through:** Provide the facility's ability to stay online during Company System: (1) three-phase fault located anywhere on the Company System and lasting up to \_\_ cycles; and (2) a single line to ground fault located anywhere on the Company System and lasting up to \_\_ cycles. Provide the Facility's ability to withstand subsequent events.

2.10.8 **Underfrequency ride-through:** Provide the facility's terminal frequency level(s) and elapsed time at which the facility will disconnect from the utility system during the disturbance, if any. Confirm the ability to meet ride-through requirements and include supporting documentation regarding inverter design, control parameters, etc.

2.10.9 **Overfrequency ride-through:** Provide the facility's terminal frequency level(s) and elapsed time at which the facility will disconnect from the utility system during the disturbance, if any. Confirm the ability to meet ride-through requirements and include supporting documentation regarding inverter design, control parameters, etc.

2.10.10 **Frequency Response:** Provide the facility's frequency response characteristics as required by the Mid-Tier SFC, including time of response, tunable parameters, alternate frequency response modes and means of implementing such features.

2.10.11 **Auxiliary Power Information:** Proposer must provide the maximum auxiliary power requirements for:

- Start-up
- Normal Operations (from generator)
- Normal Operating Shutdown
- Forced Emergency Shutdown
- Maintenance Outage

2.10.12 **Coordination of Operations:** Provide a description of the control facilities required to coordinate generator operation with and between the Company's System Operator and the Company's System.

- Include a description of the equipment and technology used to facilitate dispatch to the Company and communicate with the Company.
- Include a description of the control and protection requirements of the generator and the Company's System.

2.10.13 **Cycling Capability:** Describe the Facility's ability to cycle on/off and provide limitations.

2.10.14 **Active Power Control Interface:** Describe the means of implementing active power control and the Power Possible, including the contribution to the dispatch signal from paired storage, if any. Provide the Proposer's experience dealing with active power control, dispatch, frequency response, and ride-through.

2.10.15 Provide the details of the **major equipment** (i.e. batteries, inverters, battery management system), including, but not limited to, name of manufacturer, models, key metrics, characteristics of the equipment, and performance specifications.

2.10.16 **Energy Storage performance standards:** For projects that include a storage component, provide additional performance standard descriptions as follows:

- MWh storage output for a full year
- Ramp Rate: Provide the Facility's ramp rate, which should be no more than 2 MW/minute for all conditions other than those under control of the Company System Operator and/or those due to desired frequency response.
- System Response Time – Idle to Design Maximum (minutes)
- Discharge Start-up time (minutes from notification)
- Charge Start-up time (minutes from notification)
- Start and run-time limitations, if any
- Ancillary Services provided, if any (i.e. Spinning Reserves, Non-Spinning Reserves, Regulation Up, Regulation Down, Black Start capability, other)

2.10.17 Provide the description and details of the **grid-charging capabilities of the Facility**. Include a description on the ability to control the charging source.

## 2.11 INTERCONNECTION SUBMITTAL REQUIREMENTS

2.11.1 A summary of the model requirements and impact study scope can be found in Appx B Att 6 from the “1. Download Documents” tab.

2.11.2 For projects exactly 250 kW, a complete package of **Project Interconnection Data Request worksheets, project three line diagrams**, and an **equipment list** shall be submitted with each Proposal within 30 days after selection of a Final Award Group as specified in Section 5.1 of the RFP. If requested by the Company, models for equipment and controls, list(s) to clearly identify the components and respective files (for inverters and power plant controller), and complete documentation with instructions must also be submitted within 30 days after selection to the Final Award Group. Preparation of the models, documentation, and related information may take longer than 30 days, and Proposers shall allow adequate time for this submittal requirement. Proposers may also download the Facility Technical Model Requirements and Review Process documentation labelled as Appx B Att 3 from the “1. Download Documents” tab.

2.11.3 For projects greater than 250 kW in size, provide the **project three line diagram(s), models for equipment and controls, list(s)** identifying components and **respective files** (for inverters and power plant controller), and **complete documentation with instructions** shall be submitted within 30 days after selection to the Final Award Group as specified in Section 5.1 of the RFP. Preparation of the models, documentation, and related information may take longer than 30 days, and Proposers shall allow adequate time for this submittal requirement. Proposers may also download the Facility Technical Model Requirements and Review Process documentation labelled as Appx B Att 3 from the “1. Download Documents” tab.

## 2.12 PROVEN TECHNOLOGY

2.12.1 Provide all supporting information for the Company to assess the **commercial and financial maturity of the technology** being proposed. Provide any supporting documentation that shows examples of projects that:

- Use the technology at the scale being proposed
- Have successfully reached commercial operations
- Demonstrate experience in providing Active Power dispatch

## 2.13 EXPERIENCE AND QUALIFICATIONS

Proposers, its affiliated companies, partners, and/or contractors and consultants are required to demonstrate project experience and management capability to successfully develop and operate the proposed Project.

2.13.1 Provide a hierarchical **organizational / management chart** for the Project that lists all key personnel and project participants dedicated to this Project and that identifies the management structure and responsibilities. In addition to the chart, Proposers must provide biographies / resumes of the key personnel, including position, years of relevant experience and similar project experience. Proposers must provide specifics as they relate to financing of renewable energy projects. Identify architects and engineers or provision to provide same that are licensed to practice in the State of Hawaii. Providers must also provide a completed table:

- For each of the project participants (including the Proposer, partners, and proposed contractors), **fill out the table below** and provide statements that list the specific experience of the individual in: financing, designing, constructing, interconnecting, owning, operating, and maintaining renewable energy generating or storage facilities, or other projects of similar size and technology, and
- Provide any evidence that the project participants have worked jointly on other projects.

<b>EXPERIENCE:</b>							
In the applicable columns below, include project details (i.e., project name, location, technology, size) and relevant job duties (role/responsibilities) and time (in years/months) spent on the project. List multiple projects if applicable.							
Participant Name:	Financing	Designing	Constructing	Interconnecting	Owning	Operating	Maintaining
1.							
2.							
3.							
...							

2.13.2 Identify those **member(s) of the team** the Proposer is submitting to meet the experience and qualifications requirement, including the Threshold Requirement. Identify those **members of the team with experience and qualifications**, including affiliates, and their principal personnel who will be involved in the project. If the Proposer consists of multiple parties, such as joint ventures or partnerships, demonstrate each member(s) firm commitment to provide services to the project (e.g., letter of intent); provide this information for each party, clearly indicating the proposed role of each party, including an ownership chart indicating direct and indirect ownership, and percentage interests in the partnership or joint venture.

2.13.3 Provide a **listing in the table format below, of all renewable energy generation or energy storage projects** the Proposer has successfully developed or that are currently under construction. Describe the Proposer’s role and responsibilities associated with these projects (lead developer, owner, investor, etc.). Provide the following information as part of the response:

Project Name	Location (City, State)	Technology (wind, PV, hydro, plus storage, etc.)	Size (MW/ MWh)	Commercial Operation Date	Offtaker (if applicable)	Role & Responsibilities
1.						
2.						
3.						
...						

## 2.14 STATE OF PROJECT DEVELOPMENT AND SCHEDULE

2.14.1 Provide a **project schedule in GANTT chart format** with complete **critical path activities** identified for the Proposal from the Notice of Selection of the Proposal to the start of Commercial Operations.

- The **schedule** must include:
  - Interconnection Requirement Study (IRS) assumptions

- Anticipated contract negotiation period assumptions
- Regulatory assumptions
- Anticipated submittal and approval dates for permitting (including but not limited to environmental and archaeological compliance)
- Siting and land acquisition
- Cultural Resource implications and mitigation activities
- Community outreach and engagement activities
- Energy resource assessment
- Financing
- Engineering
- Procurement
- Facility construction including construction management events
- Applicable reporting milestone events specified in the Mid-Tier SFC
- Testing
- Interconnection (including engineering, procurement, and construction)
- Commercial Operations Date
- All other important elements outside of the direct construction of the Project
- For each project element, list the start and end date (must be in MM/DD/YY format), and include predecessors to clearly illustrate schedule dependencies and durations.
- Proposers must also list and describe critical path activities and milestone events, particularly as they relate to the integration and coordination of the project components and the Company's Electric System. Proposers must ensure that the schedule provided in this section is consistent with the milestone events contained in the Mid-Tier SFC and/or other agreements.

2.14.2 Describe the **construction execution strategy** including:

- Identification of contracting/subcontracting plans
- Modular construction
- Safety plans<sup>7</sup>
- Quality control and assurance plan
- Labor availability
- Likely manufacturing sites and procurement plans
- Similar projects where these construction methods have been used by the Proposer.

2.14.3 Provide a description of any **project activities that have been performed to date**.

2.14.4 Explain how you plan to reach **safe harbor milestones** (if applicable) and **guaranteed commercial operations**, including durations and dependencies which support this achievement.

---

<sup>7</sup> A document that describes the various safety procedures and practices that will be implemented on the Project and how applicable safety regulations, standards, and work practices will be enforced on the Project.

### 3.0 PROPOSED CBRE PROGRAM

Provide a detailed description of the CBRE program that will be offered to eligible subscribers, including at a minimum, but not limited to, a discussion of the following. Please refer to the CBRE program non-price criteria in the RFP for elements of the proposed CBRE program that Proposals will be evaluated on.

- Financing Options
  - Subscriber fees and payments
    - Upfront payments
    - Ongoing payments
  - Public funding options
  - Extent to which subscribers will be financially responsible for any facility underperformance
- Percentage of the project’s capacity that will be available to subscribers vs. unsubscribed capacity
  - Capacity allocation (%) and other commitments to residential Subscribers
  - Capacity allocation (%) and other commitments to low to moderate income (“LMI”) subscribers
- Marketing or outreach plans to advertise the proposed project/program to LMI (if applicable) and non-LMI eligible customers
- Strategies for LMI (if applicable) and non-LMI customer retention and maintaining LMI (if applicable) and non-LMI customer participation levels
- Customer protection provisions
- Estimated benefits to LMI (if applicable) and non-LMI customer participants
  - Expected savings
  - Payback periods
  - Payback mechanisms
  - Other benefits
- Prior experience, specifically relating to community-based renewable energy projects
- Plans for CBRE program administration
  - Strategies for subscriber retention
  - How turnover and churn of subscribers will be handled

### 4.0 MINOR PROPOSAL VARIATION

Proposers submitting a minor variation to their base variation (as allowed in RFP Section 1.8.2 and 1.8.3) must provide the **details of the variation in the below section**. In this proposal variation Section 4.0 below, Proposers must (1) complete a Proposal Summary identical to Section 2.0 of this Appendix B. The information in this table must reflect the information for the variation being proposed. As specified in Section 2.2.2 above, Proposers submitting a variation must also (2) include a table summarizing the differences between the base variation and the minor variation. Additionally, Proposers must (3) identify all changes to any information provided in response to Sections 2.2.4 through 3.0 of this Appendix B for the proposal variation. If differences from any section in Sections 2.2.4 through 3.0 are not identified, the Company will assume that the information contained in the base variation (Sections 2.2.4 through 3.0) also applies to this proposal variation.

#### 4.1 RESERVED

#### 4.2.0 PROPOSAL VARIATION SUMMARY TABLE

Replicate the entire Summary Table here. The responses to all line items must reflect the variation being proposed.

#### **4.2.1 through 4.3.0 RESPECTIVE SECTIONS AS NECESSARY**

Identify differences to any Appendix B Section 2.1 through 3.0 here.

Note: Section 2.2.2 above requires a table summarizing the differences between the variations, if variations are proposed. For convenience, please duplicate the table summarizing the differences here.

**Certification of Counsel for Proposer  
Hawaiian Electric Company, Inc., Maui Electric Company, Ltd, and Hawai'i Electric  
Light Company, Inc.**

Pursuant to Section 1.7.4 of Hawaiian Electric Company, Inc., Hawai'i Electric Light Company, Inc. and Maui Electric Company, Limited's (each a "Company" and collectively, the "Companies") Request For Proposals for Community-Based Renewable Energy Projects for Low- and Moderate-Income Subscribers, Island of Maui ("RFP"), the Companies may require legal counsel who represent multiple unaffiliated proposers to sign a certification that they have not shared confidential information obtained through the representation of one proposer with any other unaffiliated proposer.

Accordingly, by signing below, I hereby acknowledge, agree and certify that:

(1) in connection with the RFP, I represent the following company that has submitted a proposal(s) for the RFP: \_\_\_\_\_ ("Proposer");

(2) irrespective of any proposer's direction, waiver or request to the contrary, I will not share a proposer's confidential information or the Company's confidential information associated with such proposer, including, but not limited to, a proposer's or Company's negotiating positions, with third parties unaffiliated with Proposer (by contract or organizational structure), including other proposers responding to the RFP;

(3) the Companies may rely on this certification for purposes of the RFP; and

(4) at the conclusion of power purchase agreement negotiations, if any, the Company may require me to sign a certificate certifying that I have not shared a proposer's confidential information or the Company's confidential information associated with such proposer, including, but not limited to, a proposer's or Company's negotiating positions, with third parties unaffiliated with Proposer (by contract or organizational structure), including other proposers responding to the RFP.

\_\_\_\_\_  
Name (print)

\_\_\_\_\_  
Law Firm (if applicable)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Section 1.7.4 of the RFP provides in relevant part that:

In submitting a Proposal in response to this RFP, each Proposer certifies that the Proposal has been submitted in good faith and without fraud or collusion with any other unaffiliated person or entity. The Proposer shall acknowledge this in the Response Package submitted with its Proposal. Furthermore, in executing the NDA provided as Appendix E, the Proposer agrees on behalf of its Representatives (as defined in the NDA) that the Company's negotiating positions will not be shared with other Proposers or their respective Representatives.



In addition, in submitting a Proposal, a Proposer will be required to provide Company with its legal counsel's written certification in the form attached as Appendix B Attachment 1 certifying in relevant part that irrespective of any proposer's direction, waiver, or request to the contrary, that the attorney will not share a proposer's confidential information associated with such Proposer with others, including, but not limited to, such information such as a Proposer's or Company's negotiating positions. If legal counsel represents multiple unaffiliated proposers whose Proposals are selected for the Final Award Group, such counsel will also be required to submit a similar certification at the conclusion of power purchase agreement negotiations that he or she has not shared a proposer's confidential information or the Company's confidential information associated with such Proposer with others, including but not limited to, such information as a Proposer's or Company's negotiating positions.

**Project Interconnection - Data Request**

**FOR PV/BESS GENERATION**

**PROJECT:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**(Nonexclusive Preliminary List)**

**\*\*\*ALL ITEMS ARE REQUIRED AND ALL RESPONSES MUST BE FILLED UNLESS NOT APPLICABLE.\*\*\***

		Response
1)	Please provide a plan map of the Renewable Generation facility. Please indicate the interconnection point to the HECO system.	
2)	<p>Please provide the following generation and load information for the Renewable Generation facility:</p> <p>a. Gross and net output of the facility</p> <p>b. Expected KW and KVAR loads including, but not limited to, generators' auxiliary load curve, process load(s) profile(s), etc.</p> <p>c. Expected minimum and maximum MW and MVAR "import from" AND "export to" HECO.</p>	
3)	<p>Please provide Single-Line Diagram(s), Three-Line Diagram(s), and Protective Relay List &amp; Trip Schedule for the generation and interconnection facilities:</p> <p>a. The Single-line diagram(s) and Three-line diagram (s) should include:</p> <p style="margin-left: 20px;">i. For main and generator step up transformer(s), please show:</p> <ul style="list-style-type: none"> <li>• Transformer voltage and MVA ratings.</li> <li>• Transformer impedance(s).</li> <li>• Transformer winding connections and grounding. If neutrals are grounded through impedance, please show the impedance value.</li> </ul> <p style="margin-left: 20px;">ii. The protective relaying and metering for the generators, transformers, buses, and all other main substation equipment.</p> <p style="margin-left: 20px;">iii. For the potential transformers, please indicate the type, quantity, ratio, and accuracy rating.</p> <p style="margin-left: 20px;">iv. For the current transformers, please indicate the type, quantity, ratio, and accuracy rating, and thermal rating factor.</p> <p style="margin-left: 20px;">v. Auxiliary power devices (e.g. capacitors, reactors, storage systems, etc.) and their rating(s); additional inquiries may be made to obtain technical data for these devices.</p> <p style="margin-left: 20px;">vi. For the interconnection / tie lines (overhead or underground) and the plant's generation system, please provide the following, as applicable:</p> <ul style="list-style-type: none"> <li>• Installation details such as cross-section(s), plan and profiles, etc.</li> <li>• Conductor data such as size, insulation, length etc.</li> <li>• Continuous and emergency current ratings.</li> <li>• Voltage rating (nominal and maximum KV).</li> <li>• BIL rating.</li> <li>• Positive, negative, and zero-sequence impedances (resistance, reactance, and susceptance)</li> <li>• Capacitance or charging current.</li> <li>• Short-circuit current capability.</li> </ul> <p style="margin-left: 20px;">vii. Include station power for facility and all applicable details.</p> <p style="margin-left: 20px;">viii. All applicable notes pertaining to the design and operation of the facility.</p> <p>b. The Protective relay list &amp; trip schedule should list the protected equipment; the relay description, type, style number, quantity, ANSI Device No., and range; and the breaker(s)/switching device(s) tripped, for both the generator protection and the interconnection facilities protection.</p> <p>c. Please provide both a paper and an electronic version (e.g. dgn, dxf, or pdf) of the single-line diagram(s) and the protective relay list &amp; trip schedule.</p> <p>d. Single-line diagrams should be provided for both the generation plant and the interconnection substation.</p>	

**Project Interconnection - Data Request  
FOR PV/BESS GENERATION**

PROJECT: \_\_\_\_\_

DATE: \_\_\_\_\_

(Nonexclusive Preliminary List)

\*\*\*ALL ITEMS ARE REQUIRED AND ALL RESPONSES MUST BE FILLED UNLESS NOT APPLICABLE.\*\*\*

	Response
4) <b>For the PV Inverter Based Generating Facility, please provide the following data, as applicable:</b>	
a. Inverter manufacturer, Type, Size, Impedances. Attach copy of inverter data sheet.	
b. Power Factor Range Capability	
c. Inverter Reactive Power Capability Curve	
d. Auxillary loads (P, Q, Power Factor)	
e. Inverter's Internal Isolation Transformer Grounding Method, if used (i.e. effectively grounded, resonant grounded, low inductance grounded, high-resistance grounded, low-resistance grounded, ungrounded). If the transformer is not solidly grounded, provide the impedance value for the grounding neutral and the impedance for the isolation transformer.	
f. Diagram for Inverter's internal isolation transformer	
g. Switching and service restoration practice	
h. Protection data (voltage ride-through and trip settings, frequency ride-through and trip settings etc.). Include setpoint and clearing time ranges for voltage and frequency settings.	
i. Description of harmonic spectrum of inverter injection (order, magnitude)	
5) <b>For the BESS Inverter Based Generating Facility, please provide the following data (if system is DC coupled, please note DC coupling and reference to 4).</b>	
a. Inverter manufacturer, Type, Size, Impedances. Attach copy of inverter data sheet.	
b. Power Factor Range Capability	
c. Inverter Reactive Power Capability Curve	
d. Auxillary loads (P, Q, Power Factor)	
e. Inverter's Internal Isolation Transformer Grounding Method, if used (i.e. effectively grounded, resonant grounded, low inductance grounded, high-resistance grounded, low-resistance grounded, ungrounded). If the transformer is not solidly grounded, provide the impedance value for the grounding neutral and the impedance for the isolation transformer.	
f. Diagram for Inverter's internal isolation transformer	
g. Switching and service restoration practice	
h. Protection data (voltage ride-through and trip settings, frequency ride-through and trip settings etc.). Include setpoint and clearing time ranges for voltage and frequency settings.	
i. Description of harmonic spectrum of inverter injection (order, magnitude)	
6) <b>Energy Storage System, if applicable</b>	
a. Operation characteristics	
b. Voltage level	
c. Capacity (how long and how much can the battery support)	
d. Deployment strategy/schedule	
e. Energy storage system data sheet	
7) <b>For the PV plant's collector system, please provide the following, as applicable:</b>	
a. Conductor data such as size, insulation, etc.	
b. Continuous and emergency current ratings.	
c. Voltage rating (nominal and maximum kV).	
d. BIL rating.	
e. Positive, negative, and zero-sequence impedances (resistance, reactance, and susceptance).	
f. Capacitance or charging current.	
g. Short-circuit current capability.	

**Project Interconnection - Data Request**

**FOR PV/BESS GENERATION**

**PROJECT:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**(Nonexclusive Preliminary List)**

**\*\*\*ALL ITEMS ARE REQUIRED AND ALL RESPONSES MUST BE FILLED UNLESS NOT APPLICABLE.\*\*\***

		Response
8)	<p><b>For the BESS plant's collector system, please provide the following, as applicable (if system is DC coupled, please note DC coupling and reference to 7):</b></p> <p>a. Conductor data such as size, insulation, etc.</p> <p>b. Continuous and emergency current ratings.</p> <p>c. Voltage rating (nominal and maximum kV).</p> <p>d. BIL rating.</p> <p>e. Positive, negative, and zero-sequence impedances (resistance, reactance, and susceptance).</p> <p>f. Capacitance or charging current.</p> <p>g. Short-circuit current capability.</p>	
9)	<p><b>Please provide the following software models that accurately represent the Facility, as applicable:</b> (For model requirements, refer to the HECO Facility Technical Model Requirements and Review Process)</p> <p>a. Validated PSS/E load flow model up to the point of interconnection. The PSS/E model shall include the main transformer, collection system, generator step-up transformers, inverter systems, and any other components including capacitor banks, energy storage systems, DVAR, etc. An equivalent representation of the collection system, generator step-up transformers, and inverter systems is acceptable. Documentation on the model shall be provided.</p> <p>b. Validated PSS/E dynamic model for the inverter; and other components including energy storage system, DVAR, etc. if applicable. The inverter model shall include the generator/converter, electrical controls, plant-level controller, and protection relays. Generic and Detailed models shall be provided. Documentation on the model(s) shall be provided, including the PSS/E dyre file with model parameters.</p> <p>i. Generic models shall parameterize models available within the PSS/E standard model library.</p> <p>ii. Detailed models shall be supplied by the vendor/manufacturer as user-written models. The uncompiled source code for the user-written model shall be provided to ensure compatibility with future versions of PSS/E. In lieu of the uncompiled source code, a compiled object file and applicable library files shall be provided in PSS/E versions 33 AND 34 format. Updates of the object file compatible with future PSS/E versions must be provided as requested for the life of the project as written in the power purchase agreement. Documentation shall include the characteristics of the model, including block diagrams, values, names for all model parameters, and a list of all state variables.</p> <p>c. Validated PSCAD model of the inverter; and other components including energy storage system, DVAR, auxiliary plant controllers, etc. if applicable. Documentation on the model(s) shall be provided. Refer to PSCAD Model Requirements Memo for model requirements.</p> <p>d. Overlaid plots validating the performance of the three dynamic models for a three-phase fault. Plots shall include voltage, real and reactive power, real and reactive current.</p> <p>e. Validated Aspen Oneliner short circuit model that accurately represents the facility (including energy storage system if applicable), and is valid for all faults conditions anywhere on the Utility system. Documentation on the model(s) shall be provided. (OTHERWISE SEE ADDITIONAL TABS FOR REQUIRED INFORMATION TO MODEL INVERTER AS A GENERATOR OR A VOLTAGE CONTROLLED CURRENT SOURCE)</p>	
10)	<p><b>For the main transformer and generator step-up transformers, please provide:</b></p> <p>a. Transformer voltage and MVA ratings, and available taps. Attach copy of transformer test report or data sheet</p> <p>b. The tap settings used.</p> <p>c. The LTC Control Scheme.</p> <p>d. Transformer winding connections and grounding used. If the transformer is not solidly grounded, provide the impedance value for the grounding method.</p> <p>e. Positive, negative, and zero sequence impedance values.</p>	

**Project Interconnection - Data Request**

FOR PV/BESS GENERATION

PROJECT: \_\_\_\_\_

DATE: \_\_\_\_\_

(Nonexclusive Preliminary List)

\*\*\*ALL ITEMS ARE REQUIRED AND ALL RESPONSES MUST BE FILLED UNLESS NOT APPLICABLE.\*\*\*

		Response
11)	<b>For the circuit breakers and fault-clearing switching devices, including the generator breakers, please provide:</b> a. The voltage, continuous current and interrupting capability ratings. b. The trip speed (time to open).	
12)	<b>For the power fuses, please provide:</b> a. The manufacturer, type, size, and interrupting capability. b. The minimum melt and total clearing curves.	
13)	<b>For the protective relaying, please provide:</b> a. Data for the CTs used with the relaying including the manufacturer, type of CT, accuracy class, and thermal rating factor. b. Data for the PTs used with the relaying including the manufacturer, type of PT, voltage ratings, and quantity.	

Instructions:

Please fill in the data in the green blanks below

(Note: This does not include the internal isolation transformer, if used)

[1] Maximum rated output power =  kVA

[2] Impedances in **Per Unit** based on kVA from [1]

	R	X
Subtransient =	<input type="text"/>	<input type="text"/>
Transient =	<input type="text"/>	<input type="text"/>
Synchronous =	<input type="text"/>	<input type="text"/>
Negative Sequence =	<input type="text"/>	<input type="text"/>
Zero Sequence =	<input type="text"/>	<input type="text"/>

[3] Neutral impedance (if any) in actual **Ohms**:

R	X
<input type="text"/>	<input type="text"/>

NOTE: These parameters should reflect the inverter response for all types of faults at any point on the electrical system to which the inverter is connected. This includes faults at the inverter output terminals, and also on the 138 kV transmission system. If the stated parameters do not cover this range, please state the adjustments needed to these parameters to accurately represent the inverter response across this range.

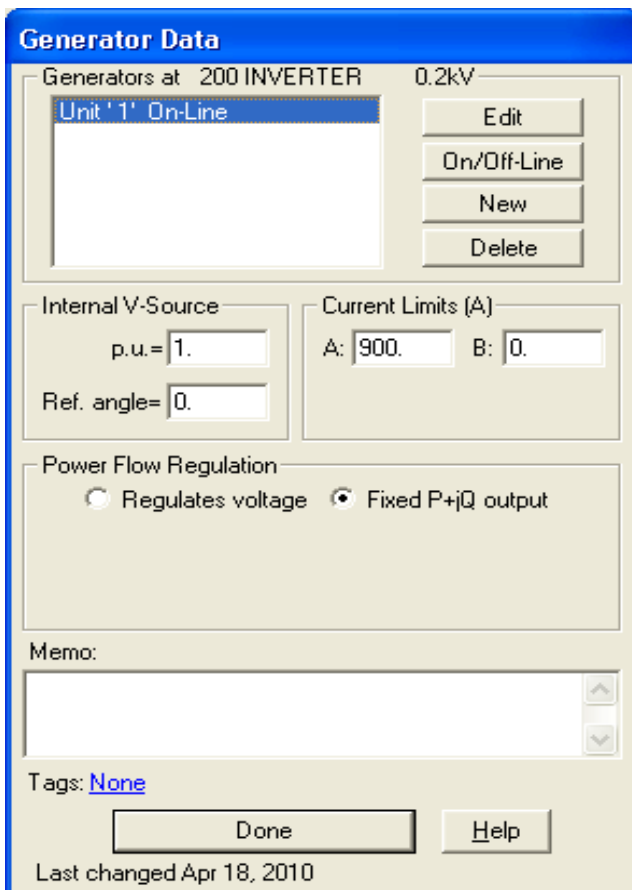
These parameters will be used to model the inverter in the Aspen Oneliner program as shown in the sample dialog box below:

Instructions:  
Please fill in the data in the green blanks below

- [1] Internal open circuit voltage  
Magnitude =  Per Unit  
Angle =  Degrees
- [2] AC Output Current Limit =  Amps

NOTE: These parameters should reflect the inverter response for all types of faults at any point on the electrical system to which the inverter is connected. This includes faults at the inverter output terminals, and also on the 138 kV transmission system. If the stated parameters do not cover this range, please state the adjustments needed to these parameters to accurately represent the inverter response across this range.

These parameters will be used to model the inverter in the Aspen Oneliner program as shown in the sample dialog box below:



Instructions:

Please fill in the data in the green blanks below

[1] Inverter MVA Rating:  MVA

[2] Voltage-Current Characteristics:

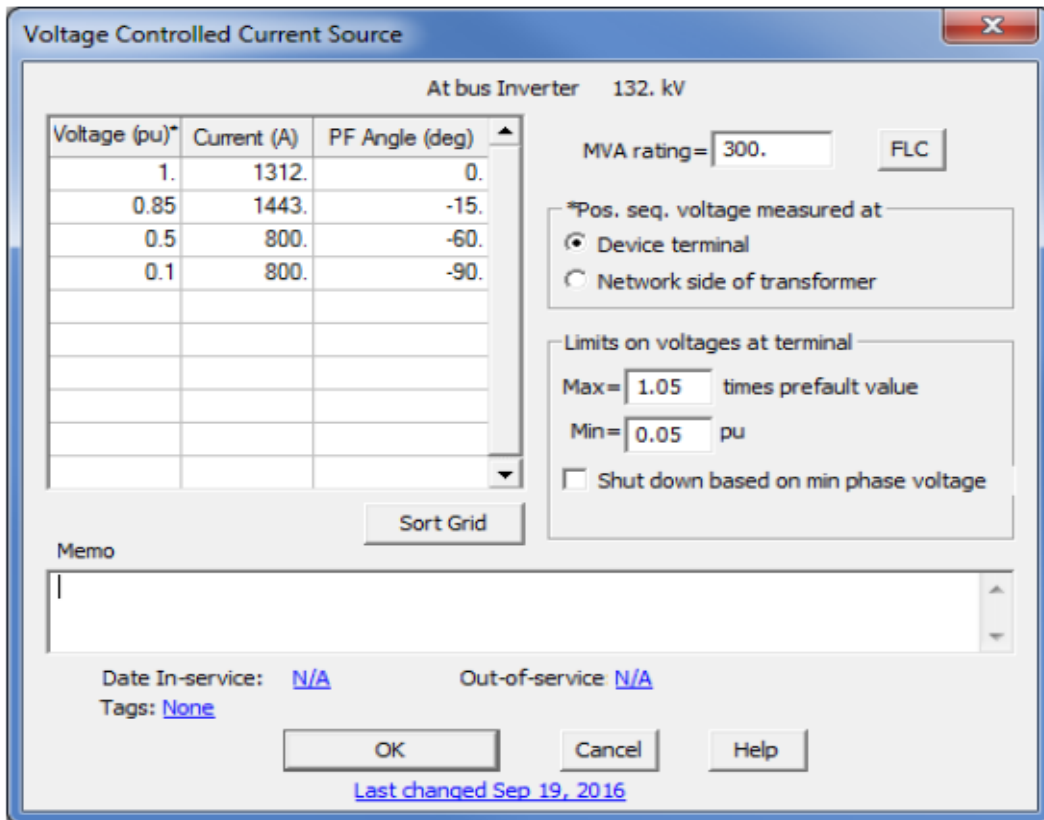
Voltage PU	Current (A)	PF Angle (deg)
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

[3] Location of Voltage Measurement:  
 Device Terminal OR  
 Network side of Transformer

[4] Maximum Voltage:  Times prefault value

[5] Minimum Voltage  Per Unit

These parameters will be used to model the inverter in the Aspen Oneliner program as shown in the sample dialog box below:





Instructions:

Please fill in the data in the green blanks below

(Note: This is not required if an internal isolation transformer is not used)

[1] Transformer rated power =  kVA

[2] Winding Configuration  
 Inverter Side =  Delta/Wye  
 Customer Side =  Delta/Wye

[2] Impedances in **Per Unit** based on kVA  
 Positive Sequence = 

R	X

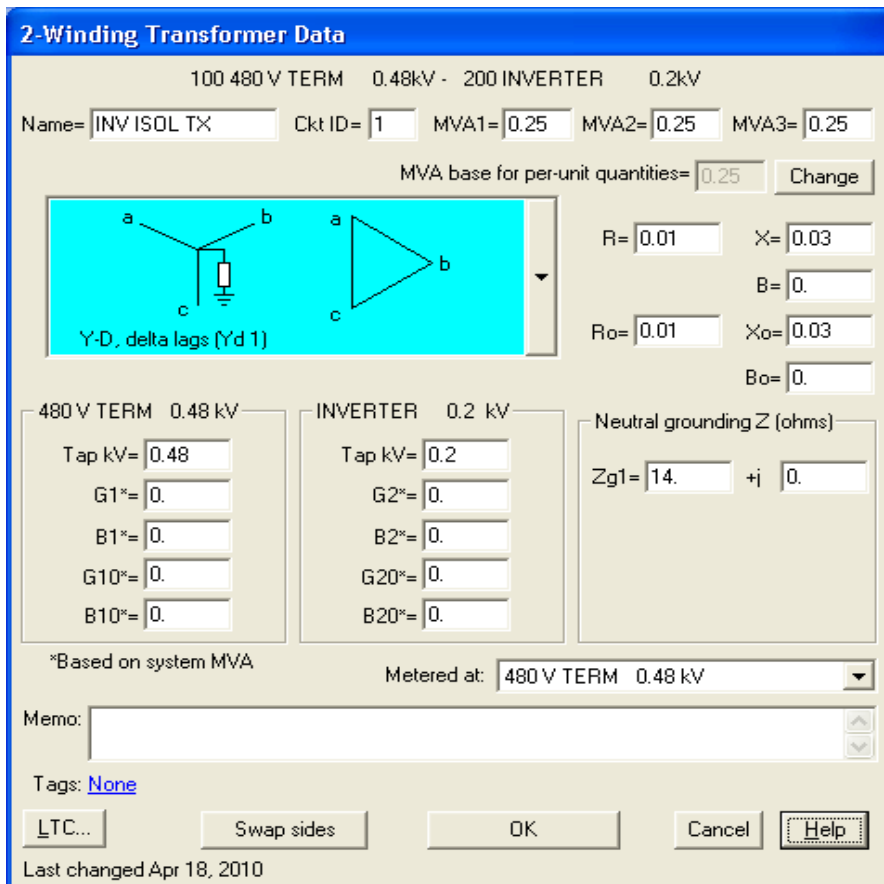
  
 Zero Sequence = 

R	X

[3] Neutral impedance (if any) in actual **Ohms**:  

R	X

These parameters will be used to model the inverter in the Aspen Oneliner program as shown in the sample dialog box below:





# HAWAIIAN ELECTRIC FACILITY TECHNICAL MODEL REQUIREMENTS AND REVIEW PROCESS

August 23, 2021



## Table of Contents

HAWAIIAN ELECTRIC FACILITY TECHNICAL MODEL REQUIREMENTS AND REVIEW PROCESS .....	0
1 INTRODUCTION.....	1
2 FACILITY TECHNICAL MODEL REQUIREMENTS.....	2
2.1 Overview of Submission .....	2
2.2 Background Functional Description of GFM and GFL .....	3
2.3 General requirements for all technical models.....	3
2.4 Requirements for generation facility PSCAD model .....	4
2.5 Requirements for generation facility PSS/E power flow model.....	4
2.6 Requirements for generation facility user defined PSS/E dynamic model.....	5
2.7 Requirements for generation facility generic PSS/E dynamic model .....	6
2.8 Requirements for generation facility ASPEN model .....	6
3 GENERATION FACILITY TECHNICAL MODEL REVIEW PROCESS.....	7
3.1 Model review in PSCAD .....	7
3.2 Model review in PSS/E.....	7
3.3 GFM Model review in PSCAD and PSS/E .....	10
4 TYPICAL ISSUES IDENTIFIED FROM THE FACILITY MODEL SUBMITTALS DURING THE PAST RFP PROCESS.....	13
REFERENCE .....	14
APPENDIX A: SAMPLE OVERLAID GENERATION FACILITY TECHNICAL MODEL OUTPUT PLOT FOR THREE-PHASE FAULT.....	15
APPENDIX B: SAMPLE TEST SYSTEM TOPOLOGYINFORMATION .....	17



# 1 INTRODUCTION

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This document summarizes requirements of generation facility technical model submittals for request for proposals for variable renewable dispatchable generation and energy storage and describes the review process for model submittals. The requirements and examples provided are based on the Company's current information as of the date of this document and are subject to change.



## 2 FACILITY TECHNICAL MODEL REQUIREMENTS

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To fully investigate impacts of the proposed generation facility on Hawaiian Electric's system and correctly identify any mitigation measures, the proposed generation facility technical model, along with related technical documents, will need to be submitted for review prior to System Impact Study (SIS).

### 2.1 Overview of Submission

For all generation facility types, the technical model submittal shall include:

1. PSCAD model<sup>1</sup>
2. PSS/E power flow model
3. Standard Library PSS/E dynamic model
4. User defined PSS/E dynamic model, and
5. ASPEN Oneliner model

For generation facilities categorized as inverter-based resources, both Grid Following (GFL) and Grid Forming (GFM) Mode capability may be required from the project. In this case, for each project, two sets of models shall be submitted: one with the project in GFL mode, and the other with the project in GFM mode. The GFL mode technical model submittal shall follow the list above. The GFM mode technical model submittal shall include:

6. GFM PSCAD model
7. GFM User defined PSS/E dynamic model
8. GFM ASPEN Oneliner model if it differs from the GFL model

Subject to Hawaiian Electric's approval, if the manufacturer can certify current standard library dynamic models accurately represent their equipment, standard library dynamic models may be provided and used in lieu of user defined dynamic models. As an example, if the generation facility is a traditional synchronous machine, of which the technology is standardized and widely understood across the industry, it can generally be accurately represented with current standard library dynamic models and thus a user defined dynamic model will not be required.

Along with the technical models, the following documents shall also be submitted for review:

9. User manual for all technical models, including a description of GFM functionality if GFM is used.
10. Generation facility one-line diagram
11. Generation unit manufacturer datasheet(s)
12. Generation unit reactive power capability curve(s)
13. Overlaid generation facility technical model output data for three-phase fault and single-phase fault. (Sample plots are shown in Appendix A)

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<sup>1</sup> For specific PSCAD model requirements, refer to <http://www.electranix.com/wp-content/uploads/2021/02/Requirements-Rev.-10-Feb-3-2021.pdf>



## 2.2 Background Functional Description of GFM and GFL

Grid Following and Grid Forming are terms with some ambiguity in current industrial usage. For the purpose of this document, the following definitions are provided as high level functional descriptions. For more detailed descriptions of what is required for each of these control modes, it is recommended to carefully review descriptions of the functional tests which will be performed.

### Grid Following (GFL) Mode:

Grid Following is defined as follows: An inverter-based resource that relies on fast synchronization with the external grid in order to tightly control the inverter's active and reactive current outputs. If these inverters are unable to remain synchronized effectively during grid events or under challenging network conditions, they are unable to maintain controlled, stable output. Advanced versions of these devices (Advanced Inverters) can provide grid supporting functions such as: voltage and frequency ride-through, volt-VAR, frequency-Watt, volt-watt, etc.; when they are able to remain synchronized.

### Grid Forming (GFM) Mode:

Grid Forming is defined as follows: GFM controls set an internal voltage waveform reference such that an inverter with the GFM control shall be able to synchronize with the grid and regulate active and reactive power generation appropriately, regardless of the grid's strength, or operate independently of other generation. An inverter with GFM control shall immediately respond to grid disturbances to support stability of the grid and maintain its own control stability during the system disturbances.

## 2.3 General requirements for all technical models

All technical models need to represent the whole generation facility, not only a generation unit such as one inverter or as separate files representing pieces of the facility. At minimum, the following equipment shall be included in the single whole generation facility model:

1. Generation unit, such as inverter with DC side model, or a rotating machine with model of exciter and governor.
2. Step up transformer, with correct impedances and winding configuration
3. Collection system, aggregated per WECC guidance<sup>2</sup>
4. Main interconnection transformer, or GSU, with its tap changer if applicable, including correct impedances and winding configuration
5. Grounding transformer if used
6. VAR compensation device, such as cap bank or STATCOM, if applicable
7. Power plant controller (not for ASPEN model)
8. Documentation
9. Gen-tie line (as applicable)

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<sup>2</sup> <https://www.wecc.org/Reliability/WECCWindPlantPowerFlowModelingGuide.pdf>



Equivalent or aggregated representations of the collection system, generator step-up transformers, and inverter systems are acceptable if it can accurately represent the generation facility and its response characteristics.

## 2.4 Requirements for generation facility PSCAD model

In addition to the general requirements mentioned above, the generation facility PSCAD model shall satisfy requirements as described in the latest version of the PSCAD Model Requirements document from Electranix Corporation (<https://www.electranix.com/the-electranix-library/>) and provided by Hawaiian Electric.

The control implementation (e.g., turbine controls, inverter controls, protection and measurement algorithms, and plant-level controller) in the generation facility PSCAD model shall implement the actual control code from the equipment. The PSCAD model shall provide output channel of voltage and frequency measured by the Facility and used for Facility's control and protection.

For the generation facility with grid-forming control, a document which describes the general mechanism and implementation of the grid-forming control is required.

## 2.5 Requirements for generation facility PSS/E power flow model

The generation facility PSS/E power flow model shall be provided for PSS/E versions 33, 34 and 35. Besides the general requirements mentioned above, the following modeling data shall be provided in the model:

1. Conductor
  - a. Impedance, both positive sequence and zero sequence
  - b. Rating: Rating A – normal rating, and Rating B – emergency rating
2. Transformer
  - a. Nominal voltages of windings
  - b. Impedance data: specified R and X
  - c. Tap ratios
  - d. Min and Max tap position limits
  - e. Number of tap positions
  - f. Regulated bus
  - g. Ratings: Rate A – normal rating; Rate B – emergency rating
  - h. Winding configuration
3. Reactive power compensation, if applicable
  - a. Fixed Shunts: G-Shunt (MW), B-Shunt (MVar)
  - b. Switched Shunts: Voltage limits (V<sub>hi</sub> and V<sub>low</sub>), mode of operation (fixed, discrete, continuous), regulated bus, Binit (MVar), steps and step size (MVar)
4. Generation unit
  - a. P<sub>max</sub>
  - b. P<sub>min</sub>
  - c. Q<sub>max</sub>
  - d. Q<sub>min</sub>
  - e. Name plate MVA



- f. Transformer data: R Tran, X Tran, and Gentap.
- g. Voltage control point

## 2.6 Requirements for generation facility user defined PSS/E dynamic model

The submitted user defined PSS/E dynamic model shall meet the following requirements:

1. The generation facility PSS/E dynamic model shall be provided for PSS/E versions 33, 34 and 35.
2. The project shall be modeled at full output per the project's Interconnection Request.
3. User defined dynamic models must accurately model all the relevant control modes and characteristics of the equipment, such as:
  - a. All available voltage/reactive power control modes
  - b. Frequency/governor response control modes
  - c. Voltage and frequency ride-through characteristics
  - d. Power plant controller or group supervisory functionality
  - e. Appropriate aggregate modeling capability
  - f. Charging mode if applicable (e.g., for a battery energy storage device)
4. Dynamic model source code (.flx, .for, .f90, .f, etc.), or dynamic linked library (.dll), and PSS/E dyr file shall be provided.
5. User defined dynamic model plant-specific settings shall comply with requirements listed in the Power Purchase Agreement, including ride-through thresholds and other specified control settings if applicable.
6. User defined dynamic models related to individual units shall be editable in the PSS/E graphic user interface. All model parameters (CONS, ICONS, and VARS) shall be accessible and shall match the description in the model's accompanying documentation.
7. User defined dynamic models shall have all their data reportable in the "DOCU" listing of dynamics model data, including the range of CONS, ICONS, and VARS numbers. Models that apply to multiple elements (e.g., park controllers) shall also be fully formatted and reportable in DOCU.
8. User defined dynamic models shall be capable of correctly initializing and run through the simulation throughout the range of expected steady state starting conditions without additional manual adjustments.
9. User defined dynamic models shall be capable of allowing all documented (in the model documentation) modes of operation without error.
10. User defined dynamic model shall be accompanied by the following documentation:
  - a. A user's guide for each model
  - b. Appropriate procedures and considerations for using the model in dynamic simulations
  - c. Technical description of characteristics of the model
  - d. Block diagram for the model, including overall modular structure and block diagrams of any sub-modules
  - e. List of plant-specific settings, which may include:
    - i. Ride-through thresholds and parameters
    - ii. Plant-level voltage controller settings
    - iii. Power ramp rate settings
    - iv. ICON flag parameters for specific control modes





- v. Deadbands
- vi. Initial State of Charge (SOC)
- f. Values, names and detailed explanation for all model parameters
- g. List of all state variables, including expected ranges of values for each variable

## 2.7 Requirements for generation facility generic PSS/E dynamic model

The submitted generic PSS/E dynamic model should meet the following requirements:

1. All generic PSS/E dynamic models must be standard library models in PSS/E.
2. The generation facility PSS/E dynamic model shall be provided for PSS/E versions 33, 34 and 35.
3. The project shall be modeled at full output per the project's Interconnection Request.
4. Generic dynamic models must accurately model all the relevant control modes and characteristics of the equipment, such as:
  - a. All available voltage/reactive power control modes
  - b. Frequency/governor response control modes
  - c. Voltage and frequency ride-through characteristics
  - d. Power plant controller or group supervisory functionality
  - e. Appropriate aggregate modeling capability
  - f. Charging mode if applicable (e.g., for a battery energy storage device)
5. PSS/E dyr file shall be provided.
6. Generic dynamic models' plant-specific settings should comply with requirements listed in the Power Purchase Agreement, including ride-through thresholds and other specified control settings if applicable.
7. Generic dynamic models shall be capable of correctly initializing and run through the simulation throughout the range of expected steady state starting conditions without additional manual adjustments.
8. Generic dynamic models shall be accompanied by the following documentation:
  - a. A user's guide for each model
  - b. Appropriate procedures and considerations for using the model in dynamic simulations
  - c. Technical description of characteristics of the model
  - d. List of plant-specific settings, which may include:
    - i. Ride-through thresholds and parameters
    - ii. Plant-level voltage controller settings
    - iii. Power ramp rate settings
    - iv. ICON flag parameters for specific control modes
    - v. Deadbands
    - vi. Initial State of Charge (SOC)

## 2.8 Requirements for generation facility ASPEN model

Besides the general requirements, validation results of three-phase fault current from the generation unit represented in the generation facility ASPEN Oneliner model shall be provided.



## 3 GENERATION FACILITY TECHNICAL MODEL REVIEW PROCESS

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To review the generation facility technical model, the following procedures are performed in the PSCAD and PSS/E environment. A review of the results will be documented and provided to the Customer for confirmation of model acceptance or further model updates.

### 3.1 Model review in PSCAD

- 1) Review model data against latest version of the PSCAD Model Requirements document from Electronix Corporation (<https://www.electronix.com/the-electranix-library/>) provided by Hawaiian Electric. In this step, it will be determined whether the model is complete, generation facility settings are according to the Power Purchase Agreement, and if the model can be compiled and run without any error. Checklists are provided in this document which are useful for both preparing a model submission, and for reviewing a model submission.
- 2) Initialization test:  
In this step, the generation facility PSCAD model will be determined whether the model initialization is acceptable. Hawaiian Electric requires that:
  - 1) The PSCAD model shall initialize as quickly as possible (e.g. <1-3 seconds) to user defined terminal conditions.
  - 2) Project PSCAD model shall initialize properly and that the same power flow and voltage conditions shall be observed between the PSCAD and PSS/E models after initialization.
- 3) Voltage and frequency ride-through tests:  
In this step, the generation facility PSCAD model ride-through performance will be reviewed by performing voltage and frequency ride-through simulations in PSCAD. The review will focus on the generation facility model dynamic response during and after ride-through and generation facility trip time.
- 4) Fault simulation tests:  
Two types of fault tested at the Point of Interconnection bus of the generation facility will be performed in this step.
  - i) 3-phase to ground fault with 6-cycle clearing time (same as the PSS/E ring down model test described in the following section).
  - ii) 1-phase to ground fault simulation with 6-cycle clearing time.

In this test, fault current contribution from the generation facility observed in the simulation will be reviewed by comparing it against the generation facility technical document.

### 3.2 Model review in PSS/E

- 1) **Model data review:**  
Review model data based on the requirements for PSS/E power flow and dynamic model provided by Hawaiian Electric. In this step, the review determines whether the model is complete, generation facility settings is according to the PPA, and model can be compiled and run without any error.



a. Steady State Model Data Review

Review the ratings and impedances of all equipment in the ASPEN Oneliner, PSS/E and PSCAD models and check for discrepancies.

Table 1. Steady State Model Data Review

Equipment	Comments
Gen-Tie Line	PSS/E, PSCAD and ASPEN models should match
Main Power Transformer Impedance	PSS/E, PSCAD and ASPEN models should match
Main Power Transformer Impedance	PSCAD and ASPEN models should match
PV Collector System Data	PSS/E, PSCAD and ASPEN models should match
BESS Collector System Data	PSS/E, PSCAD and ASPEN models should match
Inverter Pad Mount Transformer Impedance	PSS/E, PSCAD and ASPEN models should match
Inverter Pad Mount Transformer Configuration	PSCAD and ASPEN models should match
Inverter Power Flow Data	PSS/E and PSCAD models should match
Voltage Control Point	PSS/E and PSCAD models should match

b. Dynamic Data Review

Compare the various dynamic model parameters and note any discrepancies.

Table 2. Dynamic Model Data Review

Equipment	Comments
Power Plant Controller (PPC)	Review number of PPCs. Should represent actual setup of plant when in service.
Control Flags	PSS/E and PSCAD control flags should match.
Control Bus/Point of Measurement	Control buses should match in PSS/E and PSCAD models.
Frequency Control Dead Band	The frequency thresholds for primary and secondary control should match in the PSCAD and PSS/E models.
Initial State of Charge (SOC)	Make sure the initial state of charge is set up correctly to prevent initialization issues.
Voltage and Frequency Ride Through	The voltage and frequency ride through settings should match in the PSS/E user-written, PSS/E generic and PSCAD models.
P/Q priority data	The P/Q priority flags should match in the PSS/E user-written, PSS/E generic and PSCAD models

**2) Flat start test:**

PSS/E models shall initialize correctly and be capable of successful “flat start” testing using the 20 Second No-Fault simulation: This test consists of a 20 second simulation with no disturbance applied. Flat run in a two-machine system (one machine is a synchronous machine, e.g., GENCLS model, and the other machine is a project’s model.)



**3) Ring down test:**

PSS/E models shall initialize correctly and be capable of successful “ring down” testing using the 60 Second Disturbance Simulation: This test consists of the application of a 3-phase fault for 6 cycles at POI bus, followed by removal of the fault without any lines being tripped. The simulation is run for 60 seconds to allow the dynamics to settle.

**4) Voltage and frequency ride-through tests:**

In this step, the generation facility PSS/E model ride-through performance will be reviewed by performing voltage and frequency ride-through simulation in PSS/E. The review will focus on the generation facility model dynamic response during and after ride-through and generation facility trip time. **The procedures and values listed in this section are illustrative and serve as examples only; ride-through durations shall be tested against the minimum requirements outlined in the respective PPA.**

a. Voltage Ride-Through

- In these simulations, the POI voltage is varied to test the facility’s ride-through capabilities and responses to POI voltage excursions. In the PSS/E simulations, two sets of tests are performed: one for testing the ride-through capabilities and the other for testing the responses to voltage excursions. These two sets of tests are similar, except that the grid equivalent representation is different. For the ride-through tests, the grid equivalent is represented by a generator with a very large MVA, which connects to the POI bus directly.
  - o *As an example, for the voltage excursion response tests, the grid equivalent may be represented by a 200 MVA generator (actual MVA rating dependent on POI, please consult the Company for representative values) which connects to the POI through a branch with a reactance of 0.1 p.u.*
- In the PSCAD simulations, the focus is on testing the facility’s reactive power responses to POI voltage excursions, and not on testing the voltage ride-through capability.

Table 3 shows the voltage excursions that will be simulated in the PSCAD tests.

Table 3. Voltage	Duration (s)
1.20	0.8
1.10	2.0
0.88	2.0
0.70	2.0

Each of the above discussed tests were performed for the following three generation dispatches:

- i. PV output only: In this dispatch, the PV unit is at maximum output and the BESS unit is online at 0 MW.
- ii. BESS output only: In this dispatch, the BESS unit is discharging at maximum output and the PV unit is online at 0 MW.



- iii. PV charging BESS: In this dispatch, the PV unit is at its maximum output and is charging the BESS at its minimum level.
  
- b. Frequency Ride-Through
  - In these simulations, the system frequency is varied to test the facility's responses to grid's frequency excursions. In the PSS/E tests, high and low frequency excursions are simulated to mimic the frequency ride through thresholds specified in the PPA and the response of the facility is observed. Both the frequency ride-through capability of the facility and its active power response to frequency excursions are tested in the PSS/E simulations.
  - In the PSCAD simulations, the focus is on testing the facility's active power responses to frequency excursions, and not on testing the frequency ride-through capability. Table 4 and Table 5 show example frequency excursions that are simulated in the PSCAD tests.

Table 4. Frequency Excursions for PSCAD High Frequency Response Test

Frequency Level (Hz)	Duration (s)
60.1	2.0
63.0	2.0

Table 5. Frequency Excursions for PSCAD Low Frequency Response Test

Frequency Level (Hz)	Duration (s)
59.9	2.0
56.0	2.0

### 5) Expected Model Performance

- a. Matching steady-state model parameters between the PSS/E user-written, generic models and the PSCAD model.
- b. Matching control options between the three types of models.
- c. Matching voltage and frequency ride-through parameters between the three types of models. The settings should meet the ride-through requirements specified in the PPA.
- d. Flat run results do not show any movement for any of the three models.
- e. Ring-down simulation results show stable and proper responses, and the responses from the three models should show reasonable matches.
- f. Ride-through simulation results should show stable and proper responses, and the responses should show reasonable matches. The ride through performance should meet the PPA requirements.

### 3.3 GFM Model review in PSCAD and PSS/E

The tests described below will be performed in addition to the GFL model tests described in section 3.1.



**Test notes:**

- Applicable for generation facilities which have grid-forming control capability
- Assumption is that BESS has available energy and is dispatched suitably for the tests
- Each test will be repeated with three initial operating conditions, as applicable (PV output only, BESS output only, PV charging BESS)
- The project should be configured to be in GFM mode throughout these tests

**1) Able to black start and operate in an electrical island (applicable if project is providing black start capability):**

Test sequence: energize main power transformer from project side, then connect project to a load, then apply a bus fault at the POI, then remove the fault. Expected results: voltage and frequency should be stable and settle back to close to their nominal values after the disturbances.

**2) Loss of the last synchronous machine:**

Test system will be a three-machine system including: a synchronous machine modeled by GENROU with a simple excitation system model (e.g., SCRX) and a simple governor model (e.g., TGOV1), a load with both real and reactive components, and duplicates of a project's model. Duplicates of a project's model are utilized here to check if the project is able to share real and reactive power properly with other generators. Test event: trip the synchronous generator. Expected results: voltage and frequency should be stable and settle back to close to their nominal values after the disturbance, within the tolerance of the droop and deadband settings.

**3) Weak grid operation:**

Test system is the project plant model and an equivalent voltage source behind an impedance connected at the POI. The test will be to gradually decrease MVA of the equivalent voltage source within a range and check if the project's model is able to work with the studied MVA range.

**4) Able to operate in harmony with other converter resources and synchronous machines:**

Test system is the three-machine system including: a synchronous machine modeled by GENROU with a simple excitation system model and a simple governor model, a load with both real and reactive components, and duplicates of a project's model. Simulation tests to be performed may include load step up/down, ringdown, voltage ride through and frequency ride-through tests. Expected results: voltage and frequency should be stable and settle back to close to their nominal values after the disturbances.

Particularly related to frequency control characteristics, we will test for configurable frequency droop control and configurable deadband characteristics. The frequency deadband should be settable in the range from +/- 0.01 Hz to +/- 1.0 Hz and the frequency droop shall be settable in the range of 0.1% to 10% with a typical value of 4%. A sample characteristic of frequency droop control with deadband is shown in Figure 1.

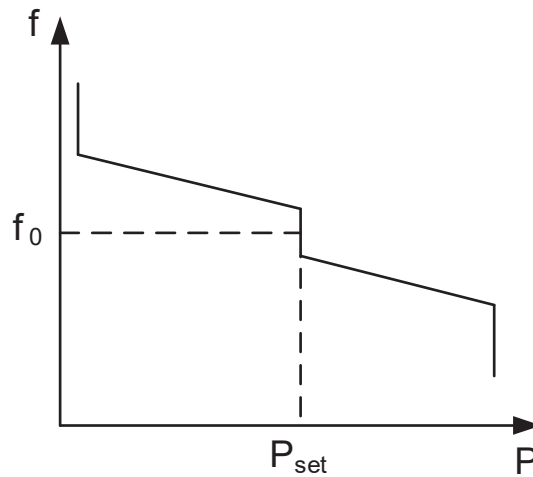


Figure 1 – Frequency Droop Control Characteristic with Deadband

**5) Switching from an electrical island to a grid-connected configuration while in GFM mode (dependent on specific project technology and controls)**

Test system is the two-machine system. Test sequence: energize main power transformer from project side, then connect project to a load (if project model does not have black-start capability, the plant will be initialized using a voltage source which will be switched out after initialization). At this point, the project will be operating in an island. Then switch in the synchronous generator. Expected results: voltage and frequency should be stable and settle back to close to their nominal values after the disturbances.

**Tests to be performed for PSS/E models only**

**6) Reduction in frequency deviation in GFM mode**

Test system will be a relevant HECO island system model. Test event is loss of a large generator. Project model will be in GFL mode and GFM mode. Result: less degree of frequency deviation is expected when project is in GFM mode than when the project is in GFL mode.

**ASPEN Model Check**

**7) A review of the ASPEN Oneliner generation models will be performed.**

As mentioned above, two models are expected for each project: one model for GFL mode, and the other for GFM mode. Documentation associated with the models should be provided. The model review will check if the components of a project are modeled properly, such as transformers, equivalent collector system, equivalent generator, etc., and that the model data are consistent to the PSS/E and PSCAD model data. A fault simulation test will also be performed in a two-machine system. Total current at the fault location and contribution from each machine will be reviewed and documented.



## 4 TYPICAL ISSUES IDENTIFIED FROM THE FACILITY MODEL SUBMITTALS DURING THE PAST RFP PROCESS

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### 1. Missing documentation

Only generation technical facility models are submitted, but no model user manual or any other documentation. Without model documentation, it is very difficult to know the correct procedures of using the technical models and identifying issues during the review.

### 2. Model incompleteness

Often, the model of a single generation unit, such as an inverter, is submitted instead of model of the whole generation facility, which is insufficient. The model of the generation facility should include models for all equipment listed in the section of “General requirements for all technical models”.

### 3. Settings in the model

Type issues in this category are:

- The PSCAD (GFL and/or GFM) and PSS/E model ride-through settings are not consistent with the minimum settings defined in the Power Purchase Agreement.
- Generation MW is not set as defined.
- Model is set for 50 Hz instead of 60 Hz

### 4. Model function issues

Some models do not function as expected during different test scenarios. For example:

- Fault current contribution from the generation facility is higher than what is described in the generation facility datasheet
- Generation level is not stable with provided settings during the initialization test
- Inadequately damped oscillations observed in the ringdown test
- Ride-through performance does not reach minimum requirements defined in the Power Purchase Agreement

### 5. Power Plant Controller (PPC)

Often, the PPC control had not yet been fully considered when models are submitted, which results in improperly configured PPC controls, or model submissions missing the PPC altogether. The PPC(s) included in the facility model should include coordination functionality between the plant components, and should represent the actual planned implementation.





## REFERENCE

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- [1] New England Iso Planning procedure – Interconnection planning procedure for generation and elective transmission upgrades
- [2] ERCOT Planning Guide, 2019
- [3] PJM MOD-032 Steady State, Dynamics, and Short Circuit Modeling Data Requirements and Reporting Procedures Document



## APPENDIX A: SAMPLE OVERLAID GENERATION FACILITY TECHNICAL MODEL OUTPUT PLOT FOR THREE-PHASE FAULT

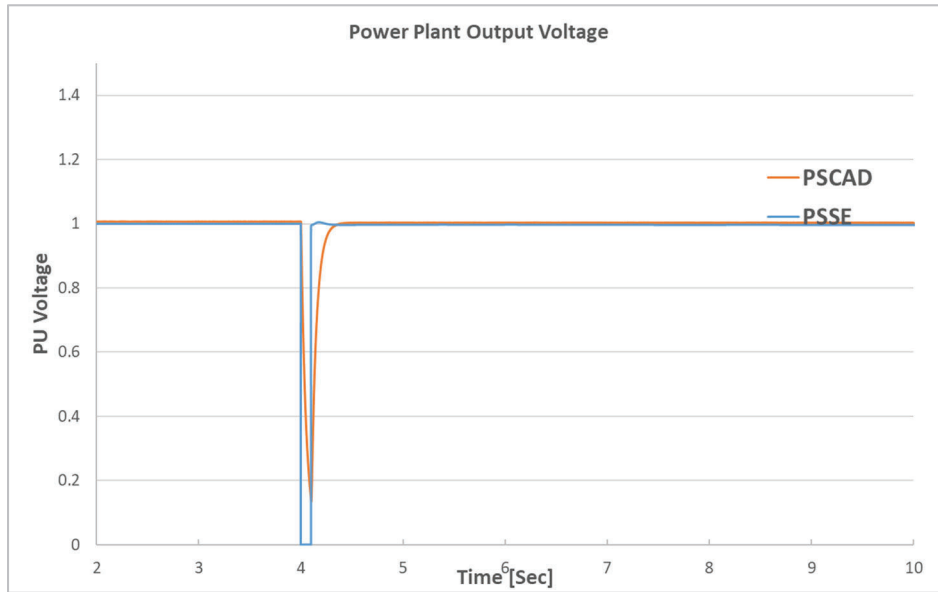


Figure 1: Overlaid plot for power plant voltage

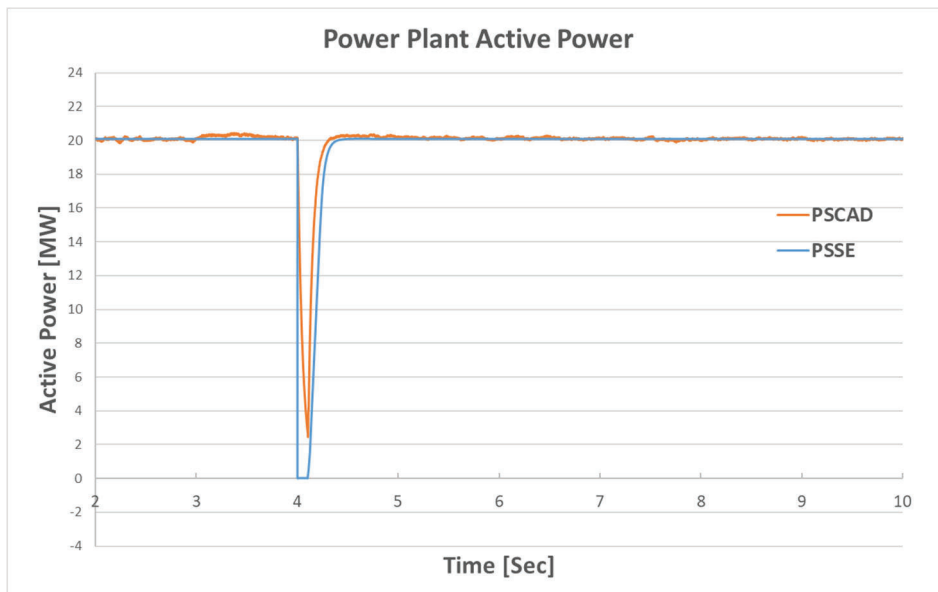


Figure 2: Overlaid plot for power plant active power generation

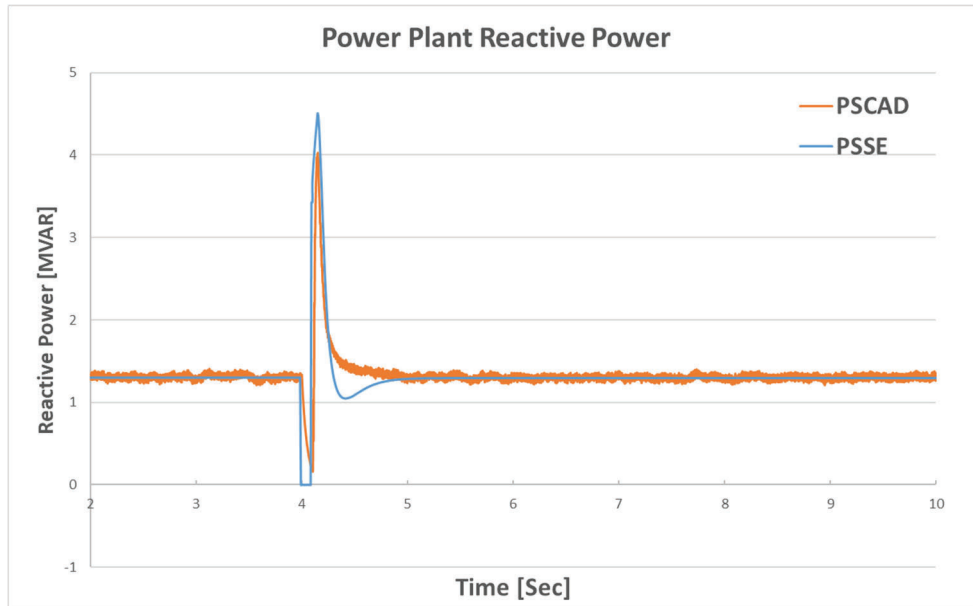


Figure 3: Overlaid plot for power plant reactive power generation



## APPENDIX B: SAMPLE TEST SYSTEM TOPOLOGY INFORMATION

On weak grids such as island systems, it is important to test the models using a representative high Thevenin equivalent impedance.

A typical topology of testing circuit which represents Hawaiian Electric system for 46 kV project is shown in Figure 4. Sample 46 kV Thevenin equivalent impedance is available upon request for model testing.

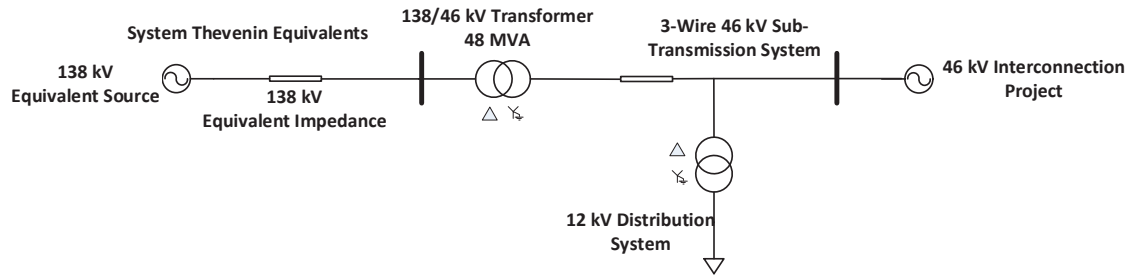


Figure 4: Testing circuit single line diagram for 46 kV project

A typical topology of testing circuit which represents Hawaiian Electric system for 138 kV project is shown in Figure 5. Sample 138 kV Thevenin equivalent impedance is available upon request for model testing.

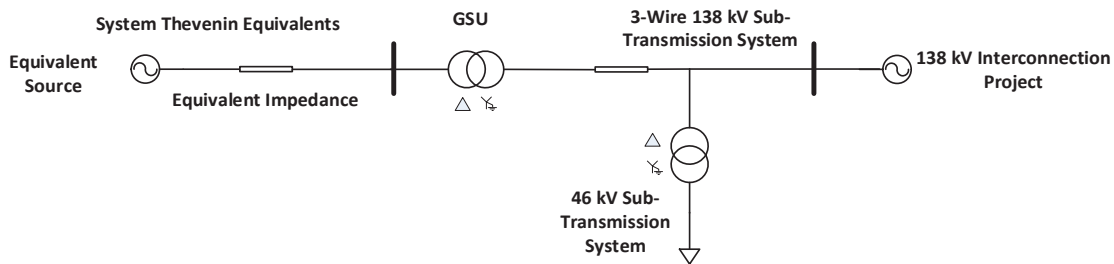


Figure 5: Testing circuit single line diagram for 138 kV project

## DETAILED INSTRUCTIONS FOR COMMUNITY OUTREACH PLAN

- The Community Outreach Plan should be as current and explanatory as possible.
  - The Community Outreach Plan information must be included in the information Proposers selected to the Final Award Group make available on their website when the website is posted publicly.
- Proposers selected to the Final Award Group must develop a public Project website, which shall include all the information on the Community Outreach Plan table for their Project.
- Proposers must develop Project presentations that include all the information on the Community Outreach Plan table (sample template provided).
- Due to the uncertainty of the duration of the COVID-19 pandemic, all Proposers are required to plan for both in-person and virtual community meetings. As we near the dates that community meetings are scheduled, in the interest of public health and safety, the conditions at the time will determine if in-person meetings or virtual meetings will be required.
  - Virtual community meetings can either be community televised, or online, but must incorporate technology that allows for live engagement and interaction between the Proposer and community participants.
- Proposers must communicate important information about the Project with stakeholders in advance of community meetings.
- Proposers must perform media outreach (earned media) and advertising (paid media) to raise community awareness of any public meeting. Media advisories (sample attached) must be issued to the following media and organizations a minimum of 30 days prior to a public meeting. Media advisories do not need to be reviewed and approved by Hawaiian Electric, but must be shared with Hawaiian Electric for awareness.
  - For Oahu Projects
    - Star Advertiser
    - Civil Beat
    - Hawaii News Now
    - KHON2 News
    - KITV4 News
    - Neighborhood Boards
  - For Maui County Projects
    - Maui News
    - Maui Now
    - Civil Beat
    - Hawaii News Now
    - KHON2 News
    - KITV4 News
    - The Moloka'i Dispatch (for Moloka'i Projects)
  - For Hawaii Island Projects
    - Hawaii Tribune Herald
    - West Hawaii Today
    - Civil Beat
    - Hawaii News Now
    - KHON2 News
    - KITV4 News
- Advertisements must be placed in area community publications.

- Guidance from the Company can be provided upon request
- Information in the ads must be consistent with the media advisory
- Public comments in support and in opposition to the proposed Project must be compiled and filed verbatim with the Public Utilities Commission.
- Proposers must work with and inform neighboring communities and stakeholders to provide community members timely information during ALL phases of the project, which must include, but not be limited to the Power Purchase Agreement negotiation period, the permitting process periods, and throughout construction.
- Should any COVID-19 related events interfere with the Proposer's ability to perform the listed actions, Proposer should inform the Company immediately of such effects for Company's consideration and guidance, and possible proposal of alternate actions.

**CONTACT:**      **NAME, 808.XXX.XXXX**      **FOR IMMEDIATE RELEASE**  
Email address      Date

### Media Advisory: Title

Project description to be drafted by developer. Description must include the location of proposed project and supporting background information.

**Date:**            TBD

**Time:**            TBD

**Location:**        TBD

**Purpose:**        To share information about a **TYPE (e. g. CBRE solar, etc.)** renewable energy project proposed to be developed in **COMMUNITY** near **AREA REFERENCE** and to solicit public comments to be filed with the Public Utilities Commission.

**Contact:**        For more information, call **808.XXX.XXXX** or visit **(website/social media)**

###

Project Name

Proposer Name

Project Benefits

Details

## Community Benefits

Details

## Proposed Facility Location in/near what City/Area

Map

Dimensions of proposed project

Include all project components



## Project Description

Details

## Site Layout Plan

Project Layout

Project Visual Simulations

- Multiple public vantage points

## Interconnection Route

Map

## Required Government Permits and Approvals

Preliminary Schedule

Opportunities for public comment

## Environmental Impacts

Preliminary environmental assessment of the site (including any pre-existing environmental conditions)

## Cultural Impacts

Identify any cultural, historic or natural resources that will be impacted by the project

Describe the potential impacts on these resources

Identify measures to mitigate such impacts.

## Where to Find More Information

Project website

Proposer email and contact information

## How to Provide Comments

CBRE Stage 2 Model and Interconnection Requirements Study (IRS) Scope

Island Size	Moloka'i Facility = 250kW Primary Metered & Dedicated Transformer Connecting to 4kV, 12kV	Moloka'i Facility = 250kW Secondary Metered & Dedicated Transformer Connecting to 4kV, 12kV	Moloka'i 250kW < size < 1MW Connecting to Pala'au Generating Station (Moloka'i)	Moloka'i ≥ 1MW Connecting to Pala'au Generating Station (Moloka'i) Maximum Size: 2.5MW																																																																				
<b>Models</b>	A PSCAD model will be required for Over-Voltage analysis	A PSCAD model will be required for Over-Voltage analysis	PSS®E Generic, PSS®E User Defined, PSCAD, and ASPEN	PSS®E Generic, PSS®E User Defined, PSCAD, and ASPEN, Grid Forming PSCAD, and Grid Forming PSS®E																																																																				
<b>System Impact Study Scope</b>	Results of ITR and SR determine if IRS is required and its scope. If IRS is required:	Results of ITR and SR determine if IRS is required and its scope. If IRS is required:	Results of ITR and SR determine if IRS is required and its scope. If IRS is required:	Results of ITR and SR determine if IRS is required and its scope. If IRS is required:																																																																				
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<b>Reference Single Line Diagram (See Appendix H)</b>	Typical Primary Distribution (250kW and larger to less than 1MW) Interconnection Single Line Diagram for CBRE	Typical Secondary Distribution (250kW and larger to less than 1MW) Interconnection Single Line Diagram for CBRE	See Single Line Diagram for each respective site	See Single Line Diagram for each respective site																																																																				

**DRAFT**

**REQUEST FOR PROPOSALS**

**FOR**

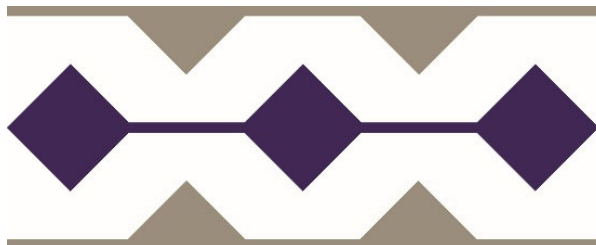
**COMMUNITY-BASED RENEWABLE ENERGY PROJECTS**

**ISLAND OF MOLOKA‘I**

NOVEMBER 4, 2021

Docket No. 2015-0389

*Appendix C – Code of Conduct Procedures  
Manual*



**Maui  
Electric**

## I. INTRODUCTION

The Framework for Competitive Bidding ("Framework") adopted on December 8, 2006, by the Public Utilities Commission of the State of Hawaii (the "Commission") pursuant to Decision and Order No. 23121 (Docket No. 03-0372, Instituting a Proceeding to Investigate Competitive Bidding for New Generating Capacity in Hawaii) requires that the utility develop and follow a Code of Conduct whenever a utility or its affiliate seeks to advance an energy generation resource proposal in response to a request for proposals ("RFP") issued by the Company. Section III.A.4 of the Framework required the utility to submit to the Commission for review and approval (subject to modification if necessary) a code of conduct prior to the commencement of any competitive bid process under the Framework. The proposed *Code of Conduct Pertaining to the Implementation of a Competitive Bidding Process for Community-Based Renewable Energy* (the "Code of Conduct") requires the Companies to also propose this *Code of Conduct Procedures Manual* (the "Procedures Manual") to implement the requirements of the Framework and the Code of Conduct.

This Procedures Manual has been developed to outline the procedures to be followed and the policies that have been developed surrounding the implementation of the Companies' competitive bidding process for system resources. This Code of Conduct Procedures Manual has been developed for the Companies' Community-Based Renewable Energy RFPs and in accordance with the requirements of Section IV.H.9.a(iii) of the Framework and outlines requirements (1), (3) and (4) of such section, namely: (1) the protocols for communicating with Proposers, the Company Self-Build team, and others; (3) the documentation forms, including logs for any communications with proposers; and (4) other information consistent with the requirements of the solicitation process. Requirement (2) of the section, the evaluation process in detail and the methodologies for undertaking the evaluation process for the RFP are described in detail in the Community-Based Renewable Energy RFP. The bid evaluation process and methodology will consider both price/system impacts and non-price criteria in accordance with Section IV.E of the Framework and Tariff Rule 19.

The procedures and policies set forth herein have been designed to ensure that the procurement process is undertaken in a fair and equitable manner and that each Proposer is afforded an equal opportunity to participate and compete within the RFP requirements.

This Procedures Manual is intended to be followed by Company personnel in connection with implementing the Companies' solicitation process and to manage communications between Company personnel and consultants participating in the RFP processes covered by the Framework. Necessary additions, deletions, and/or changes depending on the circumstances surrounding the RFP and directions from the IO may be required.

## II. DEFINITIONS

- Affiliate – Any person or entity that possesses an “affiliated interest” in a utility as defined by section 269-19.5, Hawaii Revised Statutes (“HRS”), including a utility’s parent holding company but excluding a utility’s subsidiary or parent which is also a regulated utility.
- Affiliate Team – Employees and consultants of an Affiliate of the Company who prepare a proposal to be submitted to the Company in response to a Company RFP.
- ATRs – The Affiliate Transaction Requirements, issued by the Commission, applicable to the Companies and Affiliates, attached as Exhibit B to Order No. 36112 issued on January 24, 2019 in Docket No. 2018-0065.
- Code of Conduct – The *Code of Conduct Pertaining to the Implementation of a Competitive Bidding Process for Community-Based Renewable Energy* developed by Hawaiian Electric Company, Inc., Maui Electric Company, Limited and Hawaii Electric Light Company, Inc. (each, a “Company” and collectively, the “Companies”) to ensure the fairness and integrity of the competitive bidding process, in particular where the host utility or its affiliate seeks to advance its own system resource proposal in response to an RFP. The Code of Conduct follows the requirements described in Section IV.H.9.c of the Framework.



- Code of Conduct Acknowledgement – The Competitive Bidding Code of Conduct Acknowledgement of Receipt form acknowledging review of, and agreeing to abide by, the Code of Conduct and this Procedures Manual.
- Communications Log – A written record to note activities and/or information shared between the Company RFP Team or Company Self-Build Team with Shared Resources or Unassigned Company Resources, accessed via the RFP Communication Tool Kit SharePoint Site.
- Companies' Executive in Charge – The Companies' executive responsible for ensuring compliance with this Code of Conduct and serving as the point of contact for the Independent Observer for reporting any violations by the Companies' of the Code of Conduct. The Companies' Corporate Compliance Officer shall remain responsible for the Companies' independent corporate code of conduct and may support compliance matters and questions arising with employees, agents and other representatives of the Companies, e.g., conflicts of interest, with respect to this Code of Conduct.
- Company RFP Team – The Company personnel and outside consultants responsible for the development of the Company's RFPs conducted under the Framework and the evaluation of bids submitted in response to these RFPs. Subject to the transfer rules specified herein, the Company RFP Team will have fixed team members who will not have any involvement with the Company Self-Build Team for the subject RFP.
- Company Self-Build Team – The Company personnel and outside consultants responsible for the development of the Company's self-build responses to the RFP. Subject to the transfer rules specified herein, the Company Self-Build Team will have fixed team members who will not have any involvement with the Company RFP Team for the subject RFP.
- Confidential Information – Any non-public information developed and provided by the Company (i.e., proprietary system information, etc.) or Proposers during the RFP process (such non-public information may include, for example, the identity of competing Proposers, and their technical, trade or financial information). This term includes any material non-public information regarding the RFP process developed for and used during the competitive bidding solicitation process, such as the evaluation process or criteria. Confidential Information does not include

public information, such as information in the Company's public filings with the Commission.

- Director of Renewable Acquisition – The supervisor of the Division that will oversee the Company's competitive bidding process.
- Eligible Proposer – A Proposer who has met the minimum requirements and threshold requirements in the RFP necessary to remain eligible to compete in the process.
- Energy Contract Manager – The staff position(s) within the Company's Renewable Acquisition Division responsible for managing the Company RFP Team(s). The Energy Contract Manager shall be a member of the Company RFP Team he/she manages.
- Framework – The Framework for Competitive Bidding contained in Decision & Order No. 23121 issued by Commission on December 8, 2006, to establish rules for competitive bidding in response to a request for proposals when a utility seeks to acquire new generation resources.
- Independent Observer ("IO") – The neutral person or entity appointed by either the Commission or utility to monitor the utility's competitive bidding process, and to advise the utility and Commission on matters arising out of the competitive bidding process, as described in Part III.C of the Framework.
- Manager of Energy Procurement - The supervisor of the department within the Company's Renewable Acquisition Division responsible for directing the resources responsible for the implementation of the competitive bidding process pursuant to the Framework. The Manager of Energy Procurement will report to the Director of Renewable Acquisition on the status of the competitive bidding process and shall be a member of the Company RFP Team.
- Non-Price Evaluation Team – Employees and consultants of the Company who evaluate the Proposal non-price related criteria as set forth in these RFPs. Non-Price Evaluation Team members will not include any Shared Resources and will be solely made up of Company RFP Team Members.
- Non-Wires Alternative - An electricity grid project that uses non-traditional transmission and distribution (T&D) solutions, such as distributed generation (DG), energy storage, energy efficiency (EE), demand response (DR) and grid software and controls, to defer or avoid the need for conventional transmission and/or

distribution infrastructure investments.

- Price Evaluation Team – Employees and consultants of the Company who evaluate the Proposal price related criteria set forth in these RFPs. Price Evaluation Team members will not include any Shared Resources and will be solely made up of Company RFP Team Members.
- Proposer – Entity who submits or plans to submit a proposal in response to a Company-issued RFP. An Affiliate of the Company or a Company Self-Build Team participating in the RFP and submitting a proposal shall be considered a Proposer.
- RFP – A written request for proposals issued by one of the Companies to publicly solicit bids to supply future system resources to the Company pursuant to the competitive bidding process established in the Framework.
- Roster – A consolidated list of members that comprise the Company RFP Team, Company Self-Build Team, Shared Resources and Unassigned Company Resources located in the RFP Communication Tool Kit SharePoint Site. Company employee names and titles and consultants in their designated role will be identified.
- Shared Resource – Company employees and consultants who, because of the scarcity of their expertise within the Company, are designated and authorized to provide information or input to both the Company RFP Team and the Company Self-Build Team (but not any Affiliate Team) and is not a resource dedicated to either team. For example, Shared Resources may include an environmental attorney and members of the Company's Risk Management Department.
- Unassigned Company Resource – Company employees unassigned to an essential team that may be called upon by the Company RFP Team and/or the Company Self-Build Team (but not any Affiliate Team) to assist in meeting unforeseen tasks for the RFP or the self-build proposal. For example, the Company RFP Team may be unable to evaluate an unforeseen technical specification included in a bid. In that event, the Company RFP team would need to request assistance from a Company employee or a consultant that is not already assigned to an essential team and possesses the specific expertise. Such personnel are intended to assist the requesting team only in an ad hoc manner, limited in scope and purpose to the particular task required.

### **III. STATEMENT OF OBJECTIVES**

On April 9, 2020, the Commission issued Order 37070, commencing Phase 2 of the Community-Based Renewable Energy Program (“Phase 2”). Phase 2 requires the Companies to implement competitive bidding to procure CBRE projects on all islands served by the Companies. These procurements will be concurrent and overlapping. Subsequent phases of CBRE may require further procurements through competitive bidding. Accordingly, under the Framework and the Code of Conduct, for each of the competitive procurements under the program, the Companies will undertake a detailed multi-stage review and evaluation process whereby eligible proposals will be selected based upon their ability to most cost-effectively and reliably satisfy the CBRE program requirements.

Given that multiple RFPs for CBRE, including and in addition to other RFPs currently being administered by the Companies, will be active at the same time, and because the Companies must work expeditiously, in order to consistently ensure the competitive benefits of the procurement process while continuing to provide equitable and fair consideration for all proposals, the Companies will endeavor to create, designate and maintain the Roster at all times for quicker and more decisive implementation across all active RFPs. Subject to the transfer rules specified herein, the Roster will be maintained for the durations of the RFPs. The Companies also intend that the evaluation process will be well-documented so that the results of the evaluation can be fully reviewed by an IO to confirm that all proposals were treated in a fair and consistent manner.

The Code of Conduct and this Procedures Manual address (1) communication requirements and procedures associated with the relationship between utility employees (Company RFP Team, Company Self-Build Team, Shared Resources and Unassigned Company Resources); (2) communication requirements and procedures associated with the relationship between the Company RFP Team, the Company Self-Build Team and Proposers; and (3) communication requirements associated with the relationship between Company management and the Company RFP Team.

The Code of Conduct and this Procedures Manual also include procedures for the sharing of resources, where appropriate, by the Company RFP Team and the Company

Self-Build Team for the purposes of completing their efforts to effectively evaluate an RFP or to submit a bid in response to an RFP. The small size of the Companies and limitation of resources will require specialized services, information exchange and sharing of resources in certain limited circumstances. Company personnel and consultants identified as "Shared Resources" shall be designated by the Companies for this specific purpose.

#### **IV. ORGANIZATION AND COMMUNICATION RESPONSIBILITIES**

This section outlines the RFP organizational structure for the development of the RFP and the Company self-build options and the organization's responsibilities to ensure that communications between Company personnel and consultants working on their respective RFPs or self-build projects are conducted in a fair, consistent, and equitable basis so that the Company Self-Build Team does not enjoy any unfair advantage over other Proposers responding to an RFP.

##### **A. Organization**

The Companies shall identify and maintain two separate teams to facilitate the independence and objectivity of the Company resources working on an RFP and ensure an arms-length relationship with the resources working on the Company's self-build project to avoid any real or perceived inequity in an RFP process. The two essential teams shall be the "Company RFP Team" and the "Company Self-Build Team."

Other limited Company resources, such as select staff from various functional areas of the Company that are in short supply and thus cannot be dedicated solely to either team, may be designated as "Shared Resources" to perform services for the Company RFP Team and Company Self-Build Team. Shared Resource employees are allowed to carry on with both their RFP (for either the Company RFP Team and/or the Company Self-Build Team) and regular functions throughout the resource planning process (including the development of any Company Parallel or Contingency Plan as defined in the Framework), which may require communications with or services performed for the Company Self-Build Team. Shared Resource employees, however, will not participate in the evaluation and selection process of proposals submitted in response to

an RFP. Rules for communications between Shared Resources and the essential teams are specified below.

Company employees unassigned to an RFP may be called upon by the Company RFP Team, Company Self-Build Team, or both for help to meet unforeseen tasks. After completing the Code of Conduct training, these "Unassigned Company Resources" are eligible to assist on an ad hoc basis with the requirement that all communications as an Unassigned Company Resource must be memorialized and logged in the same manner as communications with Shared Resources on the Communication Log. If an Unassigned Company Resource is called upon repeatedly for a substantial amount of assistance by a particular team, the employee should be assigned to such team or evaluated for designation as a shared resource.

**B. Essential Teams**

1. Company RFP Team. The Company RFP Team, tasked with preparing the RFP and evaluating the responses and bids in response to the RFP, will consist primarily of Director/Manager-level and other experienced employees together with possible outside consultants, with backgrounds in a number of disciplines necessary to conduct a thorough evaluation of each proposal. The Company RFP Team will be comprised of a Price Evaluation Team and a Non-Price Evaluation Team and will be prepared to evaluate proposals on the basis of their price and non-price aspects pertaining to their level of expertise. Members of the Company RFP Team will include professionals with experience in the following areas of expertise: engineering, siting/land use, environmental, transmission planning, fuel procurement, legal, financial planning, system operations, integrated resource planning, generation planning, production cost analysis, and others as needed.

The Price Evaluation Team and the Non-Price Evaluation Team will conduct their sections of the bid evaluation process separately and will not share the results of their evaluation with members of the other sub-team. Each team will submit their evaluation results to an oversight team, which will be responsible for compiling the results of the evaluations and selecting the Priority List.

The Energy Contract Manager will be responsible for directing the evaluation efforts of the Company RFP Team when the proposals are received. The Energy Contract Manager will be responsible for maintaining the documentation underlying the evaluation of each proposal as well as all communications with Proposers.

2. The Company Self-Build Team. The Company Self-Build Team, tasked with preparing any Company proposal to be submitted by the Company in response to a Company RFP, will consist primarily of Company employees, along with possible outside consultants with backgrounds in a number of disciplines necessary to complete a competitive proposal in response to a Company RFP. The members of the team will include professionals with experience in the following areas of expertise: engineering, siting/land use, environmental, transmission planning, fuel procurement, legal, financial planning, system operations, integrated resource planning, generation planning, production cost analysis, and others as needed.

3. Affiliate Team. Any Affiliate Team will be comprised solely of employees and consultants of the Affiliate and no Company employee or consultant shall serve as a member of an Affiliate Team; provided, however, that a consultant may perform services for an Affiliate and the Company so long as appropriate "walls" are established satisfactory to the Company that ensures that employees of the consultant working for the Affiliate Team do not also perform work for the Company nor communicate with employees of the consultant performing work for the Company, and vice versa. The Company will inform consultants providing services for the Company RFP Team of these separation requirements, and will seek confirmation in writing from any consultant performing services for an Affiliate and the Company that such separation requirements will be met. Affiliate Teams will be considered and treated as separate independent third-party Proposers for all purposes within any RFP and shall have no access to, interaction or communications with Shared Resources or Unassigned Company Resources for the purpose of completing a proposal in response to any RFP. Affiliate Teams shall also be subject at all times to the terms, conditions and restrictions specified in the Company's ATRs.

4. Transfers between Teams. As members of both the Company RFP

Team and the Company Self-Build Team are intended to be fixed, transfers between teams should not be permitted. However, there will be instances where a member of a particular team (whether Company RFP or Company Self-Build) transfers to a position in which he/she may be requested, as part of his/her new job responsibilities, to participate as a member of the other team. Such employee shall not be permitted to transfer from one team to the other during the pendency of any particular RFP (or stage or phase of a particular RFP). After completion of the RFP (or stage or phase of a particular RFP) under which the employee recently participated, the employee may transfer to the other team under the following conditions: (a) the employee is prohibited from disclosing any Confidential Information known to such employee as a result of being a member of his/her former team with members of the new team he/she is joining; and (b) for a period of one (1) year, such employee shall not participate or be involved in the evaluation of any subsequent stage(s) or phase(s) of a prior RFP which such employee participated in with his/her former team.

Transfers of employees between the Company and any Affiliate and their subsequent work on RFPs shall be subject to the terms, conditions and restrictions specified in the ATRs.

## **C. Communications Protocols**

### **1. Overview and General Requirements.**

The Company has developed policies and procedures governing communication between the Company RFP Team, the Company Self-Build Team, Shared Resources, the Proposers, the IO, and with the Commission regarding RFP design and bid evaluation. Bid information and evaluation data and information shall not be communicated between members of the Company RFP Team, outside parties and other employees within the Companies except to those with a business need to know.

To ensure that the competitive bidding process is fair and unbiased, that all Proposers have access to the same information so that no Proposer has an unfair advantage, and that any Company self-build and/or Affiliate proposals do not have any unfair competitive advantage over third-party bids, the Companies shall follow the Code



of Conduct whenever the utility or its Affiliate is seeking to advance a resource proposal as provided in Section IV.H.9.b of the Framework.

Each employee or consultant on the Company RFP Team, Company Self-Build Team and Shared Resources shall read, acknowledge and sign the Code of Conduct Acknowledgement. Unassigned Company Resources who are called upon by the Company RFP Team or Company Self-Build Team for help to meet unforeseen tasks shall also read, acknowledge and sign the Code of Conduct Acknowledgement.

The Company issuing the RFP will establish a shared drive on its corporate computer network designed to maintain the bid evaluation documentation and other information associated with the bidding process. Only Company RFP Team members will have access to all the files on the shared drive.

In cases where staffing and resources are limited or constrained, the Company may identify Shared Resources or those employees eligible to provide information or serve as a resource to both the Company RFP Team and the Company Self-Build Team. Specific rules to log communications with the Company RFP Team or the Company Self-Build Team are described below.

Shared Resources will not have access to the Company's shared drive established for the RFP process which will include the documentation of the bid evaluation results.

Team members should clearly mark all e-mails, documents, or other communications that contain Confidential Information and make clear which team should not receive it with the following header or a substantially similar message: "This communication contains self-build information that must be kept confidential. DO NOT copy, forward, or discuss the contents with Company RFP Team members" OR "This communication contains Company RFP Team information that must be kept confidential. DO NOT copy, forward, or discuss the contents with Company Self-Build Team members."

## **2. Communications Between the Company RFP Team and**

**Proposers, including the Company Self-Build Team and any Affiliate Team.**

During the RFP process, the Energy Contract Manager shall serve as the primary contact person for all RFP communications with Proposers. This is important from the standpoint of maintaining consistency and confidentiality of information between Proposers and the Company. For documentation and oversight purposes, all communications from Proposers must be submitted to an established website link provided by the Company (the "Company RFP website"). The IO will monitor all communications through the Company RFP website. To ensure fair and equal access to information, any Company Self-Build Team and/or Affiliate Team shall be considered a Proposer for communication purposes and any request for information from the Company Self-Build Team or Affiliate Team to the Company RFP Team shall be through the Company RFP website.

Subject to confidentiality obligations, it is the objective of the Code of Conduct that all Proposers, including the Company Self-Build Team and any Affiliate Team, receive access to information released by the Company RFP Team, whether in response to a question from a Proposer or not, at the same time.

The communications process for addressing questions and requests for information from Proposers, and for the Company RFP Team to provide information to Proposers, is provided below:

- a. Other than during Company sponsored conferences, Proposers must submit all questions to the Company RFP website or the designated RFP email address (if the Company RFP website has not been opened yet for the RFP).
- b. Questions will be reviewed and responses will be coordinated with the appropriate functional area within the Company for a response. Every reasonable effort will be made to provide responses in a timely manner.

- c. All responses, including the classification of such response, i.e., whether non-confidential or confidential as described below, will be provided to the IO for monitoring purposes via email or the PowerAdvocate messaging system. The IO may choose to comment on any response at its discretion.
  
- d. Depending on the questions received, responses may involve Confidential Information of the Company and/or Proposers. Release of any Company Confidential Information must be approved in advance by the Company executive authorized to release the Confidential Information. Any release of Company Confidential Information shall be accompanied by appropriate confidentiality and non-disclosure agreements, protective orders or other means required to maintain the confidentiality of the Company Confidential Information while still permitting its disclosure under circumstances deemed appropriate by the responsible Company executive. Other non-Company Confidential Information will not be shared without the prior written consent of the owner of such Confidential Information and the execution of appropriate confidentiality and non-disclosure agreements by all recipients of such Confidential Information. Responses will be categorized as follows:
  - i. Non-Confidential Responses: Questions and responses will either be posted directly on the Company RFP website (process-related questions or simple, non-substantive information) or a description of the information that can be made available will be posted and Proposers will be instructed to submit a request to the Company via the Company RFP website to receive a copy.
  
  - ii. Confidential Responses: Questions and a description or notice of a Confidential Information response will be posted on

the Company RFP website and Proposers will be instructed to submit a request to the Company via the Company RFP website to receive instructions on how to access the Confidential Information. The Confidential Information will only be provided to the requestor after receipt of an executed confidentiality and non-disclosure agreement. Only those who have qualified to submit a bid (i.e., Eligible Proposers) and have executed a confidentiality and non-disclosure agreement will be considered for receipt of Confidential Information.

iii. Process for Distribution of Confidential Information: Confidential Information provided in response to questions from proposers may be made available only to parties as indicated above via the following:

A. Confidential Information that is approved for exchanging on a secured access site: (1) Confidential Information may be made available on a secured website with an individual password provided to each approved Proposer; and (2) Confidential Information in documents may be transmitted to approved recipients through the Company's secure email system.

B. Confidential Information that can be made available for inspection only, but cannot be copied: There may be some types of Confidential Information that the Company may consider making available for inspection only with no copies allowed. This type of Confidential Information will be made available on Company premises for inspection only. Proposers will be advised via the Company RFP website to make arrangements with Company staff to view the Confidential Information.

C. Confidential Information that may not be released:

In the event that Proposers submit questions that require responses that the Company feels are not appropriate to provide for reasons which may include, but not be limited to, safety, security, protection of trade secrets or intellectual property rights, Proposers will be advised as such via the Company RFP website.

- e. Prior to and during the RFP, and outside of the Company RFP website protocol, developers may direct questions to the Company prior to submitting a Proposal to discuss specific questions regarding their specific Proposal. Questions shall be directed to the Company Contact for Proposals listed in the particular applicable RFP. Questions and responses that do not contain Confidential Information and which are deemed relevant to all Proposers will be published without identifying information via the Company RFP website.
- f. Once bids are received, the Company may submit information requests to Proposers to clarify their proposals or request additional information. All contacts with Proposers will be through the Company RFP website. All contacts and information exchanged will be under the oversight of the IO.
- g. A single exception to the communication process outlined above shall be instituted for the purpose of facilitating the verification of proposed project models and documentation required to perform the IRS. For this limited scope, the Company's Manager of Interconnection Services will serve as the primary contact person for all such interconnection communications with the Proposers on the Priority List, provided that all necessary confidentiality and

non-disclosure agreements are in place. The Manager of Interconnection Services and personnel in the Interconnection Services Department shall be members of the Company RFP Team. Interconnection communications will be limited to a Proposer's bid and no more information other than as necessary to facilitate such communications will be permitted. Discussion of locations of proposed projects shall be limited to that necessary only to determine the interconnection requirements of such project. The IO shall have the right to monitor all such communications in his/her discretion.

**3. Communications Between the Companies and the Commission.**

The Company's Regulatory Affairs staff will be responsible for initiating communication with the Commission regarding the RFP or the Companies' evaluation process. Regular updates may be provided to the Commission regarding the RFP process if requested.

**4. Communications Between the Company RFP Team and the IO.**

Communications between the Company RFP Team and the IO will be required for many aspects of the evaluation process. The IO is also required to maintain confidentiality of any Confidential Information. The IO will coordinate all activities through the Energy Contract Manager. The IO will be invited to participate in any meetings or discussions between the Company RFP Team and the Proposers and other communications as noted above. Sufficient notice will be provided whenever possible and teleconference and/or web conference alternatives may be utilized.

**5. Communications Between the Company RFP Team and the Company Self-Build Team or any Affiliate Team.**

Any communication between the Company RFP Team and the Company Self-Build Team or any Affiliate Team with respect to the RFP shall be handled no differently than with Proposers and other outside parties. Accordingly, the Company Self-Build Team or any Affiliate Team will be required to submit any questions or information requests to the Company RFP Team via the Company RFP website and all responses will be provided in the same manner as to other Proposers. Accordingly, as stated in Section 2 above, responses will be provided to the IO for monitoring purposes via email or the PowerAdvocate messaging system. Members of the Company RFP Team are prohibited from providing any input into the development of the self-build option by the Company or an Affiliate. Company RFP Team members are prohibited from sharing any Confidential Information (i.e., detailed evaluation criteria, other proposals, etc.) with any Company Self-Build or Affiliate Teams except in accordance with the procedures in the Code of Conduct, this Manual or the RFP.

Company RFP Team members and Company Self-Build Team members may continue to work with each other on projects not related to the RFP. Further, members of each respective team do not have to be physically separated from each other, but members of each team must make reasonable efforts to keep all Confidential Information (including electronic data) secure and inaccessible to the other team.

Company RFP Team members and Affiliate Team members may continue to work with each other on matters not related to the RFP as permitted under the ATRs.

#### **6. Communications among the Company RFP Team, the Company Self-Build Team and Shared Resources.**

Shared Resources may provide services to the Company RFP Team and the Company Self-Build Team (but not any Affiliate Team). Shared Resources shall be limited as much as possible to instances where Company resources cannot provide a dedicated member to the Company RFP Team and the Company Self-Build Team at the same time and still provide the necessary functions of its area to the Company as a whole. Shared

Resources are expressly prohibited from providing any information developed on behalf of the Company RFP Team to the Company Self-Build Team or any information developed on behalf of the Company Self-Build Team with the Company RFP Team, except through the formal communication process outlined above, i.e., through the Company RFP website.

Additionally, a written record of the time, date and substance of all conversations, data and written material directly or indirectly exchanged with the Company RFP Team or the Company Self-Build Team that pertain to the RFP shall be maintained on the Communications Log. The RFP Communication Tool Kit SharePoint Site will be set up and managed by the Energy Contract Manager to provide an easy to use and understand mechanism to log and memorialize these conversations.

Shared Resources will not have direct access to the Company's shared drive developed for the RFP process which will include documentation of the bid evaluation results.

**7. Communications between the Company RFP Team, the Company Self-Build Team and any Unassigned Company Resource or consultant that is not a Shared Resource.**

There may be times where a Company RFP or Company Self-Build team (but not an Affiliate Team) member may need ancillary or other ministerial or administrative assistance that requires communication and/or assistance from Company personnel who are neither on any team nor considered a Shared Resource. Under those circumstances, such personnel may assist the requesting team member on an ad hoc basis upon the following conditions:

- a. The essential team member making the request must inform the Company personnel that sharing of the requested information or assistance with the other team, be it the Company RFP or Company Self-Build Team, is expressly prohibited under the Code of Conduct.



b. The assisting Company personnel shall complete the Code of Conduct training and sign the Code of Conduct Acknowledgement.

c. The assisting Company personnel shall be directed to the Roster provided by such requesting team member to determine and/or confirm the restrictions on communication with the other team members. The essential team member making the request will ensure the Roster is updated by the Energy Contract Manager to include the assisting Company personnel.

d. A written record of the time, date and substance of all conversations, data and written material directly or indirectly exchanged with the Company RFP Team or the Company Self-Build Team that pertain to the RFP shall be maintained on the Communication Log. The RFP Communication Tool Kit SharePoint Site will be set up and managed by the Energy Contract Manager to provide an easy to use and understand mechanism to log and memorialize these conversations.

e. If assistance from an Unassigned Company Resource becomes more than occasional or more substantive than ancillary, ministerial or administrative services, the Unassigned Company Resource should be considered for inclusion on the team that he/she has been assisting on such basis. Additionally, the Unassigned Company Resource may also be considered for inclusion as a Shared Resource. Members of the Company RFP Team and/or Company Self-Build Team shall consult with the Company executive for resolution.

**8. Communications between the Company RFP Team, the Company Self-Build Team and Company Management.**

The Company RFP Team and the Company Self-Build Team will necessarily require management approval of the RFP and the Company Self-Build Team proposal. Because of the size of the Company, it may be possible that a single employee (at whatever level) (the "Approver") may have approval responsibility for matters affecting the RFP and the Company Self-Build Team proposal. Approvers in this situation must use their best judgment in making decisions reviewing and approving matters for the respective teams. The Code of Conduct must be adhered to in these situations and the Approver must not communicate matters learned from the Company RFP Team with the Company Self-Build Team.

If an Approver feels that he/she cannot manage this potential conflict, the Approver is recommended to consult with his/her immediate supervisor to determine whether such higher authority could be appointed with the task of reviewing and approving matters for a designated team, either the Company RFP Team or the Company Self-Build Team. In matters where a team of employees (including one or more Approvers) is responsible for reviewing and approving matters for the respective teams, approving employees (from whatever level, including executives) with information from reporting personnel beneath them from both the Company RFP Team and the Company Self-Build Team may consider recusing himself/herself from the decision making if such employee cannot objectively make a decision on the matter.

Finally, an Approver may be a member of the Company RFP Team and have a subordinate reporting to him/her that is a member of the Company Self-Build Team (or vice versa). In such situations, because the Code of Conduct prohibits communication between the teams, the Approver must recuse himself/herself from the decision making and request his/her manager to review and approve the matter in his/her place.

In all instances, it is possible that any particular situation above may be addressed and/or resolved by the terms and conditions of the Company's internal code of conduct implemented for all employees and consultants of the Company. As appropriate, an Approver or any other team member, Energy Contract Manager or Company executive in Charge may involve the Company's Corporate Compliance Officer for input and possible

resolution under the Company's internal corporate code of conduct.

**V. WHEN THE CODE OF CONDUCT BECOMES EFFECTIVE**

A. Prior to development of the requirements for any particular RFP, the Code of Conduct for that RFP will be activated. However, if the Company Self-Build Team determines at any time that it will not pursue a self-build option for a particular RFP, the Code of Conduct may be de-activated.

B. Upon the activation of the Code of Conduct, members of the Company RFP Team and the Company Self-Build Team must then conduct activities on the RFP or self-build process in compliance with the Code of Conduct. Once identified and having commenced work, no information may be shared outside the respective team members with respect to the RFP or a self-build option except through the formal communication processes outlined above.

C. Immediately upon assignment to a Company team (RFP or Self-Build), designation as a Shared Resource, or request to assist as an Unassigned Company Resource, each such employee or consultant must review this Manual, and sign the Code of Conduct Acknowledgement.

D. Within the RFP process, after a member has been assigned to a particular Company team (RFP or Self-Build), he or she will not be able to transfer to the other Company team during the pendency of any particular RFP (or stage or phase of a particular RFP). It is the responsibility of each team to fill vacant team positions with employees that have not been previously assigned as a team member for a team until the PPA negotiations have been concluded and the final contracts are executed.

E. Each employee and consultant working on the RFP shall review the Code of Conduct and sign the Code of Conduct Acknowledgement attesting to his/her compliance with the Code of Conduct until the employee is no longer working in the position he/she was in while working on the RFP.

F. The Energy Contract Manager will be responsible for maintaining the Roster and the signed Code of Conduct Acknowledgements. The Company Executive in Charge shall be responsible for ensuring compliance with the Code of Conduct and shall have the written authority and obligation to enforce the Code of Conduct.

## **VI. IMMEDIATE ACTIONS UPON ACTIVATION OF THE CODE OF CONDUCT**

The following items are required to be completed as soon as possible after activation of the Code of Conduct, but no later than the designated events specified for each item below.

A. Prior to development of the requirements for any particular RFP, a Roster listing employee (with their title) and consultants in their designated role; Company RFP Team, Company Self-Build Team, Shared Resource or Unassigned Company Resource. When the IO is appointed, this Roster shall be provided to him/her. The Roster shall be placed in the RFP Communication Tool Kit SharePoint Site so that any Company personnel can access the database to determine the identity of the respective teams and Shared Resources.

B. Upon the finalization of the Roster for the RFP, the Energy Contract Manager shall verify that all employees (whether full-time, part-time, temporary, or contract) and consultants involved in the competitive bidding process, such as members of the Company RFP Team, the Company Self-Build Team, Shared Resources or Unassigned Company Resources, have acknowledged receipt of the Code of Conduct and his or her responsibility to comply with the Code of Conduct by submitting the Code of Conduct Acknowledgement (with electronic acknowledgment being acceptable). If an employee or consultant is later added to a team, the Energy Contract Manager shall also verify that such employee or consultant has submitted the Code of Conduct Acknowledgment.

C. Prior to any solicitation for comments or questions to the RFP, establishment of the Company email address to accept requests for information from Proposers, including the Company Self-Build Team or any Affiliate Team.

D. Prior to the drafting of any documents for any particular RFP, establishment of the Company-secured site that houses the accessible database (such as SharePoint).

## **VII. WHEN THE CODE OF CONDUCT TERMINATES**

- A. The Code of Conduct for a specific RFP will terminate after the following two conditions are met when:
- a. the final contract(s) for RFPs conducted under the Framework with the successful proposer(s) is/are executed, or when written notice of termination of the RFPs to be conducted under the Framework is provided by the Manager of Energy Procurement or his/her designee to the IO and the Commission, and
  - b. a certification of Code of Conduct compliance by all employees participating in the specific RFP process is submitted by affidavit by the Company Executive in Charge.

## **VIII. DOCUMENTATION FORMS**

The following documentation forms may be utilized by those Company personnel involved in the RFP. These forms may be amended from time to time as necessary. Additional forms may also be developed as determined necessary.

- Code of Conduct Acknowledgement
- Communications Log
- Roster

## **IX. APPLICABILITY OF THE ATRs**

Except as specifically made applicable under Section V.C.1.i of the ATRs with respect to wholesale power procurement from Affiliates, the ATRs shall not apply to RFP matters covered by the Framework, the Code of Conduct and this Procedures Manual as it relates to the Companies' interactions between the Company RFP Teams and Affiliate Teams. Reference to the ATRs in the Code of Conduct and/or this Manual are specifically

for matters outside the Companies' administration of the RFP; provided, however, that such applicability may be revised as necessary and as may be directed by the Commission for any RFP.<sup>1</sup>

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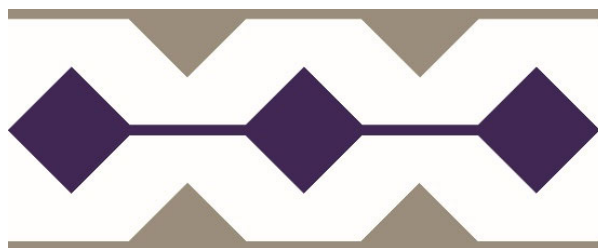
<sup>1</sup> See Decision and Order No. 35962, filed on December 19, 2018, in Docket 2018-0065, at 56-57.

**DRAFT**  
**REQUEST FOR PROPOSALS**  
**FOR**  
**COMMUNITY-BASED RENEWABLE ENERGY PROJECTS**  
**ISLAND OF MOLOKA‘I**

NOVEMBER 4, 2021

Docket No. 2015-0389

*Appendix D – PowerAdvocate User Information*



**Maui  
Electric**



## Sourcing Intelligence Quick Start for Suppliers

### Logging In

1. Launch a web browser and go to [www.poweradvocate.com](http://www.poweradvocate.com)
2. Click the orange **Login** button.
3. Enter your account **User Name** and **Password** (both are case-sensitive) and click **Login**.
4. Click the **Events** tab if it is not already displayed.

### Dashboard

Your Dashboard lists the events you have been invited to. A line divides currently accessible events from others.

Click to view Events

Click to view the event's Status tab

Buyer filter

Navigation bar

Buying entity

Number of unread/total messages

Click to view the event's Messaging tab

Click numbers to view event tabs

Datasheet available

No datasheet available

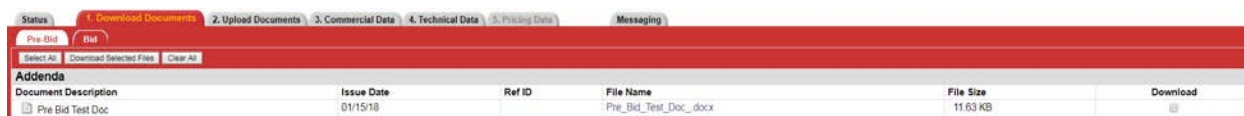
- Click an event name to view its Status tab, which displays a summary of your activity and key event dates. To view specific details of an event, click the buttons 1-5 to view the corresponding tab.
- To return to the Dashboard, click **Dashboard** in the navigation bar at the top of the window.
- An event will not appear on your Dashboard until you have been added as a participant.





## Downloading Bid Packages

All of the Buyer’s bid package documents (if any) are centrally stored on the PowerAdvocate Platform. To view bid documents, click “1” on your Dashboard or on the **1. Download Documents** tab from within the event.



- You can access the **Bid** sub-tab after the event opens. You can access Buyer documents before the event is opened from the **Pre-Bid** sub-tab, if the Buyer utilizes this feature.
- To view or download a document, click the file name.
- To download multiple documents:
  1. Select the checkbox in the Download column for each document you wish to download or click **Select All**.
  2. Click **Download Selected Files**.

## Uploading Documents

To upload your documents, click “2” on your Dashboard, or on the **2. Upload Documents** tab from within the event.

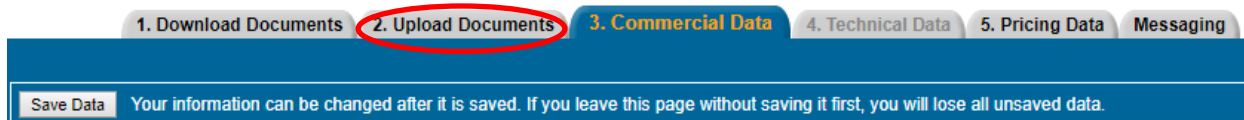


- Do not upload any files to the Pre-Bid tab.
- To upload a document to the Bid tab:
  1. Specify a **Document Type** (Reference ID can be left blank).
  2. Click **Choose File**, navigate to and select the document, and then click Open; multiple files can also be compressed into one .zip file for upload.
  3. Click **Submit Document**.



## Datasheets

Datasheets (3. Commercial Data, 4. Technical Data, 5. Pricing Data) will not be used in this RFP event. All Proposal information will be uploaded for submission through the 2. Upload Documents tab. Buttons/tabs are grayed out if the event is not using a particular type of datasheet.



## Communicating with the Bid Event Coordinator /Company Contact

Suppliers should use Email to contact the Bid Event Coordinator /Company Contact while the bid event is open. In these CBRE RFPs, PowerAdvocate Messaging will not be used.

## Getting More Information

- Click **Help** on the navigation bar to display online help.



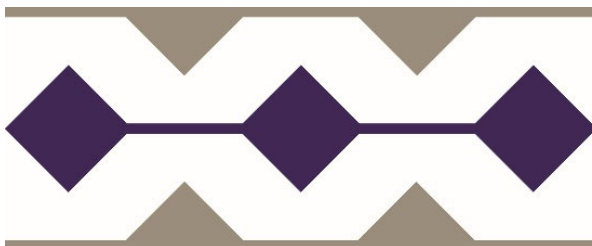
- Supplier documentation can be downloaded from the online help system.
- Call PowerAdvocate Support at 857-453-5800 (Mon-Fri, 8 a.m. to 8 p.m. Eastern Time) or e-mail [support@poweradvocate.com](mailto:support@poweradvocate.com).

**DRAFT**  
**REQUEST FOR PROPOSALS**  
**FOR**  
**COMMUNITY-BASED RENEWABLE ENERGY PROJECTS**  
**ISLAND OF MOLOKA‘I**

NOVEMBER 4, 2021

Docket No. 2015-0389

*Appendix E – Mutual Confidentiality and  
Non-Disclosure Agreement*



**Maui  
Electric**

**APPENDIX E**  
**MUTUAL CONFIDENTIALITY AND NON-DISCLOSURE AGREEMENT**  
Independent Power Producers – (“IPPs”)

This Mutual Confidentiality and Non-Disclosure Agreement (this “Agreement”) is effective as of \_\_\_\_\_, 20\_\_\_\_ (the “Effective Date”) between [INSERT NAME OF IPP], a [State of incorporation/organization] [type of entity] (“IPP”) and Hawaiian Electric Company, Inc., Maui Electric Company, Limited, and Hawaii Electric Light Company, Inc., each a Hawaii corporation (collectively, the “Companies”). In consideration of the mutual promises contained in this Agreement, including the provision of Confidential Information (as defined below) by either party to the other hereunder, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

1. Background

The Companies have or intend to issue a Request for Proposals (“RFP”) for Community-Based renewable energy projects. The IPP has or intends to submit one or more proposals for a nominal [ ] MW [TYPE OF FACILITY] facility located at [LOCATION] on the island of [ISLAND], State of Hawai‘i (“Proposal”).

In connection with the IPP’s proposed project, the Companies may conduct an interconnection requirements study (“IRS”) to establish the requirements for interconnection of the IPP’s proposed project to the Companies’ electric grid. The RFP process may also result in the award of a potential power purchase agreement, the terms of which must be agreed upon by the parties (“PPA Negotiations”). For purposes of this Agreement the term “Project” refers to the RFP, Proposal, potential IRS and PPA Negotiations.

In order to evaluate the Project, either party may from time to time provide to the other party certain Confidential Information. The parties are willing to provide such Confidential Information to each other upon the terms and conditions of this Agreement.

2. Confidential Information

Except as set forth in Section 3 (Exclusions from Confidential Information) below, “Confidential Information” means all non-public, confidential or proprietary information disclosed by either party (the “Provider”) to the other party (a “Recipient”) its affiliates and its and their directors, officers, employees, agents, advisors, consultants (including, without limitation, financial advisors, counsel and accountants) and controlling entities or individuals (collectively, “Representatives”) whether disclosed orally or disclosed or accessed in written, electronic or other form of media, and whether or not marked or otherwise identified as “confidential,” including, without limitation:

(a) all information concerning the Provider and its affiliates’, and their customers’, suppliers’ and other third parties’ past, present and future business affairs including, without limitation, finances, customer information, supplier information, products, services, designs,

processes, organizational structure and internal practices, forecasts, sales and other financial results, records and budgets, business, marketing, development, sales and other commercial information and strategies;

(b) information concerning the Companies' generation, transmission, and distribution systems (e.g., engineering and operating characteristics of the Companies' transmission lines and substations) ("Critical Infrastructure Confidential Information");

(c) the Provider's unpatented inventions (whether or not they are patentable), ideas, methods and discoveries, techniques, formulations, development plans, trade secrets, know-how, unpublished patent applications and other confidential intellectual property;

(d) all designs, specifications, documentation, components, source code, object code, images, icons, audiovisual components and objects, schematics, drawings, protocols, processes, and other visual depictions, in whole or in part, of any of the foregoing;

(e) any third-party confidential information included with, or incorporated in, any information provided by the Provider to the Recipient or its Representatives; and

(f) all notes, analyses, compilations, reports, forecasts, studies, samples, data, statistics, summaries, interpretations and other materials ("Notes") prepared by or for the Recipient or its Representatives that contain, are based on, or otherwise reflect or are derived from, in whole or in part, any of the foregoing.

### 3. Exclusions from Confidential Information

Except as required by applicable federal, state, or local law or regulation, the term "Confidential Information" as used in this Agreement shall not include information that:

(a) at the time of disclosure is, or thereafter becomes, generally available to and known by the public other than as a result of, directly or indirectly, any violation of this Agreement by the Recipient or any of its Representatives; provided, however, that Confidential Information shall not be disqualified as Confidential Information (i) merely because it is embraced by more general or generic information which is in the public domain or available from a third party, or (ii) if it can only be reconstructed from information taken from multiple sources, none of which individually shows the whole combination (with matching degrees of specificity);

(b) at the time of disclosure is, or thereafter becomes, available to the Recipient on a non-confidential basis from a third-party source, provided that such third party is not and was not prohibited from disclosing such Confidential Information to the Recipient by a contractual or other obligation to the Provider;

(c) was known by or in the possession of the Recipient or its Representatives, as established by documentary evidence, prior to being disclosed by or on behalf of the Provider pursuant to this Agreement;

(d) was or is independently developed by the Recipient, as established by documentary evidence, without reference to or use of, in whole or in part, any of the Provider's Confidential Information; or

(e) was or is learned of established entirely from public sources, as established by documentary evidence, without reference to or use of, in whole or in part, any of the Provider's Confidential Information.

The parties acknowledge and understand that the confidentiality obligations of this Agreement apply only to the Confidential Information shared in connection with the Project. The parties may share other information with each other under other agreements, provisions or understandings which are not related to the Project. Such information sharing shall be subject to the provisions of the agreements and confidentiality provisions associated thereto and this Agreement shall not be construed to infringe upon or apply to such agreements or provisions.

#### 4. Non-Disclosure of Confidential Information

Unless otherwise agreed to in writing by the Provider, the Recipient agrees as follows:

(a) except as required by law, not to disclose or reveal any Confidential Information to any person or entity other than its Representatives who are actively and directly participating in the evaluation of the Project or who otherwise need to know the Confidential Information for the purpose of evaluating the Project.

(b) not to use Confidential Information for any purpose other than in connection with its evaluation of the Project or the consummation of the Project.

(c) except as required by law, not to disclose to any person or entity (other than those of its Representatives who are actively and directly participating in the evaluation of the Project or who otherwise need to know for the purpose of evaluating the Project) any information about the Project, or the terms or conditions or any other facts relating thereto, including, without limitation, the fact that discussions are taking place with respect thereto or the status thereof, or the fact that Proprietary Information has been made available to the Recipient or its Representatives.

(d) to use diligent efforts to safeguard and protect the confidentiality of the Confidential Information, including, at minimum, implementing the same commercial measures that the Recipient uses to protect its own confidential information. Before disclosing the Confidential Information to any Representative, the Recipient will inform such Representative of the confidential nature of such information, their duty to treat the Confidential Information in accordance with this Agreement and shall ensure that such Representative is legally bound by the terms and conditions of this Agreement or subject to confidentiality duties or obligations to the Recipient that are no less restrictive than the terms and conditions of this Agreement.

(e) Any provision herein to the contrary notwithstanding, the Companies may disclose Confidential Information to the State of Hawai'i Public Utilities Commission ("Commission")

and/or the State of Hawai'i Division of Consumer Advocacy (including their respective staffs) provided that such disclosure is made under a protective order entered in the docket or proceeding with respect to which the disclosure will be made or any general protective order entered by the Commission.

5. Required Disclosure and Notice

If the parties or any of their Representatives become legally compelled (by deposition, interrogatory, request for documents, subpoena, civil investigative demand, court order, or similar process) to disclose any of the Confidential Information, the compelled party shall undertake reasonable efforts to provide the other party with notice within three (3) business days of such requirement or advice prior to disclosure so that the other party may (a) seek a protective order or other appropriate remedy, (b) consult with the other party with respect to the compelled party taking steps to resist or narrow the scope of such requirement or advice, and/or (c) waive compliance, in whole or in part, with the terms of this Agreement. If such protective order or other remedy is not obtained, or the other party waives compliance with the provisions hereof, the compelled party agrees to furnish only that portion of the Confidential Information which it is legally required to so furnish and, at the request of the other party, to use reasonable efforts to obtain assurance that confidential treatment will be accorded such Confidential Information, it being understood that such reasonable efforts shall be at the cost and expense of the party whose Confidential Information has been sought. In any event, neither the IPP nor any of its Representatives will oppose action by the Companies to obtain an appropriate protective order or other reliable assurance that confidential treatment will be accorded the Confidential Information.

6. Return or Destruction of Confidential Information

At any time during or after the term of this Agreement, at the Provider's written request, and in any event, upon the termination of the Agreement, the Recipient shall certify within ten (10) business days that it has destroyed all Confidential Information by using industry standard data elimination methods used to prevent unauthorized disclosure of information, and for Personally Identifiable Information (defined as personally identifiable information of individuals, and any information that may be used to track, locate or identify such individuals (or which is otherwise protected by privacy laws), including any automatically generated information (such as IP addresses and other customer identifiers) that identifies or is unique or traceable to a particular individual or computer or other electronic device capable of accessing the internet, including without limitation, name, address, telephone number, social security number, credit card account numbers, email addresses, user identification numbers or names and passwords, which is disclosed to the Recipient or its subcontractors in connection with this Agreement by the Provider, which products and services are used or intended to be used for personal, family or household purposes), such methods shall be consistent with Hawaii Revised Statutes Chapter 487-R; provided, however, that with respect to Confidential information in tangible form, the Recipient may return such Confidential Information to the Provider within ten (10) business days in lieu of destruction. The Recipient's sole obligation with respect to the disposition of any Notes shall be to redact or otherwise expunge all such Confidential Information from such Notes and certify to the Provider that it has so redacted or expunged the Confidential Information. Notwithstanding the foregoing, with respect to any Confidential Information stored in Recipient's disaster recovery backups or

other electronic archives, Recipient is not required to destroy such Confidential Information if it would impose a material cost or burden; provided, however, such Confidential Information shall be destroyed when such archives are destroyed in accordance with Recipient's records retention policies.

7. Authority

Each party represents and warrants that it has full power and authority to enter into and perform this Agreement, and the person signing this Agreement on behalf of each has been properly authorized and empowered to enter into this Agreement, understands it and agrees to be bound by it.

8. No Representations or Warranties

Neither the Provider nor any of its Representatives make any express or implied representation or warranty as to the accuracy or completeness of any Confidential Information disclosed to the Recipient hereunder, and the Recipient agrees that it is not entitled to rely on the accuracy or completeness of any Confidential Information. Neither the Provider nor any of its Representatives shall be liable to the Recipient or any of its Representatives relating to or arising from the use of any Confidential Information or for any errors therein or omissions therefrom. Notwithstanding the foregoing, the Recipient shall be entitled to rely solely on such representations and warranties regarding Confidential Information as may be made to it in any final agreement relating to the Project, subject to the terms and conditions of such agreement.

9. No Other Obligations

Neither this Agreement nor the disclosure of the Confidential Information shall result in any obligation on the part of either party to enter into any further agreement with the other with respect to the subject matter hereof or otherwise, to purchase any products or services from the other, or to require either party to disclose any further information to the other. Nothing in this Agreement shall be deemed to constitute either party hereto as partner, agent or representative of the other party or to create any fiduciary relationship between the parties. Either party may offer products or services which are competitive with products or services now offered or which may be offered by the other. Subject to the express terms and conditions of this Agreement, neither this Agreement nor discussions and/or communications between the parties will impair the right of either party to develop, make, use, procure, and/or market any products or services, alone or with others, now or in the future, including those which may be competitive with those offered by the other. Whether or not the Project is consummated, neither party shall issue a press release or release any information to the general public concerning such transaction or the absence thereof without the express prior written consent of the other, and the parties agree that neither party will use the other's name whether by including reference to the other in any press release, list of customers advertising that its services are used by Companies or otherwise, without written authorization by the respective party's authorized representative.

10. Property Rights in Confidential Information



All Confidential Information shall remain the sole and exclusive property of the Provider and nothing in this Agreement, or any course of conduct between the parties shall be deemed to grant to the Recipient any license or rights in or to the Confidential Information of the Provider, or any part thereof. Unless otherwise expressly agreed in a separate license agreement, the disclosure of Confidential Information to the Recipient will not be deemed to constitute a grant, by implication or otherwise, of a right or license to the Confidential Information or to any patents or patent applications of the Provider.

11. Publicly Traded

The IPP acknowledges that the Companies' holding company is a publicly traded company, and that Confidential Information of the Companies may constitute material, non-public information with respect to the Companies. The IPP understands, and will advise its Representatives to whom Confidential Information of the Companies is disclosed, of the restrictions imposed by the United States securities laws on (a) the purchase or sale of securities by any person in possession of material, non-public information with respect to such securities, and (b) the communication of material, non-public information with respect to securities to a person who may purchase or sell such securities in reliance upon such information.

12. Remedies

(a) Each party acknowledges and agrees that any breach or threatened breach of this Agreement may give rise to an irreparable injury to the Provider or its Representatives, for which compensation in damages is likely to be an inadequate remedy. Accordingly, in the event of any breach or threatened breach of this Agreement by the Recipient or its Representatives, the Provider shall be entitled to seek equitable relief, including in the form of injunctions and orders for specific performance, in addition to all other remedies available at law or in equity.

(b) In the event that the Recipient learns of dissemination, disclosure, or use of the Confidential Information which is not permitted by this Agreement, the Recipient shall notify the Provider immediately in writing and shall use reasonable efforts to assist the Provider in minimizing damages from such disclosure. Such remedy shall be in addition to and not in lieu of any other rights or remedies available to the Provider at law or in equity.

13. Cumulative Remedies

No rights or remedy herein conferred upon or reserved to either party hereunder is intended to be exclusive of any other right or remedy, and each and every right and remedy shall be cumulative and in addition to any other right or remedy under this Agreement, or under applicable law, whether now or hereafter existing.

14. Notice

(a) By delivering written notice, either party may notify the other that it no longer wishes to receive or provide Confidential Information. Any further information received or

provided by the party who received such notice following receipt of such notice, shall not be subject to the protection of this Agreement.

(b) All notices, consents and waivers under this Agreement shall be in writing and will be deemed to have been duly given when (i) delivered by hand, (ii) sent by electronic mail (“E-mail”) (provided receipt thereof is confirmed via E-mail or in writing by recipient), (iii) sent by certified mail, return receipt requested, or (iv) when received by the addressee, if sent by a nationally recognized overnight delivery service (receipt requested), in each case to the appropriate addresses and E-mail Addresses set forth below (or to such other addresses and E-mail addresses as a party may designate by notice to the other party):

**(1) Companies:**

**By Mail:**

Hawaiian Electric Company, Inc.  
P.O. Box 2750  
Honolulu, Hawaii 96840  
Attn: Manager of Procurement, Renewable Acquisition Division

**Delivered By Hand or Overnight Delivery:**

Hawaiian Electric Company, Inc.  
Central Pacific Plaza  
220 South King St, 21<sup>st</sup> Floor  
Honolulu, HI 96813  
Attn: Manager of Procurement, Renewable Acquisition Division

**By E-mail:**

Hawaiian Electric Company, Inc.  
Attn: Manager of Procurement, Renewable Acquisition Division  
Email: [renewableacquisition@hawaiianelectric.com](mailto:renewableacquisition@hawaiianelectric.com)

With a copy to:

**By Mail:**

Hawaiian Electric Company, Inc.  
Legal Department  
P.O. Box 2750  
Honolulu, Hawaii 96840

**Delivered By Hand or Overnight Delivery:**

Hawaiian Electric Company, Inc.  
American Savings Bank Tower  
1001 Bishop Street, Suite 1100  
Honolulu, Hawaii 96813  
Attn: Legal Department

By E-mail:

Hawaiian Electric Company, Inc.  
Legal Department  
Email: [legalnotices@hawaiianelectric.com](mailto:legalnotices@hawaiianelectric.com)

**(2) [IPP]**

By Mail:

[INSERT ADDRESS/CONTACT]

Delivered By Hand or Overnight Delivery:

[INSERT ADDRESS/CONTACT]

By E-mail:

[INSERT ADDRESS/CONTACT]

With a copy to:

By Mail:

[INSERT ADDRESS/CONTACT]

Delivered By Hand or Overnight Delivery:

[INSERT ADDRESS/CONTACT]

By E-mail:

[INSERT ADDRESS/CONTACT]

15. No Waiver

Except as otherwise provided in this Agreement, no delay or forbearance of a party in the exercise of any remedy or right will constitute a waiver thereof, and the exercise or partial exercise of a remedy or right shall not preclude further exercise of the same or any other remedy or right.

16. Governing Law

This Agreement is made under, governed by, construed and enforced in accordance with, the laws of the State of Hawaii. Any action brought with respect to the matters contained in this Agreement shall be brought in the federal or state courts located in the State of Hawaii. Each party agrees and irrevocably consents to the exercise of personal jurisdiction over each of the parties by such courts and waives any right to plead, claim or allege that the State of Hawaii is an inconvenient forum or improper venue.

17. Attorneys' Fees and Costs

If there is a dispute between the parties and either party institutes a lawsuit, arbitration, mediation or other proceeding to enforce, declare, or interpret the terms of this Agreement, then the prevailing party in such proceeding shall be awarded its reasonable attorneys' fees and costs.

18. Assignment Prohibited

This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors, legal representatives, and permitted assigns. Neither party shall have the right to assign any of its rights, duties or obligations under this Agreement, by operation or law or otherwise, without the prior written consent of the other party. Any purported assignment in violation of this section shall be null and void.

19. No Third Party Beneficiaries

Nothing expressed or referred to in this Agreement will be construed to give any person or entity other than the parties any legal or equitable right, remedy, or claim under or with respect to this Agreement or any provision of this Agreement. This Agreement and all of its provisions and conditions are for the sole and exclusive benefit of the parties and their successors and permitted assigns.

20. Entire Agreement

This Agreement constitutes the entire agreement between the parties relating to the subject matter hereof, superseding all prior and contemporaneous agreements, understandings or undertakings, oral or written with respect to the subject matter. Any amendment or modification of this Agreement or any part hereof shall not be valid unless in writing and signed by the Parties. Any waiver hereunder shall not be valid unless in writing and signed via by the party against whom waiver is asserted.

21. Term and Survival

This Agreement shall remain in full force and effect for a period of two (2) years from the Effective Date. All confidentiality obligations within this Agreement shall survive following expiration or termination of this Agreement.

22. Severability

If any term or provision of this Agreement, or the application thereof to any person, entity or circumstances is to any extent invalid or unenforceable, the remainder of this Agreement, or the application of such term or provision to persons, entities or circumstances other than those as to which it is invalid or unenforceable, shall not be affected thereby, and each term and provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law, and the parties will take all commercially reasonable steps, including modification of the Agreement, to preserve the economic "benefit of the bargain" to both parties notwithstanding any such aforesaid invalidity or unenforceability.

23. Negotiated Terms

The parties agree that the terms and conditions of this Agreement are the result of negotiations between the parties and that this Agreement shall not be construed in favor of or against any party by reason of the extent to which any party or its professional advisors participated in the preparation of this Agreement.

24. Counterparts and Electronic Signatures

This Agreement may be executed in counterparts, each of which shall be deemed an original, and all of which shall together constitute one and the same instrument binding all parties notwithstanding that all of the parties are not signatories to the same counterparts. For all purposes, duplicate unexecuted and unacknowledged pages of the counterparts may be discarded and the remaining pages assembled as one document. The parties agree that this Agreement and any subsequent writings, including amendments, may be executed and delivered by exchange of executed copies via E-mail or other acceptable electronic means, and in electronic formats such as Adobe PDF or other formats mutually agreeable to the parties which preserve the final terms of this Agreement or such writing. A party's signature transmitted by E-mail or other acceptable electronic means shall be considered an "original" signature which is binding and effective for all purposes of this Agreement.

*[Signature Page Follows]*

IN WITNESS WHEREOF, each party has caused this Agreement to be executed on its behalf by a duly authorized representative, all as of the Effective Date.

HAWAIIAN ELECTRIC COMPANY, INC.

By: \_\_\_\_\_  
Print Name: \_\_\_\_\_  
Its: \_\_\_\_\_

MAUI ELECTRIC COMPANY, LIMITED

By: \_\_\_\_\_  
Print Name: \_\_\_\_\_  
Its: \_\_\_\_\_

HAWAII ELECTRIC LIGHT COMPANY, INC,

By: \_\_\_\_\_  
Print Name: \_\_\_\_\_  
Its: \_\_\_\_\_

“Companies”

[Insert Name of IPP]

\_\_\_\_\_  
By: \_\_\_\_\_  
Print Name: \_\_\_\_\_  
Its: \_\_\_\_\_

“IPP”

**DRAFT**  
**REQUEST FOR PROPOSALS**  
**FOR**  
**COMMUNITY-BASED RENEWABLE ENERGY PROJECTS**

**ISLAND OF MOLOKA‘I**

NOVEMBER 4, 2021

Docket No. 2015-0389

*Appendix F – Description of Available Sites*



**MAUI ELECTRIC  
COMMUNITY-BASED RENEWABLE ENERGY RFP  
DESCRIPTION OF AVAILABLE SITES**

**Land Request for Information**

On June 15, 2020, the Hawaiian Electric Companies issued a Land Request for Information (“Land RFI”) seeking information on available land and rooftop space for potentially siting future utility scale renewable energy projects on the islands of O‘ahu, Maui, Moloka‘i, and Hawai‘i. This effort is a completely new solicitation from the previous Land RFI that was issued on December 12, 2016 in advance of the Company’s Stage 1 and Stage 2 RFPs. The information that has been gathered through this RFI is available upon request by following the instructions at <http://hawaiianelectric.com/landrfi>.

This information is being provided for proposers’ consideration only. Project proposals submitted in response to this RFP are not required to be sited at a location identified through the Land RFI. Maui Electric also makes no representations as to the suitability of the listed sites for renewable energy production with regard to resource quality, interconnection constraints, zoning and permitting issues, community support, or other issues. Proposers should perform their own evaluation of these factors in determining whether a site is suitable for renewable energy project development. After further evaluation, proposers that are interested in any of the identified sites are invited to engage in further discussions directly with landowners to negotiate any required rights to use the property.

**Company Owned Site – Pala‘au Site**

The Company is offering use of the Pala‘au Site for nominal consideration to site a renewable generation and paired energy storage facility. Any Proposer proposing to use the Pala‘au Site shall be required to agree to specific terms and conditions for such use as provided for in Attachment COS which is attached as Appendix K-4. Limited sections of Attachment COS relating to use restrictions, security and infrastructure requirements, compliance with laws, lien restrictions, and end of term obligations shall be non-negotiable.

The site, available to Proposers under this RFP, is approximately 7.2 acres, provided that any Proposer shall only be permitted to use as much acreage as is necessary for its Project. Projects sited at the Pala‘au Generating Station must be 1 MW or larger, up to and including 2.5 MW. The interconnection point would be the Pala‘au Generating Station switchyard. Proposers must include the cost for interconnecting into the switchyard in their Proposals.

The approximately 7.2 acre available land (located on a portion of TMK (2)5-2-011:031) is comprised of 3 separate areas, as identified in Appendix F Attachment 2 and further defined below:



1. Area A is approximately 5.7 acres
  - a. Ground mount photovoltaic and BESS is acceptable
  - b. Proposer must avoid any underground utilities, as identified and directed by the Company. There may be an existing underground water line crossing the area, pending confirmation of the as-built drawings and/or ground penetrating scans.
  - c. Proposers must build around or relocate the existing telecommunications pole noted on Appendix F Attachment 2. The Company shall have the right to require Proposer to co-locate its fiber communication link on the same pole as Company's fiber communication.
  - d. Proposer must avoid all capped wells. There is at least one well located near the water tank in the northeast corner, pending final confirmation.
  - e. Proposer can develop the existing paved area and utilize the gate at the northeast end for site access, if desired. Proposers should provide their own site access from the road.
2. Area B is approximately 1 acre and contains the visitor parking lot
  - a. Ground mount photovoltaic and BESS is acceptable
  - b. If the Proposer utilizes this area, the visitor parking lot must be relocated to area 'C'.
  - c. The existing security gate to access secured area of plant must be moved to the South, and employee parking lot 'C' must be converted to a combination of open lot for public access and a fenced employee lot, as directed by the Company.
  - d. The number of public and employee stalls and vegetation requirements to be determined by the Company
3. Area C is approximately 0.5 acre
  - a. If this area is utilized, only a covered parking PV canopy is acceptable
  - b. Reference the additional applicable requirements 2.c & 2.d

**The use of Area A, Area B and Area C is subject to certain restrictions as a result of the Company's existing power plant and overhead line and other facilities. Proposers should refer to Section 1.B.1 of Attachment COS for the requirements.**

Upfront costs to the Proposer associated with the use of the Pala'au Site include the following: (1) baseline assessments of the Pala'au Site, either a Phase 1 or Phase 2 environmental assessment and, as necessary, archaeological study; and (2) applicable physical and data security requirements. Ongoing costs are customary and will be reserved in Attachment COS (insurance costs, security costs, etc.) or the Mid-Tier SFC, as applicable. See Attachment COS of the Mid-Tier SFC for details on these upfront and ongoing use costs.

The specified costs above are not exhaustive, and the Proposer is encouraged to review the Attachment COS to determine all associated use costs. Proposers should perform their own evaluation and account for all possible costs and should not rely solely on the identified costs noted above. Proposer also shall be responsible, at its sole cost and expense, for all site

improvements, utilities, permits, and other required infrastructure and regulatory requirements that are necessary for use of the Pala‘au Site for Proposer’s Project.

The Proposer may permit public access to the community on an invitation-only basis to the Company-Owned Site subject to the terms and conditions of Attachment COS of the Mid-Tier SFC. Access to the Company-Owned Site shall be through the Subscriber Organization-controlled access gate only. Invitees should be advised not to attempt access to the Company-Owned Site through Company-controlled gates.

Projects at the Pala‘au Site must interconnect at the existing Company switchgear. Work within the switchyard may include, but is not limited to, the installation of one (1) new 12 kV vacuum circuit breaker for each interconnecting line within an existing Company switchgear, new relaying and control equipment for the 12 kV vacuum circuit breaker within the Company’s switchgear enclosure building, transitioning the new 12 kV overhead interconnection to underground within the switchyard, and underground 12 kV duct lines and cable trenching within the switchyard to an existing handhole. A grounding study may be needed to determine if the existing ground grid is sufficient. The IRS will confirm all necessary interconnection facilities.

Due to the Company’s COVID-19 travel restrictions, a site visit will not be available at this time. The Company will endeavor to provide as much information as possible to interested potential Proposers, and if conditions related to the ongoing health pandemic do not allow for an in-person visit early in the bid submittal period, the Company will provide additional information, which may include photographs and/or video.

The Company is also making two reports available that were prepared in support of the Moloka‘i Variable Renewable Dispatchable Generation RFP that was issued in 2019. One report is a Preliminary Subsurface Investigation, and the other is an Archaeological Literature Review and Field Inspection Report. Proposers should note that because these reports were prepared for a previous RFP, some of the information is focused on an area of the Pala‘au site that is different than the portion that has been made available as part of this RFP.

Proposers interested in receiving a copy of these studies, they may request a copy through [CBRERFP@hawaiianelectric.com](mailto:CBRERFP@hawaiianelectric.com). Please note, that any party requesting these documents must have an executed CBRE NDA with the Company, as these reports will be provided pursuant to the terms of conditions of that NDA.

The Company is including inundation maps of the Pala‘au Site based on various sea level rise scenarios as Attachment 3 and 4. The Company is including a tsunami evacuation zone map as Attachment 5.

Any drawings, reports, or any other information or data relating to the Site (“Site Information”) is being furnished for the Proposer’s convenience only and the Company assumes no responsibility whatsoever in respect to the sufficiency or accuracy of such Site Information or of the interpretation thereof, and there is no guarantee, either expressed or implied, that the conditions indicated are representative of those existing throughout the Site. In addition, no assurance is given that conditions found at the time of any surface or subsurface explorations will be the conditions that prevail at the time of construction at the Site. The Proposer shall be solely responsible for all assumptions, deductions, or conclusions the Proposer may make or derive from the information furnished. Making such information available to the Proposer is not to be construed in any way as a waiver of the Proposer’s responsibility to examine the Request for Proposals and the Site. Proposers must satisfy itself through its own investigation as to conditions to be encountered at the Site.

### **Additional Information**

Additionally, the following links to a few publicly available resources relating to renewable energy project siting and development from the Hawaii State Energy Office are being provided for use at proposers’ sole discretion:

### **Project Permitting Assistance and Resources**

<http://energy.hawaii.gov/developer-investor/project-permitting-assistance-and-resources>

Provides numerous resources to support more informed and appropriate project siting and permitting, including the Permit Guide, Renewable Energy Permitting Consultants, DOH, ePermitting Portal, Renewable EnerGIS, Permitting Wizard, and the Renewable Energy Projects Directory.

### **Hawaii Clean Energy Programmatic Environmental Impact Statement**

<http://energy.hawaii.gov/testbeds-initiatives/hawaii-clean-energy-peis/peis-overview>

The Hawaii Clean Energy Programmatic Environmental Impact Statement (PEIS) analyzes, at a programmatic level, the potential environmental impacts of clean energy activities and technologies in the following clean energy categories: (1) Energy Efficiency, (2) Distributed Renewables, (3) Utility-Scale Renewables, (4) Alternative Transportation Fuels and Modes, and (5) Electrical Transmission and Distribution.

### **Hawaii Statewide GIS Program**

<http://planning.hawaii.gov/gis/>

Provides Hawaii GIS data and other resources to support site identification and analysis.

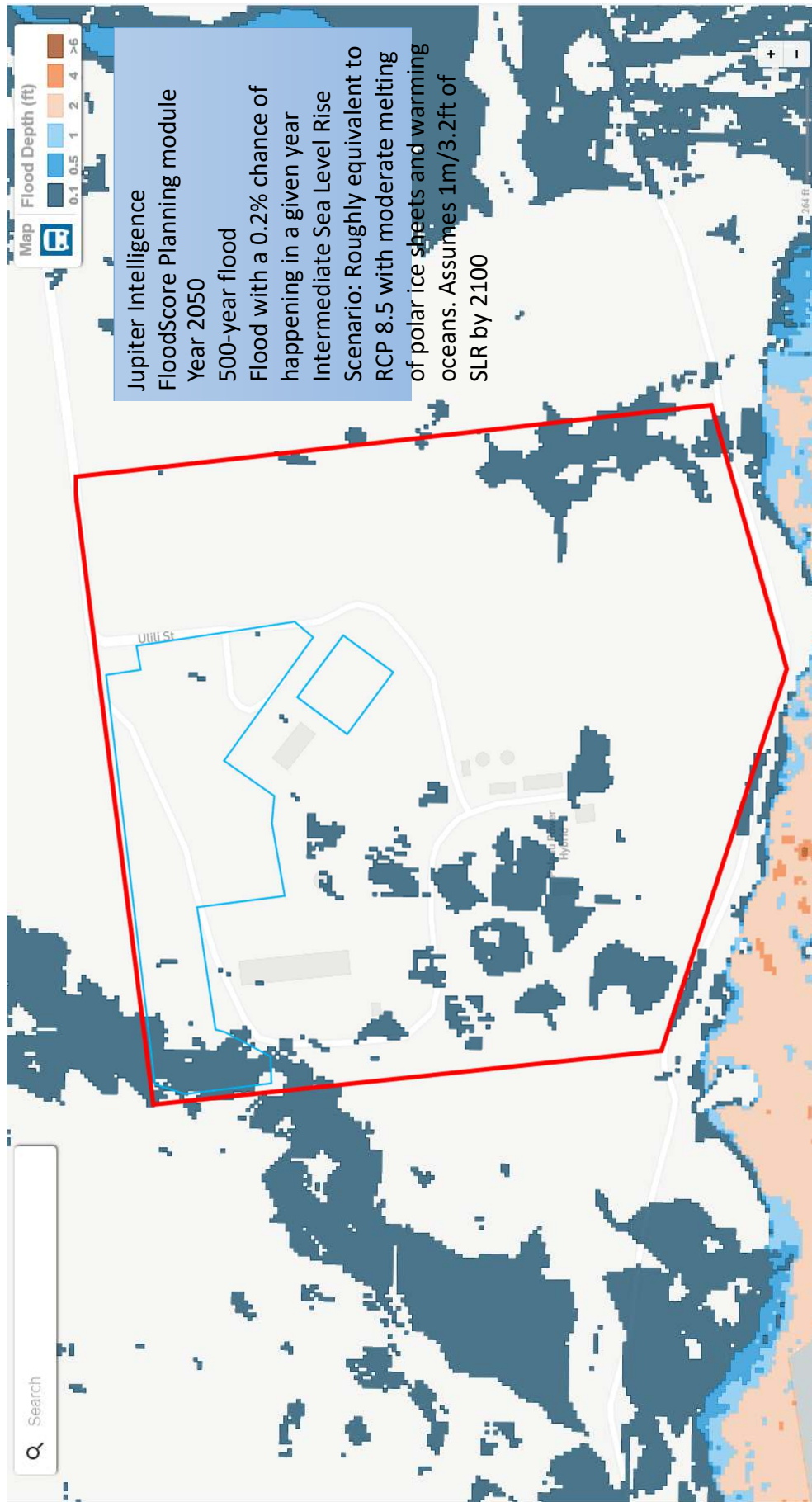
**Aloha Aina: A Framework for Biocultural Resource Management in Hawai‘i’s  
Anthropogenic Ecosystems**

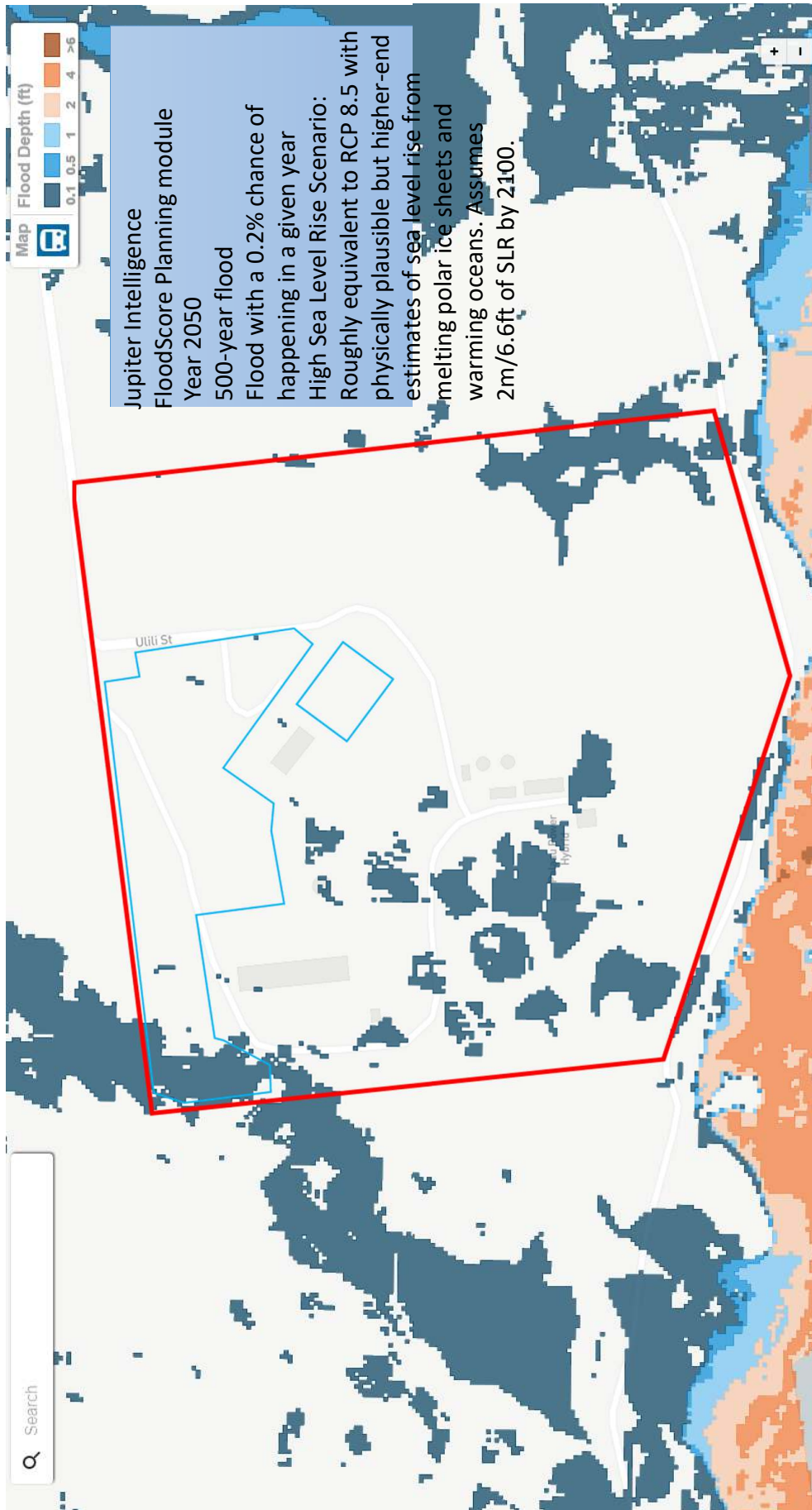
[https://nmshawaiihumpbackwhale.blob.core.windows.net/hawaiihumpbackwhale-prod/media/archive/council/pdfs/aloha\\_aina.pdf](https://nmshawaiihumpbackwhale.blob.core.windows.net/hawaiihumpbackwhale-prod/media/archive/council/pdfs/aloha_aina.pdf)

A framework developed by the Hawaiian Islands Humpback Whale National Marine Sanctuary Advisory Council to integrate Native Hawaiian and Western scientific management approaches toward ecosystem management. While intended for the Sanctuary, this document provides useful insight into successful collaboration in Hawaii.

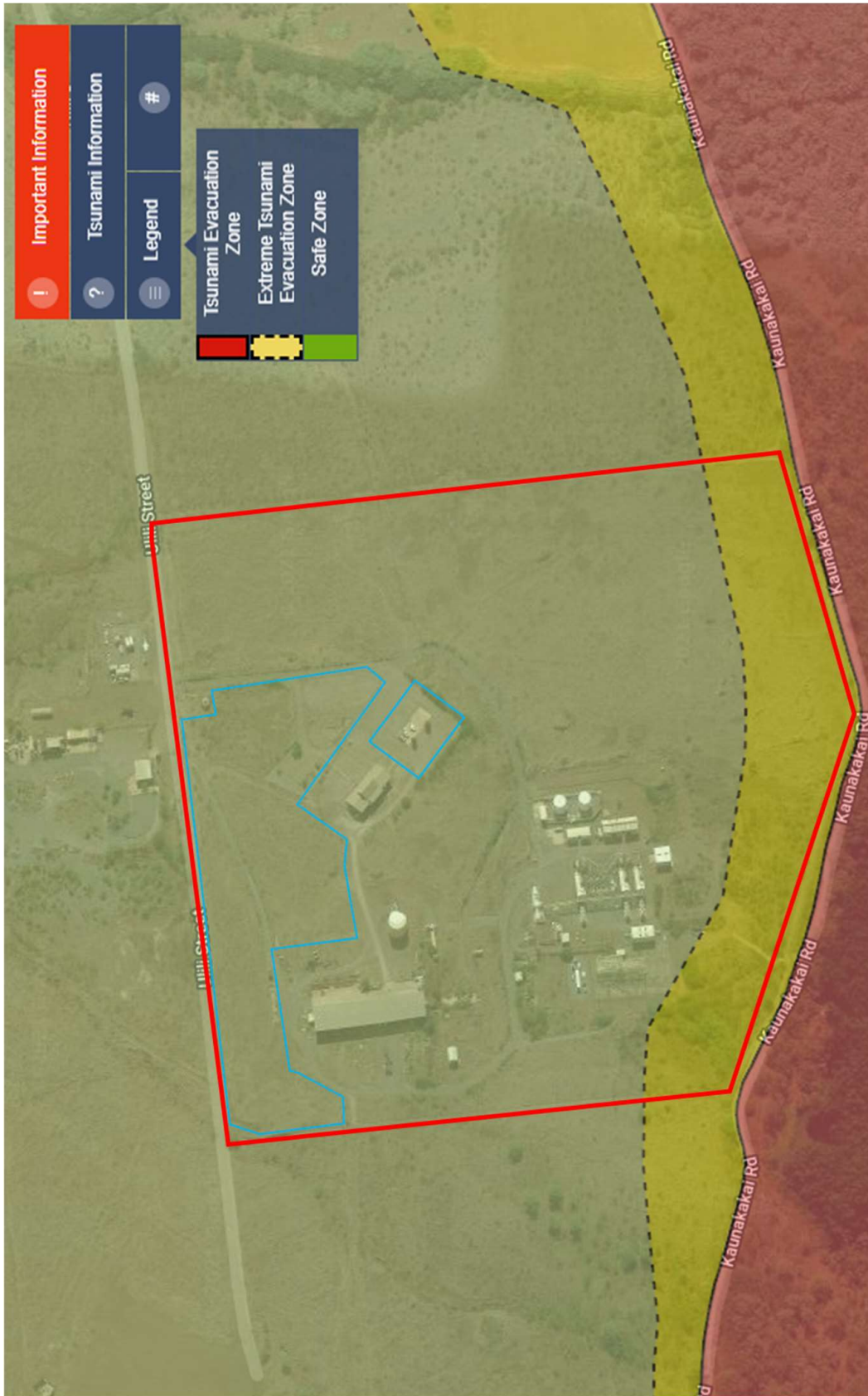












Source: <https://tsunami.coast.noaa.gov>

**DRAFT**  
**REQUEST FOR PROPOSALS**  
**FOR**  
**COMMUNITY-BASED RENEWABLE ENERGY PROJECTS**  
**ISLAND OF MOLOKA‘I**

NOVEMBER 4, 2021

Docket No. 2015-0389

*Appendix G – Reserved*



**Maui  
Electric**

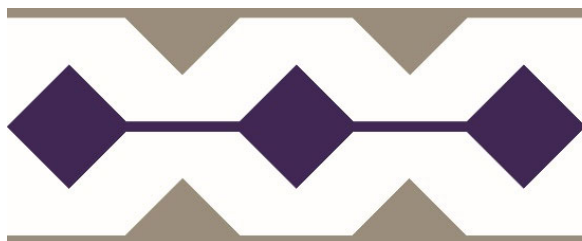
**DRAFT**  
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Docket No. 2015-0389

*Appendix H – Interconnection Facilities Cost  
and Schedule Information*



**Maui  
Electric**

Hawaiian Electric Company  
APPENDIX H - INTERCONNECTION FACILITIES COST AND SCHEDULE  
INFORMATION

**CONTENTS**

Section 1 – Cost Responsibilities..... 3

    1.1 – Definitions..... 3

    1.2 – Abbreviations..... 3

    1.3 – Facilities At Proposer Site ..... 4

    1.4 – Station Power For Company Switching Station ..... 4

    1.5 – Remote Substation Facilities..... 5

    1.6 – Line Extension from Grid Connection Point (GCP) To Proposer Site..... 6

    1.7 – T&D System Upgrades ..... 7

    1.8 – Company-Owned Fiber..... 7

    1.9 – Telecommunication Facilities ..... 7

    1.10 – Proposer Payments..... 9

Section 2 – Interconnection Costs..... 9

    2.1 – Distribution (12kv And Below) Interconnection ..... 9

        A. Typical Distribution Secondary Interconnection For 250 kW Projects (Attachment 1) . 9

        B. Typical Distribution Primary Interconnection For 250 kW Projects (Attachment 2) ... 11

        C. Typical Distribution Primary Interconnection at Pala‘au for Projects ≥ 1 MW  
(Attachment 3) ..... 13

        D. Distribution Line Extension Costs ..... 14

        E. Typical Telecommunications Requirements for Distribution Interconnections ..... 15

        F. Security Requirements for Distribution Interconnections ..... 15

    2.2 – [Not Used]..... 15

    2.3 – [Not Used]..... 15

    2.4 – Telecommunications ..... 16

        A. Telecommunications Baseline Costs ..... 16

    2.5 – Security of Company-Owned Facilities..... 18

        A. Proposer Responsibilities at Proposer Facility ..... 18

Section 3 – [Not Used]..... 19

Section 4 – Typical Company Durations for Interconnection Projects ..... 19

    4.1 – Distribution Projects (Company-Build)..... 19

    4.2 – [Not Used]..... 20

    4.3 – [Not Used]..... 20

    4.4 – [Not Used]..... 20

Hawaiian Electric Company  
APPENDIX H - INTERCONNECTION FACILITIES COST AND SCHEDULE  
INFORMATION

Tariff Rule No. 19, approved by the PUC, establishes provisions for Interconnection and Transmission Upgrades (<https://www.hawaiianelectric.com/billing-and-payment/rates-and-regulations/>). The tariff provisions are intended to simplify the rules regarding who pays for, installs, owns, and operates interconnection facilities in the context of competitive bidding. Tariff Rule No. 19 will be utilized as the basis for addressing interconnection and transmission upgrades for any projects developed through this RFP. Proposers will comply with the terms and conditions as specified therein.

## **SECTION 1 – COST RESPONSIBILITIES**

The purpose of Section 1 is to clearly define the cost responsibilities of construction, replacements, and upgrades of Company-Owned Interconnection Facilities (COIF) and existing Company-owned facilities in compliance with Tariff Rule No. 19.

### **1.1 – DEFINITIONS**

1. Betterment – Any upgrading to a facility made solely for the benefit of and at the election of the Company and is not required by applicable laws, codes, Company Standards, and the interconnection requirements in accordance with Tariff Rule No. 19.
2. Company – Hawaiian Electric, Maui Electric, or Hawai‘i Electric Light.
3. Company-Owned Interconnection Facilities – The equipment and devices owned by Company between the Point of Interconnection and the Grid Connection Point that are required to permit a generating facility to operate in parallel with and deliver electric energy to Company’s system and provide reliable and safe operation of, and power quality on, Company’s system.
4. Grid Connection Point – The point that the new interconnection facilities associated with the Proposer’s project interconnects to the Company’s existing electrical grid.
5. Interconnection Agreement – The executed contract between the Company and Proposer (e.g. Power Purchase Agreement, Standard Interconnection Agreement, etc.).
6. Point of Interconnection – The point of delivery of energy supplied by Proposer to Company, where the Facility owned by the Proposer interconnects with the facilities owned or to be owned by the Company.
7. Proposer – The developer proposing a renewable project in response to a Company RFP.

### **1.2 – ABBREVIATIONS**

1. ADSS – All Dielectric Self-Supporting
2. COIF – Company-Owned Interconnection Facilities
3. CT – Current Transformer

Hawaiian Electric Company  
APPENDIX H - INTERCONNECTION FACILITIES COST AND SCHEDULE  
INFORMATION

4. DFR – Digital Fault Recorder
5. DTT – Direct Transfer Trip
6. FS – Facility Study
7. GCP – Grid Connection Point
8. HVAC – Heating, Ventilation, and Air Conditioning
9. IRS – Interconnection Requirements Study (includes both SIS and FS)
10. NDA – Non-Disclosure Agreement
11. OPGW- Optical Ground Wire
12. POI – Point of Interconnection
13. PT – Potential Transformer
14. RTU – Remote Terminal Unit
15. SCADA – Supervisory Control and Data Acquisition
16. SIS – System Impact Study
17. UFLS – Under-Frequency Load Shed

### **1.3 – FACILITIES AT PROPOSER SITE**

1. Proposer shall be responsible for all costs related to COIF at the Proposer site required by any relevant Rule or Tariff, Request for Proposal, and/or the IRS. This may include, but is not limited to:
  - a. Project management, design, permitting/regulatory fees and approvals, land rights, installation labor, inspection, construction management, and testing
  - b. Site work (grading, trenching, manholes/handholes, conduits, cable trench, concrete pads/foundations, fencing, roadways/driveways, ground grid, lighting, etc.)
  - c. Substation structures, design, and configuration (i.e., breaker and a half, ring bus, etc.)
  - d. Control equipment enclosure/cabinet
  - e. Equipment (circuit breakers, transformers, relays, switches, arresters, batteries, HVAC, RTU, DFR, DTT, meters, PTs, CTs, etc.)
  - f. Telecommunication equipment (See Telecommunication Facilities section below)
  - g. Electrical work (bussing, wiring, lightning protection, fiber optic cable, etc.)
  - h. Security systems/equipment
2. Company shall be responsible for Betterment costs.

### **1.4 – STATION POWER FOR COMPANY SWITCHING STATION**

1. Station power is required if a new Company switching station or substation is built to allow the interconnection of the Proposer's project. If station power is required, the Proposer shall be responsible for all costs related to the primary and backup station power sources. This may include, but is not limited to:
  - a. Project management, design, permitting/regulatory fees and approvals, land rights, installation labor, inspection, construction management, and testing

Hawaiian Electric Company  
APPENDIX H - INTERCONNECTION FACILITIES COST AND SCHEDULE  
INFORMATION

- b. Overhead electrical facilities (poles, conductor, insulators, crossarms, guy wires, transformers, etc.)
  - c. Underground electrical facilities (cables, splices, termination, grounding, transformers, switchgears, etc.)
  - d. Step-down transformer
  - e. Civil/structural work (survey, grading, trenching, conduits, manholes/handholes, concrete pads, concrete pier foundations, pole hole excavation, etc.)
  - f. Vegetation trimming and traffic control
2. Options for primary station power sources for the Company's various switching station voltages are:
    - a. Tap off the bus through a step-down transformer for 23kV through 69kV
    - b. 12kV line extension and service transformer for 23kV through 138kV
    - c. Gensets are not an allowable substitute for the above options

### 1.5 – REMOTE SUBSTATION FACILITIES

1. Proposer shall be responsible for all costs that are solely for the benefit of the Proposer's project, that cannot be used for future system benefit, and that does not provide any benefit to other customers. This may include, but is not limited to:
  - a. Telecommunications cards for DTT (if required)
  - b. Point-to-point microwave facilities between the Proposer's facility and the remote substation (if Proposer chooses that communications option) since there is no way to splice into or multi-link a microwave and it cannot be used for other purposes
2. If the project is interconnecting directly to an existing Company substation, any new equipment required at the substation to accommodate the interconnection will be considered Interconnection Facilities according to Tariff Rule No. 19 and all costs shall be the responsibility of the Proposer. This may include, but is not limited to:
  - a. Project management, design, permitting/regulatory fees and approvals, land rights, installation labor, inspection, construction management, and testing
  - b. Site work (grading, trenching, manholes/handholes, conduits, cable trench, concrete pads/foundations, fencing, roadways/driveways, ground grid, lighting, etc.)
  - c. Substation structures
  - d. New control equipment cabinet or existing enclosure expansion
  - e. Equipment (circuit breakers, transformers, relays, switches, arresters, batteries, HVAC, DFR, DTT, meters, PTs, CTs, etc.)
  - f. Electrical work (bussing, wiring, lightning protection, fiber optic cable, etc.)
  - g. Telecommunications equipment
3. Company shall be responsible for all other costs. This may include, but is not limited to:
  - a. Betterment

Hawaiian Electric Company  
APPENDIX H - INTERCONNECTION FACILITIES COST AND SCHEDULE  
INFORMATION

- b. System upgrades, changes, or replacement of existing facilities (e.g. breaker replacements, relay upgrade, transformer installs, Under-Frequency Load Shed (UFLS) settings, etc.)
- c. Site work associated with those system upgrades (grading, trenching, manholes/handholes, conduits, cable trench, concrete pads/foundations, fencing, roadways/driveways, ground grid, lighting, etc.)
- d. Substation structures
- e. New control equipment cabinet or existing enclosure expansion
- f. Equipment (circuit breakers, transformers, relays, switches, arresters, batteries, HVAC, DFR, DTT, meters, PTs, CTs, SCADA equipment, telecommunications routers, etc.)
- g. Electrical work (bussing, wiring, lightning protection, fiber optic cable, etc.)

**1.6 – LINE EXTENSION FROM GRID CONNECTION POINT (GCP) TO PROPOSER SITE**

1. Proposer shall be responsible for all costs related to the line extension between the GCP and the Proposer site. This may include, but is not limited to:
  - a. Project management, design, permitting/regulatory fees and approvals, land rights, installation labor, inspection, construction management, and testing
  - b. Overhead electrical facilities (poles, conductor, insulators, crossarms, guy wires, etc.)
  - c. Underground electrical facilities (cables, splices, terminations, grounding, transformers, switchgears, etc.)
  - d. Civil/structural work (survey, grading, trenching, conduits, manholes/handholes, concrete pads, concrete pier foundations, pole hole excavation, etc.)
  - e. Company fiber (ADSS fiber, OPGW shieldwire, splice boxes, etc.)
  - f. Vegetation trimming and traffic control
2. The Company shall be responsible for the following costs:
  - a. Betterment
  - b. Replacement of overhead and underground facilities due to certain pre-existing conditions and not caused by interconnection of the Proposer's project as follows:
    - i. Asset is identified for replacement in Company's 5-year work plans
    - ii. Poles (if not identified in 5-year work plans) that require replacement based on the Company's standards and practices (e.g. NESC remaining strength requirements, mechanical or insect damage, cracked, and excessive checking, leaning, or corrosion) or poles that are overloaded prior to addition of the new line
    - iii. Conductors, hardware, and equipment that have issues requiring replacement for safe/reliable operation (e.g. corrosion, damage, etc.)
    - iv. Facilities that meet any of these criteria will be identified by Company engineers



Hawaiian Electric Company  
APPENDIX H - INTERCONNECTION FACILITIES COST AND SCHEDULE  
INFORMATION

- v. Company will pay for a one for one equivalent to current standards, and Proposer will pay for anything above that standard required for their interconnection

### **1.7 – T&D SYSTEM UPGRADES**

1. Company shall be responsible for all costs related to system upgrades or changes required to accommodate the Proposer's project (e.g. re-conductoring or recircuiting of existing lines that do not have the required ampacity, re-fusing or re-programming of protective devices upstream of the GCP, etc.)

### **1.8 – COMPANY-OWNED FIBER**

1. If Company-owned fiber is used to satisfy the communications requirements in the IRS, then the Proposer shall be responsible for all costs related to routing the ADSS fiber or OPGW from the nearest existing splice point to the Proposer site. This may include, but is not limited to:
  - a. Project management, design, permitting/regulatory fees and approvals, land rights, installation labor, inspection, construction management, and testing
  - b. Company fiber-optic cable (ADSS fiber cable or OPGW shieldwire) and associated equipment/hardware (splice boxes, innerduct, vibration dampers, etc.)
  - c. Splicing and Testing of fiber strands
  - d. Pole replacements and additional equipment if needed for additional capacity
  - e. Civil/structural work (survey, grading, trenching, conduits, manholes/handholes, concrete pads, concrete pier foundations, pole hole excavation, etc.)
  - f. Vegetation trimming and traffic control
2. Company will provide the location(s) of the existing fiber splice point(s) after the Proposer has signed a Non-Disclosure Agreement (NDA).
3. Company shall be responsible for Betterment costs.

### **1.9 – TELECOMMUNICATION FACILITIES**

1. Telecommunication Cabinet
  - a. If a control equipment enclosure will not be built, the Proposer shall be responsible for all costs related to installing a telecommunication cabinet required to accommodate the telecommunication equipment at the Proposer's facility. This may include, but is not limited to equipment racks and ancillary infrastructure, 48V DC Power System (includes 48V DC Charger w/ at least 12-hr battery backup), alarming, and air conditioning
2. Telecommunication Power
  - a. Proposer shall be responsible for all costs related to providing reliable 48V DC power to Company equipment at a new Company switching station or a Proposer-owned station. This may include, but is not limited to battery racks, banks, fuse panels, and associated power system equipment.

Hawaiian Electric Company  
APPENDIX H - INTERCONNECTION FACILITIES COST AND SCHEDULE  
INFORMATION

3. Fiber Termination Equipment
  - a. If Company-owned fiber is used to satisfy the communication requirements in the IRS, then the Proposer shall be responsible for all costs related to terminating the ADSS fiber or OPGW at the new Company switching station and point of interconnection to Company's existing system. This may include, but is not limited to a fiber termination panel and associated equipment/hardware (fiber guide, splice trays, connectors, etc.)
4. Microwave Radio or Wireless Radio
  - a. If Company-owned microwave radio (6GHz, 10/11 GHz, etc.) or Company-owned wireless radio (900MHz, 450MHz, etc.) is used to satisfy the communications requirements in the IRS, then the Proposer shall be responsible for all costs related to installing the microwave or wireless radio/link at the new Company switching station and remote site(s). This may include, but is not limited to:
    - i. Pre-design requirements (path survey/engineering, FCC frequency coordination, licensing, filings, EME study if required, etc.)
    - ii. Project management, design, permitting, regulatory fees and approvals, land rights, labor, inspection, construction management, and testing
    - iii. Pole or tower facilities to support the microwave dish and its connection to the microwave equipment (waveguide, cables, conduit, etc.)
    - iv. Civil/structural work (survey, grading, trenching, conduits, manholes/handholes, concrete pads, concrete pier foundations, pole hole excavation, etc.)
    - v. Antenna system design and installation
5. Leased Service
  - a. If 3<sup>rd</sup> party leased service will provide telecommunication connectivity to the new Company switching station, then the Proposer shall be responsible for all costs related to ordering and installing the leased service at the site. This may include, but not be limited to the initial cost to establish the leased line(s) required for the project, monthly recurring leased cost of the service(s), and on-going maintenance of the service(s).
6. Telecommunication Service Equipment
  - a. Telecommunication equipment is required to provide circuits to support the various applications at the new Company switching station. The Proposer shall be responsible for all costs related to installing the telecommunication equipment. This may include, but is not limited to:
    - i. Project management, design, installation, and testing
    - ii. Telecommunication routers, multiplexors, and associated equipment/hardware

Hawaiian Electric Company  
APPENDIX H - INTERCONNECTION FACILITIES COST AND SCHEDULE  
INFORMATION

**1.10 – PROPOSER PAYMENTS**

1. The Company shall require upfront payment prior to the commencement of any phase of work based on an estimate of Company costs for that phase. A true-up at the end of the project shall be completed and a refund or bill shall be processed in accordance with the Interconnection Agreement when necessary.
2. Proposer is also responsible for payments to the Company related to service contracts for service power.

**SECTION 2 – INTERCONNECTION COSTS**

To assist Proposers in assessing the impacts of location on potential projects, the information provided in Section 2 can be used to approximate the cost for Company-Owned Interconnection Facilities (COIF), including substation, telecommunications, security, transmission or distribution lines, and project management. This information is based on typical interconnections as shown in Attachments 1 through 3 of this Appendix H. Conceptual design is not intended to cover all interconnection requirements. Final interconnection design will be subject to the results of a technical review. The per-unit cost figures below should not be used to create a detailed project estimate. A detailed project estimate typically requires a certain level of engineering to assess project site conditions and to factor in other parameters specific to the project.

The Proposer should identify the components assumed for their project and the quantity assumed for each. Each table below provides notes on the assumptions for each of the unit cost estimates. If a Proposer's project requirements are different than what is assumed in the notes, the Proposer should identify each difference and provide an estimated additional cost or savings resulting from those different requirements. Please see Attachment 4 for examples of how to apply the per-unit costs provided. All costs provided do not include costs related to Proposer responsibilities including, but not limited to, permitting, land rights, community outreach, biological and/or cultural (archeological) surveys. Proposers should do their own due diligence for these costs.

**2.1 – DISTRIBUTION (12KV AND BELOW) INTERCONNECTION**

Please refer to Attachment 1 (Distribution Secondary Interconnection for 250 kW and larger to less than 1 MW), Attachment 2 (Distribution Primary Interconnection for 250 kW and larger to less than 1 MW), or Attachment 3 (Pala'au Interconnection for Projects 250kW or larger) of this Appendix H for single line diagrams depicting the required interconnection to the Company's system. Please see Attachment 4 for examples of how to apply the per-unit costs provided. All costs provided in Section 2.1 assume the COIF will be built by the Company.

**A. TYPICAL DISTRIBUTION SECONDARY INTERCONNECTION FOR 250 KW  
PROJECTS (ATTACHMENT 1)**

Hawaiian Electric Company  
APPENDIX H - INTERCONNECTION FACILITIES COST AND SCHEDULE  
INFORMATION

<b>TYPICAL DISTRIBUTION SECONDARY INTERCONNECTION FOR 250 KW PROJECTS (ATTACHMENT 1)</b>		
<b>Item</b>	<b>Description</b>	<b>Cost</b>
<b>Substation &amp; Meter Baseline Costs</b>		
1	All components shown in <u>Attachment 1</u> except for the T&D Baseline and Distribution line extension costs. <ul style="list-style-type: none"> <li>• Includes costs for engineering, materials, construction, and testing.</li> <li>• Distribution line extension – See Items 2, 3, and 4 and Section 2.1D.</li> <li>• Telecommunications requirements – See Section 2.1E.</li> <li>• Security requirements – See Section 2.1F.</li> </ul>	\$468,000
<u>Notes:</u>		
a) Assumes construction in 2022. b) Civil infrastructure and space for COIF provided by Proposer. c) Substation relay protection requirements have not been identified so costs are based upon typical line protection relaying requirements. d) Does not include costs for permitting, land rights, or a Relay Coordination Study.		
<b>T&amp;D Baseline Costs</b>		
2	Tap to OH (secondary interconnection) <ul style="list-style-type: none"> <li>• Includes costs for engineering, materials, construction for 3ph riser fuses (100A max) or disconnects, 1 wood pole, 100ft UG line extension (1 feeder), padmount transformer, and 3ph, 4W 600V cables from transformer to Proposer switchgear</li> </ul>	\$231,000
3	Tap to UG Main (secondary interconnection) <ul style="list-style-type: none"> <li>• Includes costs for engineering, materials, construction for UG tap, 100ft UG line extension (1 feeder), padmount switch (fuse 100A max), padmount transformer, cable between switch and transformer, and 3ph, 4W 600V cables from transformer to Proposer switchgear</li> <li>• Assumes padmount switch is within 10ft of the Company-owned transformer</li> </ul>	\$285,000
4	Tap to UG Fused Feeder (secondary interconnection) <ul style="list-style-type: none"> <li>• Includes costs for engineering, materials, construction for UG tap, 100ft UG line extension (1 feeder), padmount transformer, and 3ph, 4W 600V cables from transformer to Proposer switchgear</li> </ul>	\$211,000
<u>Notes:</u>		
a) Assumes construction in 2022. b) Interconnection will typically require either Item 2, 3, or 4 depending on the existing facilities in the area and the specific route of the line extension.		

Hawaiian Electric Company  
APPENDIX H - INTERCONNECTION FACILITIES COST AND SCHEDULE  
INFORMATION

<b>TYPICAL DISTRIBUTION SECONDARY INTERCONNECTION FOR 250 KW PROJECTS (ATTACHMENT 1)</b>		
<b>Item</b>	<b>Description</b>	<b>Cost</b>
	<ul style="list-style-type: none"> <li>c) Includes 100ft UG line extension of one feeder (minimum requirement).</li> <li>d) Proposer can request an additional backup feeder for quicker restoration if a fault occurs. Proposer should add costs for the additional feeder per Item 34.</li> <li>e) OH Line extension – Add applicable costs per Items 30 and/or 32.</li> <li>f) UG Line extension (above 100ft) – Add costs per Item 33.</li> <li>g) Additional OH/UG transitions – Add costs per Item 37.</li> <li>h) Secondary voltage from Proposer is assumed to be 480Y/277V in these scenarios.</li> <li>i) Maximum of 11 secondary connections is allowed on the Company-owned transformer.</li> <li>j) Assumes Proposer switchgear is within 10ft of the Company-owned transformer.</li> <li>k) OH/UG route and civil infrastructure drawings provided by Proposer.</li> <li>l) Civil infrastructure (pads, MH/HHs, conduits, etc.) is designed, procured, and installed by Proposer.</li> <li>m) Includes review of Proposer civil infrastructure designs and materials and inspection of Proposer civil infrastructure construction.</li> <li>n) Does not include vegetation clearing, grading, dewatering, permitting or land rights.</li> </ul>	

B. TYPICAL DISTRIBUTION PRIMARY INTERCONNECTION FOR 250 KW PROJECTS  
(ATTACHMENT 2)

<b>TYPICAL DISTRIBUTION PRIMARY INTERCONNECTION FOR 250 KW PROJECTS (ATTACHMENT 2)</b>		
<b>Item</b>	<b>Description</b>	<b>Cost</b>
<b>Substation &amp; Meter Baseline Costs</b>		
10	Components on the Company side of the demarcation as shown in <u>Attachment 2</u> <ul style="list-style-type: none"> <li>• Includes costs for engineering, materials, construction, and testing.</li> <li>• Distribution line extension – See Items 11, 12, and 13 and Section 2.1D.</li> <li>• Telecommunications requirements – See Section 2.1E.</li> <li>• Security requirements – See Section 2.1F.</li> </ul>	\$468,000
<u>Notes:</u>		
<ul style="list-style-type: none"> <li>a) Assumes construction in 2022.</li> <li>b) Civil infrastructure and space for COIF provided by Proposer.</li> <li>c) Substation relay protection requirements have not been identified so costs are based upon typical line protection relaying requirements.</li> <li>d) Does not include costs for permitting, land rights, or a Relay Coordination Study.</li> </ul>		

Hawaiian Electric Company  
APPENDIX H - INTERCONNECTION FACILITIES COST AND SCHEDULE  
INFORMATION

<b>TYPICAL DISTRIBUTION PRIMARY INTERCONNECTION FOR 250 KW PROJECTS (ATTACHMENT 2)</b>		
<b>Item</b>	<b>Description</b>	<b>Cost</b>
<b>T&amp;D Baseline Costs</b>		
11	Tap to OH (primary interconnection) <ul style="list-style-type: none"> <li>Includes costs for engineering, materials, construction for 3ph riser fuses (100A max) or disconnects, 1 wood pole, 100ft UG line extension (1 feeder), and primary termination to Proposer switchgear</li> </ul>	\$110,000
12	Tap to UG Main (primary interconnection) <ul style="list-style-type: none"> <li>Includes costs for engineering, materials, construction for UG tap, 100ft UG line extension (1 feeder), padmount switch (fuse 100A max), and primary cables and terminations between switch and Proposer switchgear</li> <li>Assumes padmount switch is within 10ft of the Proposer switchgear</li> </ul>	\$158,000
13	Tap to UG Fused Feeder (primary interconnection) <ul style="list-style-type: none"> <li>If Project &lt; 100A – Includes costs for engineering, materials, construction for UG tap, 100ft UG line extension (1 feeder), and primary termination to Proposer switchgear</li> <li>If Project ≥ 100A – Not allowed</li> </ul>	\$80,000
<b>Notes:</b> <ol style="list-style-type: none"> <li>Assumes construction in 2022.</li> <li>Interconnection will typically require either Item 11, 12, or 13 depending on the existing facilities in the area and the specific route of the line extension.</li> <li>Assumes Proposer switchgear is within 100ft of the GCP.</li> <li>Includes 100ft UG line extension of one feeder (minimum requirement).</li> <li>Proposer can request an additional backup feeder for quicker restoration if a fault occurs. Proposer should add costs for the additional feeder per Item 34.</li> <li>OH Line extension – Add applicable costs per Items 30, and/or 32.</li> <li>UG Line extension (above 100ft) – Add costs per Item 33.</li> <li>Additional OH/UG transitions – Add costs per Item 37.</li> <li>OH/UG route and civil infrastructure drawings provided by Proposer.</li> <li>Civil infrastructure (pads, MH/HHs, conduits, etc.) designed, procured, and installed by Proposer.</li> <li>Includes review of Proposer civil infrastructure designs and materials and inspection of Proposer civil infrastructure construction.</li> <li>Does not include vegetation clearing, grading, dewatering, permitting or land rights.</li> </ol>		

Hawaiian Electric Company  
APPENDIX H - INTERCONNECTION FACILITIES COST AND SCHEDULE  
INFORMATION

C. TYPICAL DISTRIBUTION PRIMARY INTERCONNECTION TO PALA‘AU FOR  
PROJECTS ≥ 250KW (ATTACHMENT 3)

<b>INTERCONNECTION AT PALA‘AU  FOR PROJECTS ≥ 250 kW AND ≤ 2.5 MW (<u>ATTACHMENT 3</u>)</b>		
<b>Item</b>	<b>Description</b>	<b>Cost</b>
<b>Substation &amp; Meter Baseline Costs</b>		
21	Components at the Project Site on the Company side of the demarcation as shown in <u>Attachment 3</u> <ul style="list-style-type: none"> <li>• Includes costs for engineering, materials, construction, and testing.</li> <li>• Assumes civil infrastructure and space for COIF is provided by Proposer.</li> <li>• Distribution line extension – See Items 24 and 26 and Section 2.1D.</li> <li>• Telecommunications requirements – See Section 2.1E.</li> <li>• Security requirements – See Section 2.1F.</li> </ul>	\$486,000 / interconnection line
22	Company work for components at Pala‘au PP as shown in <u>Attachment 3</u> <ul style="list-style-type: none"> <li>• Includes engineering, materials, construction, and testing.</li> <li>• Local SCADA equipment is included.</li> <li>• Does not include excavation and fill</li> </ul>	\$600,000 / interconnection line
<u>Notes:</u> <ol style="list-style-type: none"> <li>a) Assumes construction in 2022.</li> <li>b) Substation relay protection requirements have not been identified so costs are based upon typical line protection relaying requirements.</li> <li>c) Does not include costs for permitting, land rights, or a Relay Coordination Study.</li> </ol>		
<b>T&amp;D Baseline Costs</b>		
24	UG Termination to OH Extension <ul style="list-style-type: none"> <li>• Includes costs for engineering, materials, construction for UG termination at Proposer site, 100ft UG line extension (1 feeder), 3ph riser with disconnects, and 1 wood pole</li> <li>• Add OH line extension – See Item 30 or 32. Line extension costs are for one line. If the project is segmented, then costs for two separate OH lines (one for each feeder) should be accounted for.</li> <li>• Add UG line extension (if &gt; 100ft) – See Item 33.</li> <li>• If Proposer’s Facility is segmented, then add an additional UG feeder and riser – See Items 34 and 37. UG feeders can be in the same conduit and MH system.</li> </ul>	\$110,000

Hawaiian Electric Company  
APPENDIX H - INTERCONNECTION FACILITIES COST AND SCHEDULE  
INFORMATION

<b>INTERCONNECTION AT PALA‘AU FOR PROJECTS ≥ 250 kW AND ≤ 2.5 MW (ATTACHMENT 3)</b>		
<b>Item</b>	<b>Description</b>	<b>Cost</b>
	<ul style="list-style-type: none"> <li>Risers and UG line extension should also be added for termination at Pala‘au PP.</li> </ul>	
26	UG Termination to UG Extension <ul style="list-style-type: none"> <li>Includes costs for engineering, materials, construction for UG termination at Proposer site and 100ft UG line extension (1 feeder)</li> <li>Add UG line extension (if &gt; 100ft) – See Item 33.</li> <li>If Proposer’s Facility is segmented, then add an additional feeder for the entire UG length – See Item 34. UG feeders can be run in the same conduit and MH system.</li> </ul>	\$80,000
<b>Notes:</b> <ol style="list-style-type: none"> <li>Assumes construction in 2022.</li> <li>Interconnection will typically require either Item 24 or 26 for work at the Proposer’s site in addition to any line extension above 100ft of UG.</li> <li>Includes 100ft UG line extension of one feeder.</li> <li>OH/UG route and civil infrastructure drawings provided by Proposer.</li> <li>Civil infrastructure (pads, MH/HHs, conduits, etc.) designed, procured, and installed by Proposer.</li> <li>Includes review of Proposer civil infrastructure designs and materials and inspection of Proposer civil infrastructure construction.</li> <li>Does not include vegetation clearing, grading, dewatering, permitting or land rights.</li> </ol>		

D. DISTRIBUTION LINE EXTENSION COSTS

<b>DISTRIBUTION LINE EXTENSION COSTS</b>		
<b>Item</b>	<b>Description</b>	<b>Cost</b>
30	12kV OH accessible (200ft spans, #1/0 AAC)	\$796,000 / mile
32	12kV OH inaccessible (250ft spans, #1/0 AAC)	\$1,692,000 / mile
33	12kV UG (200ft spans, #4/0 AL PEICN)	\$835,000 / mile
34	12kV UG add’l feeder (200ft spans, #4/0 AL PEICN)	\$502,000 / mile
37	12kV 3ph riser w/ disconnects (including pole/anchor)	\$46,000 each
<b>Notes:</b> <ol style="list-style-type: none"> <li>Assumes construction in 2022.</li> <li>OH assumes wood poles and 3ph overhead conductor with neutral underbuild.</li> <li>Accessible assumes vehicles can be used during construction.</li> <li>Inaccessible assumes helicopters are needed during construction.</li> <li>Includes engineering, materials, construction labor for electrical work, inspection for UG civil infrastructure, and contractor costs for pole/anchor digging.</li> </ol>		



Hawaiian Electric Company  
APPENDIX H - INTERCONNECTION FACILITIES COST AND SCHEDULE  
INFORMATION

<b>DISTRIBUTION LINE EXTENSION COSTS</b>		
<b>Item</b>	<b>Description</b>	<b>Cost</b>
f)	OH/UG route and civil infrastructure drawings provided by Proposer.	
g)	Civil infrastructure (pads, MH/HHs, conduits, etc.) designed, procured, and installed by Proposer.	
h)	Does not include vegetation clearing, grading, dewatering, permitting or land rights.	

E. TYPICAL TELECOMMUNICATIONS REQUIREMENTS FOR DISTRIBUTION INTERCONNECTIONS

1. 250 KW Projects – See Section 2.4 for costs
  - a. Primary communications links can consist of cellular, lease line, licensed radio, fiber, or microwave.
  - b. Back-up communications links not required.
  - c. Additional analog leased telephone lines are required to support revenue meters (Proposer shall do their own due diligence for costs on this).
2. Interconnection Project at Pala‘au – See Section 2.4 for costs
  - a. Primary communications links can consist of lease line, licensed radio, fiber or microwave.
  - b. Back-up communications links are required (can consist of lease line, licensed radio, fiber, or microwave).
  - c. Back-up communications links must be transport diverse until the “last mile”.
  - d. Additional analog leased telephone lines are required to support revenue meters (Proposer shall do their own due diligence for costs on this).
3. Requirements are subject to change based on project specific evaluations, technical reviews, or IRS.

F. SECURITY REQUIREMENTS FOR DISTRIBUTION INTERCONNECTIONS

1. For Company-owned equipment within Proposer’s Facility, Company requires:
  - a. Standard 8ft high security fence with 3-strand barbed wire V-top.
  - b. Interior mounted 4’ high cattle fencing.
  - c. All gates will be secured using a proprietary padlock system.
  - d. Proposer-owned cabinets/enclosures housing Company equipment shall be secured with a lock provided by Company.
  - e. Company requires 24/7 access to Company facilities within the Proposer facility.
2. See Section 2.5 for more information on Security Requirements.

**2.2 – [NOT USED]**

**2.3 – [NOT USED]**

Hawaiian Electric Company  
APPENDIX H - INTERCONNECTION FACILITIES COST AND SCHEDULE  
INFORMATION

**2.4 – TELECOMMUNICATIONS**

Please refer to Attachment 1 (Distribution Secondary Interconnection for 250 kW and larger to less than 1 MW), Attachment 2 (Distribution Primary Interconnection for 250 kW and larger to less than 1 MW), or Attachment 3 (Pala’au Interconnection for Projects 1 MW or larger) of this Appendix H for single line diagrams depicting the required interconnection to the Company’s system. Please see Attachment 4 for examples of how to apply the per-unit costs provided.

The communications equipment will require a communications channel(s). Some of the communications channel options include cellular, lease line, licensed radio, fiber, or microwave. The number of communication circuits (primary/backup) and type of communication circuits required will vary depending on the type/size of the project.

**A. TELECOMMUNICATIONS BASELINE COSTS**

The costs below are high level per unit costs for communications requirements in support of the Project. Sections 2.1E and 2.2B above provide typical scenarios of when these options may be utilized.

<b>TELECOMMUNICATIONS BASELINE COSTS</b>		
<b>Item</b>	<b>Description</b>	<b>Cost</b>
<b>Communications Cabinet or Enclosure</b>		
70	Communications Enclosure with circuits to support SCADA <ul style="list-style-type: none"> <li>Only applicable to Cellular, Lease Line, Company-owned fiber options</li> </ul>	\$52,000 / site
72	Communications Cabinet with circuits to support SCADA <ul style="list-style-type: none"> <li>Projects with SCADA and diverse communication circuits</li> </ul>	\$230,000 / site
<u>Notes:</u>		
a) Assumes construction in 2022. b) All projects that require communications will require facilities to store the communications equipment. The example above is provided but other alternatives may be available upon request. c) Cabinet is used to support Company equipment and capable of providing communications circuit for SCADA. d) Communications cabinet cost does not include fiber, microwave, radio equipment or lease circuits. e) Proposer will provide all conduits, foundations, HHs, AC power, grounding as required per Company standards.		
<b>Cellular or Lease Line Options</b>		
73	Cellular or Lease Line one-time and recurring costs	Will vary based on 3 <sup>rd</sup> party provider

Hawaiian Electric Company  
APPENDIX H - INTERCONNECTION FACILITIES COST AND SCHEDULE  
INFORMATION

<b>TELECOMMUNICATIONS BASELINE COSTS</b>		
<b>Item</b>	<b>Description</b>	<b>Cost</b>
<p><u>Notes:</u></p> <ul style="list-style-type: none"> <li>a) Add cost of Communications Cabinet – See Items 70-72.</li> <li>b) Check with Company to understand the current cellular or lease line requirements.</li> <li>c) Communication circuit requirements will be based on applications needed for the project.</li> <li>d) Company can provide communication circuit interconnection requirements and assist with review of circuit order from the 3<sup>rd</sup> party provider as needed.</li> <li>e) Proposer to work directly with 3<sup>rd</sup> party provider if a cellular or lease line circuit is needed.</li> <li>f) Cost will be the responsibility of the Proposer and is to be negotiated with the 3<sup>rd</sup> party provider.</li> </ul>		
<b>Licensed 900 MHz Radio Option</b>		
74	Licensed 900 MHz Radio Equipment <ul style="list-style-type: none"> <li>• Includes 2 each antenna equipment to create a radio link</li> </ul>	\$168,000 / link
<p><u>Notes:</u></p> <ul style="list-style-type: none"> <li>a) Assumes construction in 2022.</li> <li>b) Add cost of Communications Cabinet – See Items 71-72. The radio equipment will be installed within the Communication Cabinet.</li> <li>c) Assumes there is radio line-of-sight clearance between the communication endpoints.</li> <li>d) Assumes FCC licensed 900MHz Frequencies are available.</li> <li>e) Assumes there is an existing structure/building with space available on the Company side to mount the antenna equipment and house the radio equipment.</li> <li>f) Assumes Telecommunications grounding standards are up to date at both sites.</li> <li>g) Assumes 48 V DC power with 12-hour battery backup is available.</li> <li>h) Does not include special site-specific permit/approval activities that may be required including, but not limited to, Neighborhood Board(s), Conservation District Use Application, Environmental Assessment, Shoreline Management Area approval, biological (endangered species or habitat) surveys, and/or cultural (archeological) surveys or the cost of any migration required for approvals to be granted. Proposers should conduct their own due diligence for these costs.</li> <li>i) Proposer is responsible to install a structure to mount the antenna equipment on the Proposer side and provide any conduit required between the Communications Cabinet and the antenna mount structure.</li> </ul>		
<b>Fiber-Optic Cable Option</b>		
75	New Fiber-only pole line (200' avg spans, 60-strand ADSS) <ul style="list-style-type: none"> <li>• Includes new wood poles</li> </ul>	\$472,000 / mile
76	Fiber underbuild on new or existing pole line (200' avg spans, 60-strand ADSS)	\$218,000 / mile

Hawaiian Electric Company  
 APPENDIX H - INTERCONNECTION FACILITIES COST AND SCHEDULE  
 INFORMATION

<b>TELECOMMUNICATIONS BASELINE COSTS</b>		
<b>Item</b>	<b>Description</b>	<b>Cost</b>
	<ul style="list-style-type: none"> <li>Assumes no replacements of existing poles are needed</li> </ul>	
<u>Notes:</u>		
a) Assumes construction in 2022. b) Add cost of Communications Cabinet – See Items 70-72. c) Assumes no splices are needed along the route.		
<b>Microwave Option</b>		
77	Point-to-Point Microwave Link <ul style="list-style-type: none"> <li>Includes 2 each antenna equipment to create a radio link</li> </ul>	\$836,000 / link
78	50ft Microwave Tower	\$734,000 each
79	100ft Microwave Tower	\$1,066,000 each
<u>Notes:</u>		
a) Assumes construction in 2022. b) Add cost of Communications Cabinet – See Items 70-72. c) Assumes there is radio line-of-site clearance between the communication endpoints. d) Assumes FCC licensed microwave frequencies are available. e) Assumes there are existing structures/buildings with space available on both ends to house the radio equipment. f) Assumes Telecommunications grounding standards are up to date at both sites. g) Assumes 48 V DC power with 12-hour battery backup is available. h) Does not include special site-specific permit/approval activities that may be required including, but not limited to, Neighborhood Board(s), Conservation District Use Application, Environmental Assessment, Shoreline Management Area approval, biological (endangered species or habitat) surveys, and/or cultural (archeological) surveys or the cost of any migration required for approvals to be granted. Proposers should conduct their own due diligence for these costs. i) Assumes space is available at both ends to construct antenna towers or structures that are rated to survive a Saffir-Simpson category 4 hurricane. j) Other options for Microwave Towers of varying heights may be available.		

**2.5 – SECURITY OF COMPANY-OWNED FACILITIES**

**A. PROPOSER RESPONSIBILITIES AT PROPOSER FACILITY**

The Proposer shall be responsible to incorporate security components and systems for **their facilities** that consider the Security Guidelines for the Electricity Sector (CIP-014-2): Physical Security, as published by the North American Electric Reliability Corporation (NERC) and that at a minimum, meet the requirements in Sections 2.1F.

Hawaiian Electric Company  
 APPENDIX H - INTERCONNECTION FACILITIES COST AND SCHEDULE  
 INFORMATION

**SECTION 3 – [NOT USED]**

**SECTION 4 – TYPICAL COMPANY DURATIONS FOR INTERCONNECTION PROJECTS**

The tables below in Section 4 are to be used as a reference when developing a schedule (required in Appendix B – Proposer’s Response, Section 2.14) to assist Proposers in setting realistic durations and deadlines for critical milestones. These tables represent typical durations for the Company to complete the listed critical milestones that assist in moving the interconnection project through the IRS, Engineering, Procurement, and Construction phases. The durations below do not include time for Proposer to complete items they are responsible for. These high-level typical durations are for planning purposes only and is not intended to cover all project specific requirements. Specific project details can increase or decrease these durations. The detailed project schedule will be determined after the IRS is completed.

**4.1 – DISTRIBUTION PROJECTS (COMPANY-BUILD)**

<b>Hawaiian Electric Durations to be Considered in Schedules (12kV and Below)            General Guidelines for Planning Purposes Only            Hawaiian Electric Build ≥ 1 MW</b>		
<b>Milestone</b>	<b>Duration</b>	<b>Notes</b>
<b>IRS Phase</b>		
Model Validation	2-3 months	May increase depending on # of iterations
System Impact Study (SIS)	150 calendar days	Following Model Acceptance
Facility Study (FS)	40 business days	Following completion of SIS, SLD Acceptance, and Receipt of Developer Drawings and Schedules
<b>Engineering Phase</b>		
30% Design & Review	40 business days	Designs & Reviews for Company-Owned Interconnection Facilities (COIF) & review of Proposer-Owned Interconnection Facilities (SOIF) supporting/impacting COIF
60% Design & Review	50 business days	Designs & Reviews for COIF & review of SOIF supporting/impacting COIF. Following 30% Design acceptance.
90% Design & Review	50 business days	Designs & Reviews for COIF & review of SOIF supporting/impacting COIF. Following 60% Design acceptance

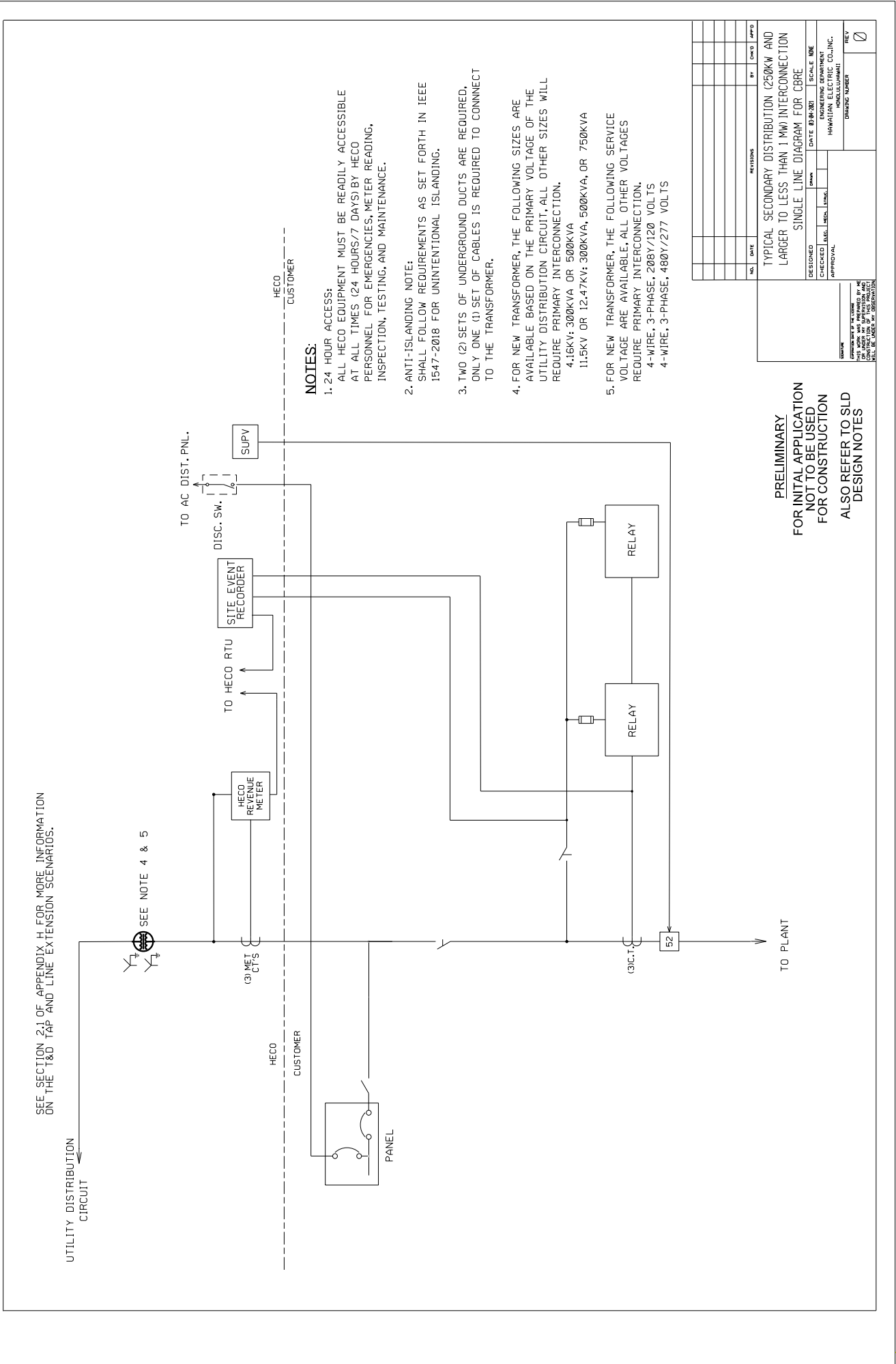
Hawaiian Electric Company  
 APPENDIX H - INTERCONNECTION FACILITIES COST AND SCHEDULE  
 INFORMATION

<b>Hawaiian Electric Durations to be Considered in Schedules (12kV and Below)            General Guidelines for Planning Purposes Only            Hawaiian Electric Build <math>\geq</math> 1 MW</b>		
<b>Milestone</b>	<b>Duration</b>	<b>Notes</b>
Issued for Construction (IFC) Design & Review	30 business days	Designs & Reviews for COIF & review of SOIF supporting/impacting COIF. Following 90% Design acceptance.
<b>Procurement Phase</b>		
Procurement	9 months	Procurement of materials typically happens at 60% design completion
<b>Construction Phase</b>		
Construction	7-8 months	Based on scope/complexity of work
Acceptance Testing	10 business days	Approximately 2 weeks after construction completion
CSAT	30 business days	To occur after commissioning of Proposer's Facility. Duration depends on Proposer's ability to meet the Performance Standards. Required for project $\geq$ 1 MW

4.2 – [NOT USED]

4.3 – [NOT USED]

4.4 – [NOT USED]



**NOTES:**

1. 24 HOUR ACCESS:  
ALL HECO EQUIPMENT MUST BE READILY ACCESSIBLE AT ALL TIMES (24 HOURS/7 DAYS) BY HECO PERSONNEL FOR EMERGENCIES, METER READING, INSPECTION, TESTING, AND MAINTENANCE.
2. ANTI-ISLANDING NOTE:  
SHALL FOLLOW REQUIREMENTS AS SET FORTH IN IEEE 1547-2018 FOR UNINTENTIONAL ISLANDING.
3. TWO (2) SETS OF UNDERGROUND DUCTS ARE REQUIRED, ONLY ONE (1) SET OF CABLES IS REQUIRED TO CONNECT TO THE TRANSFORMER.
4. FOR NEW TRANSFORMER, THE FOLLOWING SIZES ARE AVAILABLE BASED ON THE PRIMARY VOLTAGE OF THE UTILITY DISTRIBUTION CIRCUIT, ALL OTHER SIZES WILL REQUIRE PRIMARY INTERCONNECTION.  
4.16KV: 300KVA OR 500KVA  
11.5KV OR 12.47KV: 300KVA, 500KVA, OR 750KVA
5. FOR NEW TRANSFORMER, THE FOLLOWING SERVICE VOLTAGE ARE AVAILABLE, ALL OTHER VOLTAGES REQUIRE PRIMARY INTERCONNECTION.  
4-WIRE, 3-PHASE, 208Y/120 VOLTS  
4-WIRE, 3-PHASE, 480Y/277 VOLTS

**PRELIMINARY**  
FOR INITIAL APPLICATION  
NOT TO BE USED  
FOR CONSTRUCTION  
ALSO REFER TO SLD  
DESIGN NOTES

NO.	DATE	REVISIONS	BY	CHKD	APP'D

TYPICAL SECONDARY DISTRIBUTION (250KV AND LARGER TO LESS THAN 1 MW) INTERCONNECTION SINGLE LINE DIAGRAM FOR CBRE

DESIGNED	DATE 01/04/2021	SCALE	LINE
CHECKED	DATE	SCALE	LINE
APPROVAL	DATE	SCALE	LINE

ENGINEERING DEPARTMENT  
HAWAIIAN ELECTRIC CO., INC.  
INDIVIDUAL NAME: \_\_\_\_\_  
DRAWING NUMBER: \_\_\_\_\_  
REV: 0

**Template Notes to be added to the 12kV PV/BESS (250kW and larger to less than 1MW) Project Single Line Diagram**

**Additional requirements may be added based on project design.**

<b>PROPOSED PROJECT NAME:</b>	
<b>PROPOSED PROJECT SIZE:</b>	
<b>CUSTOMER SLD REVISION NUMBER AND DATE:</b>	
<b>UTILITY SLD REVISION NUMBER AND DATE:</b>	
<b>UTILITY SUBSTATION:</b>	
<b>UTILITY 12KV CIRCUIT:</b>	
<b>UTILITY 12KV CIRCUIT BREAKER #:</b>	

**Section A: Planning Notes**

A1. If IRS required, by operation procedure(s), the Project shall be paralleled with the utility system only when the \_\_\_\_\_ (12kV circuit name) 12 kV circuit is in normal operating configuration served via breaker \_\_\_\_\_ (utility breaker number) at \_\_\_\_\_ (utility substation name) Substation.

A2. Customer to ensure manual closing of Customer’s main AC kV breaker CB-A (utility# XXXX) shall be allowed only for hot line (\_\_\_\_\_(utility 12kV circuit) 12 kV line-side) and dead bus (Customer-side) unless otherwise allowed by the Company. There shall be no auto reclosing on Customer’s main AC breaker CB-A (utility# XXXX).

**Section B: System Operation Notes**

B1. Utility load dispatcher shall be enabled to issue the following to the Customer via DNP 3.0, or other utility-approved protocol interface:

- a. Maximum Power Limit and Power Reference Limit (dispatch) set point control signals. Customer is not allowed to override utility’s curtailment control; and

B2. The following signals provided by the Customer shall be telemetered to Utility load dispatch office:

- a. Status of Customer’s main AC breaker CB-A (utility# XXXX);
- b. Distribution voltage (3 phase L-N);
- c. Facility Power Possible (kW);
- d. Facility Online/Offline Status;
- e. Facility output (kW) that is being exported to Company System;
- f. Facility’s confirmation of a Company control being received and value of that control as implemented.



- B3. The facility equipment should be capable of supporting, at a future date additional telemetry data requested by the Company as applicable:
- a. Distribution line amps (3 phase), frequency, NET kW, NET kVAR, and NET power factor at point of interconnection. Power factor to be a calculated value;
  - b. PV kW and kVAR output;
  - c. BESS kW and kVAR output/charge;
  - d. Received kWh accumulator, sent kWh accumulator, received kVARh accumulator, Sent kVARh accumulator;
  - e. Plane of Array Solar Irradiance in Watts/m<sup>2</sup>;
  - f. kW output for each inverter;
  - g. Status for each inverter (by DNP status);
  - h. Facility Net Power Possible (kW);
  - i. Volt-Var curve and deadband settings;
  - j. Volt-Var Enabled/Disabled Status;
  - k. Volt-Watt curve and deadband settings;
  - l. Volt-Watt Enabled/Disabled Status;
  - m. Frequency-Watt curve and deadband settings;
  - n. Frequency-Watt Enabled/Disabled Status;
  - o. BESS State of Charge (%);
  - p. BESS Energy remaining (kWH);
  - q. kW set point for each inverter
- B4. The following occurrences shall initiate separate alarm to utility load dispatch office.
- a. RTU Loss of Communication;
  - b. Violation of Maximum Ramp Rate Upward (Performance Standard); and
  - c. Violation of Maximum Ramp Rate Downward (Performance Standard).
- B5. Utility requires 24 hour access to utility-owned SCADA, communication, and utility-owned relaying and monitoring equipment.
- B6. Utility shall own a high-speed digital fault recorder (DFR) (i.e., Tesla Lite Model) near the point of interconnection, which shall be in continuous service and on a rolling window basis monitoring sub-cycle voltages, currents and harmonics, as well as disturbance events and capable of remote interrogation following an event. Utility requires 24 hour access to this equipment. Customer to provide the following hard wired inputs to utility's power quality device:
- a. Status of Customer's main AC breaker CB-A (utility# XXXX);
  - b. line amps (3 phase); and
  - c. line-to-line voltage (3 phase)

### **Section C: Telecommunication Notes**

- C1. Secure and reliable communication is required for the following:

Template 12kV SLD Notes for RFP (250kW and larger to less than 1MW).docx

- a. Monitoring and control to/ from Customer's facility;
- b. Revenue metering for power export and consumption readings (for 1MW facility; and
- c. Phone circuits as required.

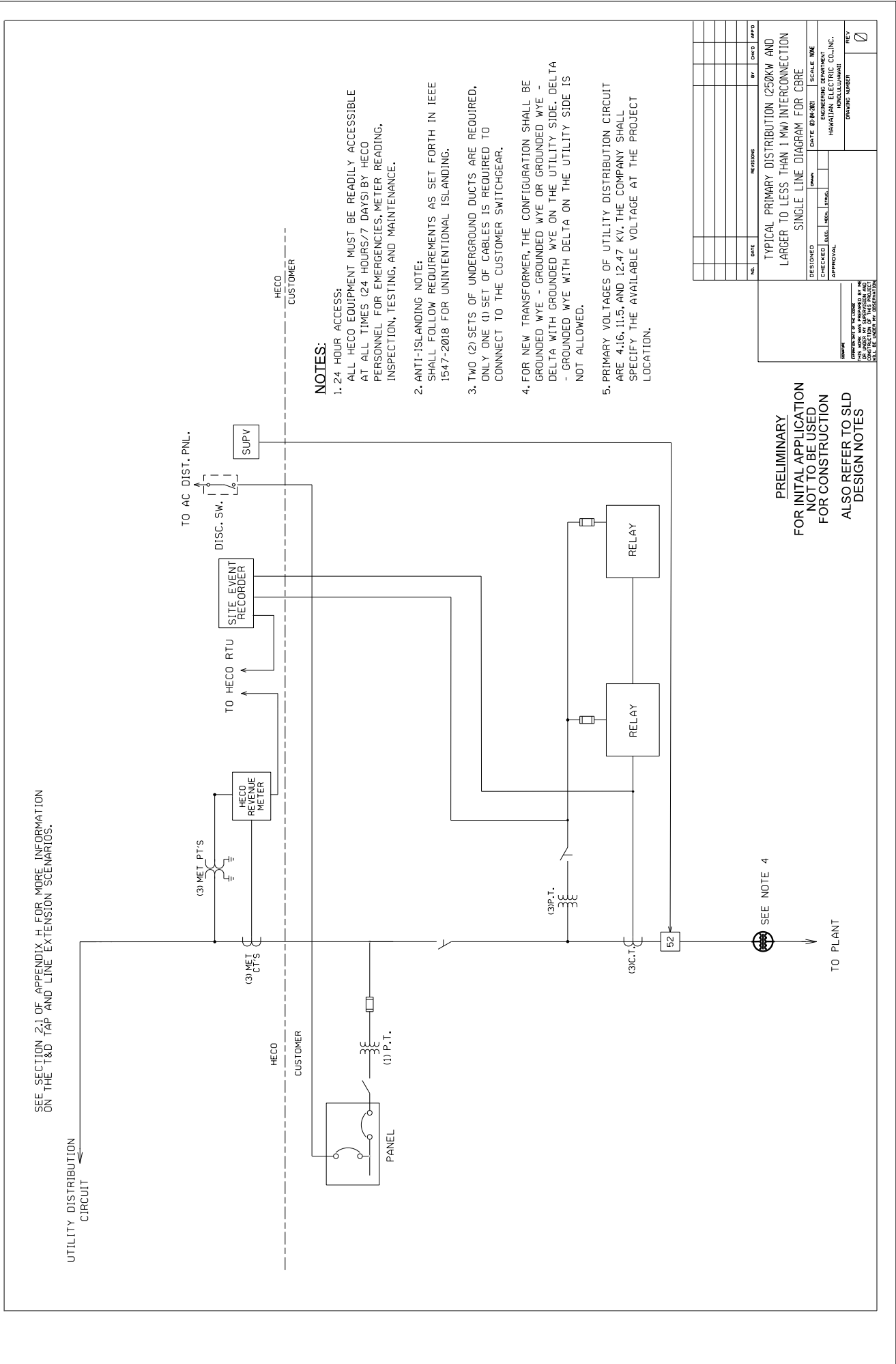
C2. Customer to provide leased service from Hawaiian Telecom as required. Customer to coordinate with utility for details

#### **Section D: Metering Notes**

D1. Customer to design revenue metering facilities in accordance with the requirements in Chapter 4 of the Hawaiian Electric Company's Electric Service Installation Manual.

#### **Section E: Design Notes**

- E1. Customer to provide a reliable DC source for 12 hour backup period; specific voltage to be determined by utility at a later date.
- E2. Customer to provide a source of station service power for its facility that will remain available when Customer's main AC breaker CB-A (utility# XXXX) is opened and the facility is separated from utility's system.
- E3. PTs and CTs for DFR should be the same quality as the PTs and CTs for the protective relaying.
- E4. Customer to provide raw count (DNP 3.0) for analog points to utility. Customer to provide hardwired dry contact pairs for status points to utility and accept hardwired control points from utility (except for DNP control signals identified in Note B1 and DNP status points identified in Note B3.g).



**NOTES:**

1. 24 HOUR ACCESS:  
ALL HECO EQUIPMENT MUST BE READILY ACCESSIBLE AT ALL TIMES (24 HOURS/7 DAYS) BY HECO PERSONNEL FOR EMERGENCIES, METER READING, INSPECTION, TESTING, AND MAINTENANCE.
2. ANTI-ISLANDING NOTE:  
SHALL FOLLOW REQUIREMENTS AS SET FORTH IN IEEE 1547-2018 FOR UNINTENTIONAL ISLANDING.
3. TWO (2) SETS OF UNDERGROUND DUCTS ARE REQUIRED, ONLY ONE (1) SET OF CABLES IS REQUIRED TO CONNECT TO THE CUSTOMER SWITCHGEAR.
4. FOR NEW TRANSFORMER, THE CONFIGURATION SHALL BE GROUNDED WYE - GROUNDED WYE OR GROUNDED WYE - DELTA WITH GROUNDED WYE ON THE UTILITY SIDE. DELTA - GROUNDED WYE WITH DELTA ON THE UTILITY SIDE IS NOT ALLOWED.
5. PRIMARY VOLTAGES OF UTILITY DISTRIBUTION CIRCUIT ARE 4.16, 11.5, AND 12.47 KV. THE COMPANY SHALL SPECIFY THE AVAILABLE VOLTAGE AT THE PROJECT LOCATION.

**PRELIMINARY**  
FOR INITIAL APPLICATION  
NOT TO BE USED  
FOR CONSTRUCTION  
ALSO REFER TO SLD  
DESIGN NOTES

REVISIONS		BY		DATE	
NO.	DATE	CHK'D	APP'D	NO.	DATE

TYPICAL PRIMARY DISTRIBUTION (250KW AND LARGER TO LESS THAN 1 MW) INTERCONNECTION SINGLE LINE DIAGRAM FOR CBRE

DESIGNED	DATE 08/04/2021	SCALE N/A
CHECKED	DATE 08/04/2021	SCALE N/A
APPROVAL	DATE 08/04/2021	SCALE N/A

ENGINEERING DEPARTMENT  
HAWAIIAN ELECTRIC CO., INC.  
HONOLULU, HAWAII

DRAWING NUMBER: \_\_\_\_\_  
REV: 0

**Template Notes to be added to the 12kV PV/BESS (250kW and larger to less than 1MW) Project Single Line Diagram**

**Additional requirements may be added based on project design.**

<b>PROPOSED PROJECT NAME:</b>	
<b>PROPOSED PROJECT SIZE:</b>	
<b>CUSTOMER SLD REVISION NUMBER AND DATE:</b>	
<b>UTILITY SLD REVISION NUMBER AND DATE:</b>	
<b>UTILITY SUBSTATION:</b>	
<b>UTILITY 12KV CIRCUIT:</b>	
<b>UTILITY 12KV CIRCUIT BREAKER #:</b>	

**Section A: Planning Notes**

A1. If IRS required, by operation procedure(s), the Project shall be paralleled with the utility system only when the \_\_\_\_\_ (12kV circuit name) 12 kV circuit is in normal operating configuration served via breaker \_\_\_\_\_ (utility breaker number) at \_\_\_\_\_ (utility substation name) Substation.

A2. Customer to ensure manual closing of Customer’s main AC kV breaker CB-A (utility# XXXX) shall be allowed only for hot line \_\_\_\_\_ (utility 12kV circuit) 12 kV line-side) and dead bus (Customer-side) unless otherwise allowed by the Company. There shall be no auto reclosing on Customer’s main AC breaker CB-A (utility# XXXX).

**Section B: System Operation Notes**

B1. Utility load dispatcher shall be enabled to issue the following to the Customer via DNP 3.0, or other utility-approved protocol interface:

- a. Maximum Power Limit and Power Reference Limit (dispatch) set point control signals. Customer is not allowed to override utility’s curtailment control; and

B2. The following signals provided by the Customer shall be telemetered to Utility load dispatch office:

- a. Status of Customer’s main AC breaker CB-A (utility# XXXX);
- b. Distribution voltage (3 phase L-N);
- c. Facility Power Possible (kW);
- d. Facility Online/Offline Status;
- e. Facility output (kW) that is being exported to Company System;
- f. Facility’s confirmation of a Company control being received and value of that control as implemented.

- B3. The facility equipment should be capable of supporting, at a future date additional telemetry data requested by the Company as applicable:
- a. Distribution line amps (3 phase), frequency, NET kW, NET kVAR, and NET power factor at point of interconnection. Power factor to be a calculated value;
  - b. PV kW and kVAR output;
  - c. BESS kW and kVAR output/charge;
  - d. Received kWh accumulator, sent kWh accumulator, received kVARh accumulator, Sent kVARh accumulator;
  - e. Plane of Array Solar Irradiance in Watts/m<sup>2</sup>;
  - f. kW output for each inverter;
  - g. Status for each inverter (by DNP status);
  - h. Facility Net Power Possible (kW);
  - i. Volt-Var curve and deadband settings;
  - j. Volt-Var Enabled/Disabled Status;
  - k. Volt-Watt curve and deadband settings;
  - l. Volt-Watt Enabled/Disabled Status;
  - m. Frequency-Watt curve and deadband settings;
  - n. Frequency-Watt Enabled/Disabled Status;
  - o. BESS State of Charge (%);
  - p. BESS Energy remaining (kWH);
  - q. kW set point for each inverter
- B4. The following occurrences shall initiate separate alarm to utility load dispatch office.
- a. RTU Loss of Communication;
  - b. Violation of Maximum Ramp Rate Upward (Performance Standard); and
  - c. Violation of Maximum Ramp Rate Downward (Performance Standard).
- B5. Utility requires 24 hour access to utility-owned SCADA, communication, and utility-owned relaying and monitoring equipment.
- B6. Utility shall own a high-speed digital fault recorder (DFR) (i.e., Tesla Lite Model) near the point of interconnection, which shall be in continuous service and on a rolling window basis monitoring sub-cycle voltages, currents and harmonics, as well as disturbance events and capable of remote interrogation following an event. Utility requires 24 hour access to this equipment. Customer to provide the following hard wired inputs to utility's power quality device:
- a. Status of Customer's main AC breaker CB-A (utility# XXXX);
  - b. line amps (3 phase); and
  - c. line-to-line voltage (3 phase)

### **Section C: Telecommunication Notes**

- C1. Secure and reliable communication is required for the following:

Template 12kV SLD Notes for RFP (250kW and larger to less than 1MW).docx

- a. Monitoring and control to/ from Customer's facility;
- b. Revenue metering for power export and consumption readings (for 1MW facility; and
- c. Phone circuits as required.

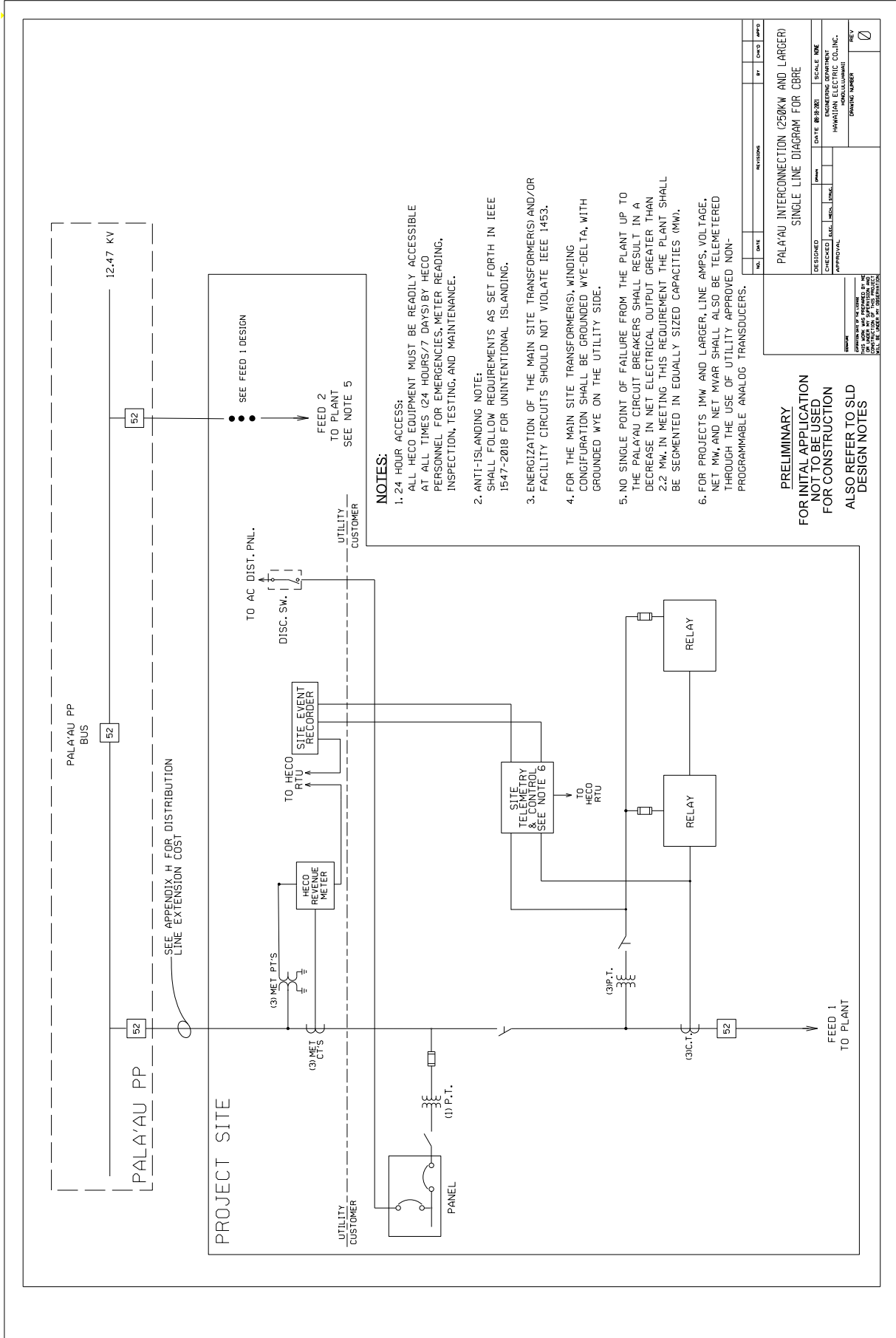
C2. Customer to provide leased service from Hawaiian Telecom as required. Customer to coordinate with utility for details

#### **Section D: Metering Notes**

D1. Customer to design revenue metering facilities in accordance with the requirements in Chapter 4 of the Hawaiian Electric Company's Electric Service Installation Manual.

#### **Section E: Design Notes**

- E1. Customer to provide a reliable DC source for 12 hour backup period; specific voltage to be determined by utility at a later date.
- E2. Customer to provide a source of station service power for its facility that will remain available when Customer's main AC breaker CB-A (utility# XXXX) is opened and the facility is separated from utility's system.
- E3. PTs and CTs for DFR should be the same quality as the PTs and CTs for the protective relaying.
- E4. Customer to provide raw count (DNP 3.0) for analog points to utility. Customer to provide hardwired dry contact pairs for status points to utility and accept hardwired control points from utility (except for DNP control signals identified in Note B1 and DNP status points identified in Note B3.g).



**NOTES:**

1. 24 HOUR ACCESS:  
ALL HECO EQUIPMENT MUST BE READILY ACCESSIBLE AT ALL TIMES (24 HOURS/7 DAYS) BY HECO PERSONNEL FOR EMERGENCIES, METER READING, INSPECTION, TESTING, AND MAINTENANCE.
2. ANTI-ISLANDING NOTE:  
SHALL FOLLOW REQUIREMENTS AS SET FORTH IN IEEE 1547-2018 FOR UNINTENTIONAL ISLANDING.
3. ENERGIZATION OF THE MAIN SITE TRANSFORMER(S) AND/OR FACILITY CIRCUITS SHOULD NOT VIOLATE IEEE 1453.
4. FOR THE MAIN SITE TRANSFORMER(S), WINDING CONFIGURATION SHALL BE GROUNDED WYE-DELTA, WITH GROUNDED WYE ON THE UTILITY SIDE.
5. NO SINGLE POINT OF FAILURE FROM THE PLANT UP TO THE PALAU CIRCUIT BREAKERS SHALL RESULT IN A DECREASE IN NET ELECTRICAL OUTPUT GREATER THAN 2.2 MW. IN MEETING THIS REQUIREMENT THE PLANT SHALL BE SEGMENTED IN EQUALLY SIZED CAPACITIES (MW).
6. FOR PROJECTS 1MW AND LARGER, LINE AMPS, VOLTAGE, NET MW, AND NET MVAR SHALL ALSO BE TELEMETERED THROUGH THE USE OF UTILITY APPROVED NON-PROGRAMMABLE ANALOG TRANSDUCERS.

**PRELIMINARY**  
FOR INITIAL APPLICATION  
NOT TO BE USED  
FOR CONSTRUCTION  
ALSO REFER TO SLD  
DESIGN NOTES

NO.	DATE	REVISIONS	BY	APP'D

PALAU INTERCONNECTION (250KW AND LARGER)  
SINGLE LINE DIAGRAM FOR CBRE

DESIGNED	DATE 08/28/2018	SCALE N/A
CHECKED		
APPROVAL		

ENGINEERING DEPARTMENT  
HAWAIIAN ELECTRIC CO., INC.  
DESIGN NUMBER  
DRAWING NUMBER  
REV 0

DATE PLOTTED: 08/28/2018 10:58:00 AM  
PLOTTER: HP PLOTTER  
PLOT FILE: PALAU\_SLD.dwg

**PROJECT EXAMPLES (MOLOKA'I) - APPENDIX H UNIT COST TABLE**

Examples provided for illustrative purposes only and is not binding for actual facility costs.  
Estimated costs represent Company costs charged to the Proposer.

**250 KW Projects interconnecting to a distribution circuit (secondary interconnection)****Example 1**

250kW PV system with secondary interconnection. Line extension includes tap to existing UG fused feeder and 400ft UG to Company transformer. Proposer to install 12kV civil infrastructure. Proposer site built per Attachment 1 of this Appendix H. Proposer to provide cellular communications with another provider. Company to install communications enclosure.

Appx H Item	Description	Quantity	Unit	Unit Price (\$)	Total Cost (\$)
1	Company work at Proposer site	1	EA	\$390,000	\$468,000
4	Tap to UG FF (sec interconnection)	1	EA	\$211,000	\$211,000
33	12kV UG	0.06	MI	\$835,000	\$47,443
	12kV civil infrastructure (by Proposer)	1	LS	\$0	\$0
70	Comm Enclosure (< 1MW)	1	EA	\$43,000	\$52,000
73	Cellular line (by Proposer)	1	EA	\$0	\$0
			<b>ESTIMATED TOTAL =</b>		<b>\$778,443</b>

**250 KW Projects interconnecting to a distribution circuit (primary interconnection)****Example 2**

250kW PV system interconnecting to an existing 12kV UG circuit. Line extension includes tap to existing UG main and 200ft UG to Company switchgear. Proposer requested additional feeder. Proposer to install 12kV civil infrastructure. Proposer site built per Attachment 2 of this Appendix H. Proposer to provide cellular communications with another provider. Company to install communications enclosure.

Appx H Item	Description	Quantity	Unit	Unit Price (\$)	Total Cost (\$)
10	Company work at Proposer site	1	EA	\$468,000	\$468,000
12	Tap to UG Main (primary interconnection)	1	EA	\$158,000	\$158,000
33	12kV UG	0.02	MI	\$835,000	\$15,814
34	12kV UG add'l feeder	0.04	MI	\$502,000	\$19,966
	12kV civil infrastructure (by Proposer)	1	LS	\$0	\$0
70	Comm Enclosure (< 1MW)	1	EA	\$43,000	\$52,000
73	Cellular line (by Proposer)	1	EA	\$0	\$0
			<b>ESTIMATED TOTAL =</b>		<b>\$713,780</b>



**Pala'au Interconnection****Example 3**

2.5MW project interconnecting to Pala'au substation at a project site 1 mile away. Project interconnects with two (2) outgoing feeders to Pala'au, sized at 1.25MW each. Each 12kV UG feeder between the Proposer's switchgear and the riser poles is 200ft. Each feeder risers to a separate OH line extension. At Pala'au, each OH line will transition back to UG and run 100ft to terminate to the breaker. All lines are accessible. Proposer to install 12kV civil infrastructure. Proposer site built per Attachment 3 of this Appendix H (Pala'au Interconnection for Projects 1 MW or larger). Proposer to provide leased line telecommunications with another provider; back-up communications is required. Company to install Company-owned equipment in Proposer-provided communications cabinet at Proposer site.

Appx H Item	Description	Quantity	Unit	Unit Price (\$)	Total Cost (\$)
21	Company work at Proposer site	2	EA	\$486,000	\$972,000
22	Company work at Pala'au PP	2	EA	\$600,000	\$1,200,000
24	UG Termination to OH Extension	1	EA	\$110,000	\$110,000
30	12kV OH accessible	2	MI	\$796,000	\$1,592,000
33	12kV UG	0.04	MI	\$835,000	\$31,629
34	12kV UG add'l feeder	0.06	MI	\$502,000	\$28,523
37	12kV 3ph riser	3	EA	\$46,000	\$138,000
72	Comm Cabinet (SCADA, 2 circuits)	1	EA	\$230,000	\$230,000
73	Primary Leased line (by Proposer)	1	LS	\$0	\$0
73	Backup Leased line (by Proposer)	1	LS	\$0	\$0
				<b>ESTIMATED TOTAL =</b>	<b>\$4,302,152</b>

**Example 4**

2.2MW project interconnecting to Pala'au substation and located at the Company's Pala'au site. Project interconnects with one (1) outgoing feeder to Pala'au. The 12kV UG feeder between the Proposer's switchgear and the riser poles is 100ft. The OH line extension to the Pala'au substation is 1000ft. At Pala'au, the OH line will transition back to UG and run 100ft to terminate to the breaker. All lines are accessible. Proposer to install 12kV civil infrastructure. Proposer site built per Attachment 3 of this Appendix H (Pala'au Interconnection for Projects 1 MW or larger). Proposer to provide leased line telecommunications with another provider; back-up communications is required. Company to install Company-owned equipment in Proposer-provided communications cabinet at Proposer site.

Appx H Item	Description	Quantity	Unit	Unit Price (\$)	Total Cost (\$)
21	Company work at Proposer site	1	EA	\$486,000	\$486,000
22	Company work at Pala'au PP	1	EA	\$600,000	\$600,000
24	UG Termination to OH Extension	1	EA	\$110,000	\$110,000
30	12kV OH accessible	0.19	MI	\$796,000	\$150,758
33	12kV UG	0.02	MI	\$835,000	\$15,814
37	12kV 3ph riser	1	EA	\$46,000	\$46,000
72	Comm Cabinet (SCADA, 2 circuits)	1	EA	\$230,000	\$230,000
73	Primary Leased line (by Proposer)	1	LS	\$0	\$0
73	Backup Leased line (by Proposer)	1	LS	\$0	\$0
				<b>ESTIMATED TOTAL =</b>	<b>\$1,638,572</b>

**DRAFT**

**REQUEST FOR PROPOSALS**

**FOR**

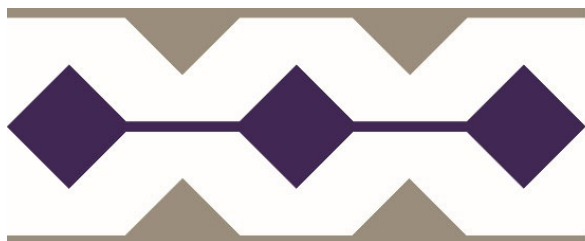
**COMMUNITY-BASED RENEWABLE ENERGY PROJECTS**

**ISLAND OF MOLOKA‘I**

NOVEMBER 4, 2021

Docket No. 2015-0389

*Appendix I – RESERVED*



**Maui  
Electric**

**DRAFT**

**REQUEST FOR PROPOSALS**

**FOR**

**COMMUNITY-BASED RENEWABLE ENERGY PROJECTS**

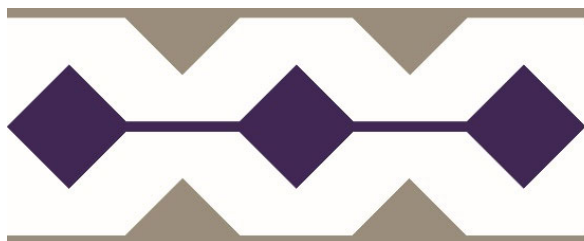
**ISLAND OF MOLOKA‘I**

NOVEMBER 4, 2021

Docket No. 2015-0389

*Appendix J – Maui Electric Rule 29 Tariff*

**[NOTE: Please refer to Exhibit 1 of the November 4, 2021 filing for the proposed Maui Electric Rule No. 29 CBRE Phase 2.]**



**Maui  
Electric**

**DRAFT**  
**REQUEST FOR PROPOSALS**  
**FOR**  
**COMMUNITY-BASED RENEWABLE ENERGY PROJECTS**

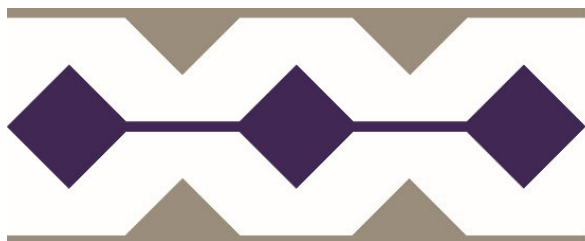
**ISLAND OF MOLOKA‘I**

NOVEMBER 4, 2021

Docket No. 2015-0389

*Appendix K – Model PV Mid-Tier Standard Form  
Contract*

**[NOTE: Please refer to Exhibit 3 of the November 4, 2021 filing for the Draft Mid-Tier Standard Form Contract for Renewable Dispatchable Generation.]**



**Maui  
Electric**

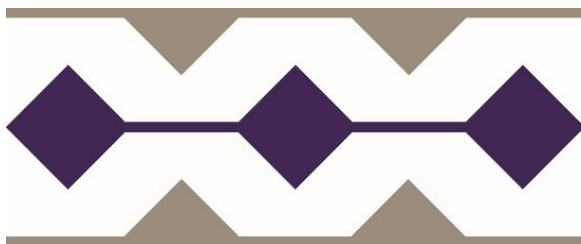
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**REQUEST FOR PROPOSALS**  
**FOR**  
**COMMUNITY-BASED RENEWABLE ENERGY PROJECTS**

**ISLAND OF MOLOKA‘I**

NOVEMBER 4, 2021

Docket No. 2015-0389

*Appendix K-1 – Reserved*



**Maui  
Electric**

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**REQUEST FOR PROPOSALS**  
**FOR**  
**COMMUNITY-BASED RENEWABLE ENERGY PROJECTS**

**ISLAND OF MOLOKA‘I**

NOVEMBER 4, 2021

Docket No. 2015-0389

*Appendix K-2 – Reserved*



**Maui  
Electric**

**DRAFT**

**REQUEST FOR PROPOSALS**

**FOR**

**COMMUNITY-BASED RENEWABLE ENERGY PROJECTS**

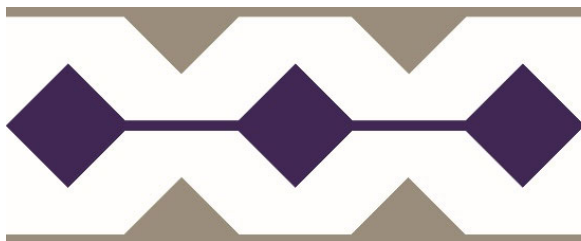
**ISLAND OF MOLOKA‘I**

NOVEMBER 4, 2021

Docket No. 2015-0389

*Appendix K-3 – Project Specific Addendum for the  
Mid-Tier Standard Form Contract*

**[NOTE: Please refer to Exhibit 3 of the November 4, 2021 filing for the Draft Mid-Tier Standard Form Contract for Renewable Dispatchable Generation, which includes this addendum.]**



**Maui  
Electric**

**DRAFT**

**REQUEST FOR PROPOSALS**

**FOR**

**COMMUNITY-BASED RENEWABLE ENERGY PROJECTS**

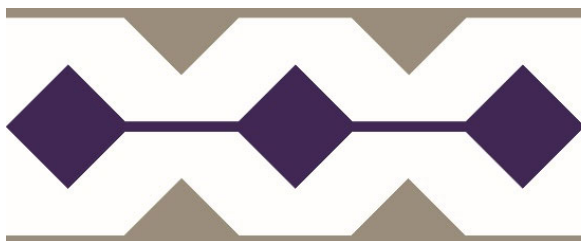
**ISLAND OF MOLOKA‘I**

NOVEMBER 4, 2021

Docket No. 2015-0389

*Appendix K-4 – Attachment COS to the Project  
Specific Addendum for the Mid-Tier Standard Form  
Contract: Company-Owned Site*

**[NOTE: Please refer to Exhibit 3 of the November 4, 2021 filing for the Draft  
Mid-Tier Standard Form Contract for Renewable Dispatchable Generation,  
which includes this attachment.]**



**Maui  
Electric**



**DRAFT**

**REQUEST FOR PROPOSALS**

**FOR**

**COMMUNITY-BASED RENEWABLE ENERGY PROJECTS**

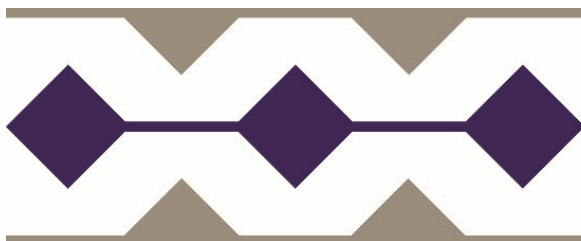
**ISLAND OF MOLOKA‘I**

NOVEMBER 4, 2021

Docket No. 2015-0389

*Appendix K-5 – Attachment DCC to the Project  
Specific Addendum for the Mid-Tier Standard Form  
Contract: DC Coupled Storage*

**[NOTE: Please refer to Exhibit 3 of the November 4, 2021 filing for the Draft Mid-Tier Standard Form Contract for Renewable Dispatchable Generation, which includes this attachment.]**



**Maui  
Electric**

## EXHIBIT 3

Draft CBRE Mid-Tier Standard Form Contract for  
Renewable Dispatchable Generation (PV+BESS)



**Hawaiian  
Electric**

*Mid-Tier Standard Form Contract  
For  
Renewable Dispatchable Generation*

*Project Type: PV + BESS Community Based Renewable Energy*

*Contract Capacity: \_\_\_\_\_ MW of Generation*

*BESS Contract Capacity: \_\_\_\_\_ MW of Storage*

*Are the PV System and the BESS DC-Coupled? No  Yes*

*CBRE Facility Location: \_\_\_\_\_*

*Execution Date: \_\_\_\_\_*

**August 25, 2021 Version**

## PREFATORY NOTES

- **This Contract is non-negotiable. The Mid-Tier Standard Form Contract has been pre-approved by the PUC and its terms and conditions shall not be negotiable. Required Attachments (as noted below), blanks and noted provisions requiring completion shall be filled in based on the CBRE Facility’s project specific details prior to execution.**
- **This Contract document assumes that the proposed generation facility will be paired with a battery energy storage system (“BESS”), and therefore contains terms and conditions with respect to the BESS. If a generation only proposal is selected for the CBRE Mid-Tier Project RFP’s final award group, the BESS specific provisions will be removed from this Contract for such project proposal.**
- **The document evidencing the complete contract for this Project consists of this Mid-Tier Standard Form Contract for the CBRE Facility, and all Attachments, Exhibits and related documents attached to such Mid-Tier Standard Form Contract, together with the Project Specific Addendum for the CBRE Facility, and all Attachments, Exhibits and related documents attached to such Project Specific Addendum.**
- **This Contract document assumes that the Project will be constructed on and operated from a site under the ownership and control of the Subscriber Organization. Should the Parties elect to utilize a Company-owned Site, the Contract Document titled Attachment COS - “COMPANY-OWNED SITE”, which contains the terms and conditions required of a Subscriber Organization when utilizing a Company-Owned site shall be attached to the Project Specific Addendum and applied to this Contract.**
- **This Contract is for Projects that are AC Coupled. For DC Coupled projects, the changes shown in the Contract Document titled Attachment DCC – “DC-COUPLED STORAGE” shall be attached to the Project Specific Addendum and applied to this Contract.**

**TABLE OF CONTENTS**

1	DEFINITIONS.....	2
2.	PARALLEL OPERATION. ....	2
3.	TERM. ....	2
4.	BILLING AND PAYMENT PROVISIONS. ....	3
5.	COMPANY DISPATCH. ....	7
6.	HOUSE POWER. ....	8
7.	METERING REQUIREMENTS, CHARGES AND TESTING. ....	9
8.	CBRE TARIFF REQUIREMENTS. ....	9
9.	REQUIREMENTS APPLICABLE TO SUBSCRIBER ORGANIZATION’S RELATIONSHIP WITH ITS SUBSCRIBERS. ....	11
10.	GENERAL PROVISIONS FOR CBRE FACILITY DESIGN, CONSTRUCTION AND OPERATION.....	13
11.	INTERCONNECTION REQUIREMENTS.....	15
12.	PERSONNEL AND SYSTEM SAFETY.....	18
13.	EVENTS OF DEFAULT BY SUBSCRIBER ORGANIZATION.....	19
14.	TERMINATION FOR CAUSE.....	21
15.	DAMAGES IN THE EVENT OF TERMINATION BY COMPANY. ....	22
16.	LIMITATION OF LIABILITY. ....	22
17.	DISPUTE RESOLUTION. ....	23
18.	ENVIRONMENTAL CREDITS. ....	23
19.	REPRESENTATIONS AND WARRANTIES.....	23
20.	SUBSCRIBER ORGANIZATION AND CBRE FACILITY INFORMATION.....	24
21.	ADDITIONAL INFORMATION.....	24
22.	NO MATERIAL CHANGES TO CBRE FACILITY. ....	24
23.	CERTIFICATION BY LICENSED ELECTRICAL CONTRACTOR. ....	24
24.	GOOD ENGINEERING PRACTICE.....	25
25.	INSURANCE.....	25
26.	MISCELLANEOUS. ....	26
27.	FORCE MAJEURE. ....	27
28.	COMMUNITY OUTREACH.....	30
29.	GENERATOR/EQUIPMENT CERTIFICATION. ....	31
30.	NOTICE AND DISCLAIMER REGARDING FUTURE TARIFF MODIFICATIONS.....	31

**LIST OF ATTACHMENTS**

ATTACHMENT A SCHEDULE OF DEFINED TERMS ..... A-1  
ATTACHMENT B COMPANY PAYMENTS FOR ENERGY, DISPATCHABILITY AND  
AVAILABILITY OF BESS ..... B-1  
ATTACHMENT C REQUIRED PERFORMANCE METRICS; LIQUIDATED DAMAGES ..... C-1  
ATTACHMENT D CALCULATION AND ADJUSTMENT OF NET ENERGY POTENTIAL ..... D-1  
ATTACHMENT E MONTHLY REPORTING AND DISPUTE RESOLUTION BY INDEPENDENT AF  
EVALUATOR ..... E-1  
ATTACHMENT F FACILITY OWNED BY SUBSCRIBER ORGANIZATION.....F-1  
ATTACHMENT G COMPANY-OWNED INTERCONNECTION FACILITIES ..... G-1  
EXHIBIT G-1 FORM OF LETTER OF CREDIT.....G-1-1  
ATTACHMENT H BESS REQUIREMENTS..... H-1  
ATTACHMENT I FACILITY'S CBRE PROGRAM .....I-1  
ATTACHMENT J [RESERVED] ..... J-1

**MID-TIER STANDARD FORM CONTRACT  
FOR  
RENEWABLE DISPATCHABLE GENERATION**

**THIS MID-TIER STANDARD FORM CONTRACT FOR RENEWABLE DISPATCHABLE GENERATION** is entered into as of \_\_\_\_\_, 20\_\_ (the “Effective Date”), by [Hawaiian Electric Company, Inc., Maui Electric Company, Ltd., Hawai‘i Electric Light Company, Inc.], a Hawai‘i corporation (“Company”) and \_\_\_\_\_ (“Subscriber Organization”). Together, the Company and Subscriber Organization are the “Parties” and may singularly each be referred to as a “Party”.

**RECITALS**

**WHEREAS**, Company is an operating electric public utility engaged in the generation, transmission, distribution, storage, regulation, or physical control of electricity (“Company System”) on the Island of [Hawai‘i, Maui, Moloka‘i, O‘ahu], subject to the Hawai‘i Public Utilities Law (Hawai‘i Revised Statutes, Chapter 269) and the rules and regulations of the Hawai‘i Public Utilities Commission (“PUC” or the “Commission”); and

**WHEREAS**, the Company System is operated as an independent power grid and must both maximize system reliability for its customers by ensuring that sufficient generation is available that meets the Company’s requirements for voltage stability, frequency stability, and reliability standards; and

**WHEREAS**, Company desires to minimize fluctuations in its purchased energy costs by acquiring renewable dispatchable generation at a fixed Unit Price; and

**WHEREAS**, Subscriber Organization understands the need to use all commercially reasonable efforts to maximize the overall reliability of the Company System; and

**WHEREAS**, Subscriber Organization is an “approved Subscriber Organization” for Phase 2 of the State of Hawai‘i Community-Based Renewable Energy (“CBRE”) Program, and desires to construct and operate a dispatchable generation renewable energy system (“CBRE Facility” or “Facility”) that is classified as an eligible resource under Hawai‘i’s Renewable Portfolio Standards Statute (codified as Hawai‘i Revised Statutes (“HRS”) 269-91 through 269-95) and qualifies for the CBRE Program together with a safe, reliable and operationally flexible battery energy storage system (“BESS”) so as to provide the Company System with those benefits and services associated with renewable energy generation and energy storage services, as defined herein; and

**WHEREAS**, this Contract applies to CBRE Facilities which provide at least 250 kW up to and including [O‘ahu: 5 MW; Maui, Hawai‘i, Moloka‘i: 2.5 MW] of renewable dispatchable generation and is entered into in accordance with the terms and conditions contained herein, the CBRE Tariff and Tariff Rule 14H (Interconnection of Distributed Generating Facilities Operating in Parallel With The Company’s Electric System) (“Rule 14H”); and

**WHEREAS**, the Parties agree to allow Subscriber Organization to interconnect and operate the CBRE Facility in parallel with the Company System so long as all applicable requirements and conditions of this Contract, the CBRE Tariff and Rule 14H have been satisfied; and

**WHEREAS**, the PV System to be developed by the Subscriber Organization will be a planned electrical energy generation system with a nameplate capacity of \_\_\_\_\_ kilowatts of alternating current (AC) (“PV System”); and

**WHEREAS**, the BESS to be installed by the Subscriber Organization will be an electrical energy battery storage system with a nameplate capacity in kilowatts of \_\_\_\_\_ and in kilowatt-hours [kWh] of \_\_\_\_\_; and

**WHEREAS**, the CBRE Facility will be installed and operated on property located at \_\_\_\_\_, Island of \_\_\_\_\_, State of Hawai'i and more fully described in Attachment F (Facility Owned by Subscriber Organization), Exhibit F-1 (Description of Generation and Battery Storage Facilities) to the Contract; and

**WHEREAS**, Subscriber Organization desires to sell to Company, and Company agrees to purchase, subject to the terms and conditions set forth herein, (i) the Actual Output produced by the Facility and delivered to the Point of Interconnection; (ii) the availability of the BESS; and (iii) the availability of the Facility's Net Energy Potential for Company Dispatch in accordance with this Contract;

**NOW, THEREFORE**, in consideration of the premises and the respective promises herein, Company and Subscriber Organization hereby agree as follows:

### AGREEMENT

1. **DEFINITIONS.** Capitalized terms in this Contract shall have the meanings set forth in the Schedule of Defined Terms in Attachment A hereto.
2. **PARALLEL OPERATION.** Company agrees to allow Subscriber Organization to interconnect and operate the Facility to provide renewable dispatchable generation and energy in parallel with the Company System; provided, however, that such interconnection and operation shall not: (i) adversely affect Company's property or the operations of its customers and customers' property; (ii) present safety hazards to the Company System, Company's property or employees or Company's customers or the customers' property or employees; or (iii) otherwise fail to comply with this Contract. Such parallel operation shall be contingent upon the satisfactory completion, as determined solely by Company, of the Acceptance Test and, to the extent applicable, the Control System Acceptance Test, in accordance with Good Engineering and Operating Practices.
3. **TERM.**
  - A. The Term of this Contract shall begin when signed by the Parties and end twenty (20) years after the Commercial Operations Date unless otherwise provided for in this Contract.
  - B. This Contract shall continue in full force and effect as set forth above, until the earliest date that one of the following events occurs:
    1. The Parties agree in writing to terminate the Contract; or
    2. The Contract is declared null and void pursuant to the terms of Section 3.E (Contract Null and Void). Upon receipt of such notice, the Parties shall take reasonable steps to minimize additional costs to the other Party, where reasonably possible; or
    3. The Contract is terminated under Section 10.I.4 (Project Completion) if Subscriber Organization fails to interconnect and operate the CBRE Facility pursuant to the terms of this Contract or:
    4. The Contract is terminated pursuant to an Event of Default under the Contract.
  - C. Interconnection Requirements Study. If this Contract is executed prior to completion of the Interconnection Requirements Study, then following the completion of the IRS:



1. The Parties shall, no later than the IRS Amendment Deadline, execute a formal amendment to this Contract substituting new versions of appropriate attachments to this Contract, including but not limited to, Attachment F (Facility Owned by Subscriber Organization) and Exhibits attached thereto, Attachment G (Company-Owned Interconnection Facilities) (the "IRS Amendment") solely to reflect the results of the IRS. If the IRS Amendment is not executed by the IRS Amendment Deadline, either Party may, by written notice delivered to the other Party, declare this Contract null and void.
  2. If Subscriber Organization is dissatisfied with the results of the IRS, Subscriber Organization shall have the option, by written notice delivered to Company no later than the IRS Termination Deadline, to declare the Contract null and void.
- D. Prior to IRS Amendment Deadline. Company may, by written notice delivered prior to the IRS Amendment Deadline, declare the Contract null and void if any one or more of the following conditions applies:
1. Subscriber Organization implements a material change to the Facility without following the requirements of Section 5(g) of Exhibit F-1 (Description of Generation and Battery Storage Facilities).
  2. Subscriber Organization, subsequent to making any payment to Company required under Attachment G (Company-Owned Interconnection Facilities), or subsequent to making the payment to Company to pay for the IRS under the IRS Amendment(s), requests in writing that Company stop or otherwise delay the performance of the work for which Company received such payment.
  3. The IRS Letter Agreement(s) is/are terminated pursuant to the terms thereof prior to the completion of the IRS.
- E. Contract Null and Void. If the Contract is declared null and void pursuant to Section 3.C (Interconnection Requirements Study), Section 3.D (Prior to IRS Amendment Deadline), or Section 1.D (NEP IE Estimate, Liquidated Damages and Subscriber Organization's Null and Void Right) of said Attachment D (Calculation and Adjustment of Net Energy Potential) (the "Null and Void Rights"), the Parties hereto shall thereafter be free of all obligations hereunder except as set forth in this Section 3.E (Contract Null and Void) and Section 11.F.2 (Return of Development Period Security), and shall pursue no further remedies against one another. A declaration that this Contract is null and void pursuant to the Null and Void Rights, shall not affect the following provisions, which shall remain in full force and effect: this Section 3.E (Contract Null and Void), Section 8.F.2 (Confidentiality), Section 17 (Dispute Resolution), Section 26.A (Disconnection and Survival of Obligations), Section 26.L (Survival), and such provisions of Section 26 (Miscellaneous) which, by their terms, should survive termination of this Contract, and Section 6 (Land Restoration) of Attachment G (Company-Owned Interconnection Facilities).
- F. Termination Rights. Notwithstanding any of the foregoing, the right of Company to terminate the Contract at any time upon the occurrence of any Event of Default described in Section 13 (Events of Default by Subscriber Organization) shall remain in full force and effect.
- 4. BILLING AND PAYMENT PROVISIONS.**
- A. Purchase and Sale of Renewable Energy, Dispatchability of CBRE Facility and Availability of the BESS. Subject to the other provisions of this Contract, Company shall, through a combination of Bill Credits allocated among CBRE Facility Subscribers and payments to Subscriber Organization, pay for: (i) the Actual Output produced by the CBRE Facility and delivered to the Point of Interconnection in response to Company Dispatch of the CBRE Facility; (ii) the availability of the

CBRE Facility's Net Energy Potential for Company Dispatch in accordance with this Contract; and (iii) the availability of the BESS. Included in such purchase are all of the Environmental Credits associated with the renewable energy. Company will not reimburse Subscriber Organization for any taxes or fees imposed on Subscriber Organization including, but not limited to, State of Hawai'i general excise tax.

- B. Lump Sum Payment. Commencing on the Commercial Operations Date, Company shall pay a monthly lump sum payment ("Lump Sum Payment"), to be apportioned between Subscribed and Unsubscribed RDG, as provided in Section 2. (Lump Sum Payment) of Attachment B (Company Payments for Energy, Dispatchability and Availability of BESS) to this Contract. As more fully set forth in Section 3. (Calculation of Lump Sum Payment) of Attachment B, the monthly Lump Sum Payment shall be calculated and adjusted to reflect changes in the estimate of the CBRE Facility's Net Energy Potential as such estimate is revised from time to time as more fully set forth in Attachment D (Calculation and Adjustment of Net Energy Potential) to this Contract. For purposes of calculating the monthly Lump Sum Payment, the monthly Lump Sum Payment shall be adjusted downward to account for the time the Facility or any portion of the Facility is not available for Company Dispatch because of a Force Majeure condition (i) at the CBRE Facility, whether the PV System, the BESS or both, or (ii) that otherwise delays or prevents the Subscriber Organization from making the Facility or any portion of the Facility in question available for Company Dispatch, as more fully set forth in Section 3.D (Lump Sum Payment Pro-Rata Adjustments) of Attachment B (Company Payments for Energy, Dispatchability and Availability of BESS) to this Contract.
- C. Assurance of Capability of CBRE Facility to Deliver Net Energy Potential and Availability of BESS. In order to provide Company with reasonable assurance that, subject to the Renewable Resource Variability, the CBRE Facility's Net Energy Potential will be available for Company Dispatch: (i) the PV System Equivalent Availability Factor Performance Metric shall be used to evaluate the availability of the PV System for dispatch by Company; (ii) the Guaranteed Performance Ratio ("GPR") Performance Metric shall be used to evaluate the efficiency of the PV System; (iii) the BESS Capacity Performance Metric shall be used to confirm the capability of the BESS to discharge continuously for four (4) hours at Maximum Rated Output or to discharge continuously for a total energy (MWh) equal to the BESS Contract Capacity if the test is conducted at less than Maximum Rated Output; (iv) the BESS EAF Performance Metric shall be used to determine whether the BESS is meeting its expected availability; (v) the BESS EFOF Performance Metric shall be used to evaluate whether the BESS is experiencing excessive unplanned outages; and (vi) the RTE Performance Metric shall be used to evaluate the storage efficiency of the BESS. Whenever the PV System potential output is in excess of the Company Dispatch, the excess energy from the PV System shall be used to maximize the BESS State of Charge so long as this does not conflict with the operating parameters of the BESS set forth in Section 9.D (Battery Energy Storage System) of Attachment F (Facility Owned by Subscriber Organization) to this Contract. Subscriber Organization shall design, operate and maintain the CBRE Facility in a manner consistent with the standard of care reasonably expected of an experienced owner/operator with the desire and financial resources necessary to design, operate and maintain the CBRE Facility to achieve the Performance Metrics. The foregoing is without limitation to Subscriber Organization's other obligations under this Contract, including the obligation to operate the CBRE Facility in accordance with Good Engineering and Operating Practices. The Performance Metrics are set forth in Attachment C (Required Performance Metrics; Liquidated Damages) of this Contract and shall be interpreted consistent with the North American Electric Reliability Corporation Generating Availability Data System ("NERC GADS") Data Reporting Instructions. In the event of a conflict between NERC GADS and the terms of this Contract, the terms of this Contract will control.

- D. No Payments Prior to Commercial Operations Date. CBRE Facilities shall be subject to an Acceptance Test and a Control System Acceptance Test prior to initial parallel operation. Company may accept test energy delivered by Subscriber Organization as provided in Section 6. (Test Energy) of Attachment B (Company Payments for Energy, Dispatchability and Availability of BESS) to this Contract. The procedures for such tests will be provided to Subscriber Organization by the Company prior to executing this Contract. Company shall not compensate Subscriber Organization for such test energy.
- E. Sale of Energy to Third Parties. Subscriber Organization shall not sell the renewable energy produced, stored or associated with the CBRE Facility, to any person or entity other than the Company during the Term of this Contract.
- F. Subscriber Organization's Preparation of the Monthly Invoice. By the tenth (10th) Business Day of each calendar month, Subscriber Organization shall submit to Company an invoice that separately states the following for the preceding calendar month: (i) the Actual Output during the preceding calendar month; (ii) the monthly Lump Sum Payment for the preceding calendar month; (iii) a computation, based on the updated Monthly Subscriber Information for such preceding calendar month as provided pursuant to Section 4. (Updating Monthly Subscriber Information Used to Calculate Bill Credits and Other Matters) of Attachment B (Company Payments for Energy, Dispatchability and Availability of BESS) to this Contract, of each Subscriber's Subscriber Allocation for the preceding month stated as a percentage of Contract Capacity; (iv) the Unsubscribed RDG for the preceding calendar month stated as a percentage of Contract Capacity; (v) a computation, based on each Subscriber's Subscriber Allocation, of the dollar amount of the Bill Credit to which each Subscriber is entitled for the monthly Lump Sum Payment for the preceding calendar month; (vi) the dollar amount owing to Subscriber Organization for its share of the monthly Lump Sum Payment for the preceding calendar month; and (vii) as a credit against the amount owing to the Subscriber Organization, the amounts payable by Subscriber Organization under Section 8.D (Subscriber Organization Fees) of this Contract. The dollar amount payable to the Subscriber Organization shall be subject to adjustment as provided in Section 5 (Payment to Subscriber Organization; Payment Reductions-Liquidated Damages for Failure to Achieve CBRE Subscriber Thresholds) of Attachment B (Company Payments for Energy, Dispatchability and Availability of BESS) to this Contract.
- G. Payment Procedures.
1. Payments to Subscriber Organization. By the twentieth (20th) Business Day of each calendar month following the month during which the invoice was submitted (i.e., by the twentieth (20th) Business Day of the second calendar month following the calendar month covered by the invoice in question), and not later than the last Business Day of that month if there are less than twenty (20) Business Days in that month, Company shall, make payment to Subscriber Organization of the amount payable for the Unsubscribed RDG shown on such invoice, or provide to Subscriber Organization an itemized statement of its objections to all or any portion of such invoice and pay Subscriber Organization its share of any undisputed amount. Any such payment to the Subscriber Organization shall be subject to Company's right to set-off payment reductions-liquidated damages and/or to draw liquidated damages from Operating Period Security as provided in Section 5 (Payment To Subscriber Organization; Payment Reductions-Liquidated Damages for Failure to Achieve CBRE Subscriber Thresholds) of Attachment B (Company Payments for Energy, Dispatchability and Availability of BESS) to this Contract. The foregoing is without limitation to Company's rights under Section 8 (Payment of Liquidated Damages for Failure to Achieve Performance Metrics; Limitation on Liquidated Damages) of Attachment C (Required Performance Metrics; Liquidated Damages) to this Contract.

2. Time Extensions. Notwithstanding the foregoing, the Day by which the Company shall make payment to Subscriber Organization hereunder shall be increased by one (1) Day for each Day that Subscriber Organization is delinquent in providing to the Company either: (i) the Monthly Report for the calendar month in question pursuant to Section 1. (Monthly Report) of Attachment E (Monthly Reporting and Dispute Resolution by Independent AF Evaluator) to this Contract; or (ii) the information required under Section 4.F (Subscriber Organization's Preparation of the Monthly Invoice) of this Contract.

H. Bill Credits.

1. The sole means of payment for each Subscriber Allocation for the calendar month covered by the invoice shall be by a Bill Credit on such Subscriber's retail electric bill. The Bill Credit shall be calculated on the undisputed amount of Subscriber Organization's invoice as set forth in Section 4.F. (Subscriber Organization's Preparation of the Monthly Invoice) of this Contract. Because not all of Company's customers have the same billing cycle, the timing of the appearance of the Bill Credit will vary with the Subscriber's billing cycle, but Company shall cause the Bill Credit to appear on each Subscriber's retail electric bill no later than the next billing cycle for such Subscriber following the due date for Company's payment to Subscriber Organization for the Unsubscribed RDG on the corresponding invoice. The calendar month upon which the Bill Credit is based shall not necessarily match the billing period for the retail electric service bill in which the Bill Credit is applied.
  2. For purposes of applying the Bill Credit to each Subscriber's retail electric bill, the Company shall be entitled to rely exclusively on the Monthly Subscription Information as timely entered by the Subscriber Organization via the CBRE Online Portal as set forth in Section 4. (Updating Monthly Subscriber Information Used to Calculate Bill Credits and Other Matters) of Attachment B (Company Payments for Energy, Dispatchability and Availability of BESS) to this Contract.
  3. If there is a breach, error or changed circumstances resulting in some portion of the monthly Lump Sum Payment being assigned to a Subscriber in excess of such Subscriber's allowable Subscriber Allocation under the CBRE Tariff, then the Company may treat this excess as an "overpayment" of the Subscriber Allocation and reduce the Bill Credit(s) to such Subscriber for the following calendar month for overpayment in proportion to the excess allocation received in error. Payment to the Subscriber Organization for such Unsubscribed RDG shall only occur if no corresponding Bill Credit is made to a Subscriber, or if already allocated, if such allocation is corrected and withdrawn from such Subscriber. The intent of the Parties is to ensure that no production from the CBRE Facility is double-counted to any Subscriber and/or Subscriber Organization.
- I. Late Payments. Notwithstanding all or any portion of such invoice in dispute, and subject to the provisions of Section 8. (Payment of Liquidated Damages for Failure to Achieve Performance Metrics; Limitation on Liquidated Damage) of Attachment C (Required Performance Metrics; Liquidated Damages) to this Contract (to the extent applicable), interest shall accrue on any invoiced amount that remains unpaid following the twentieth (20th) Business Day of each calendar month (or the last Business Day of that month if there are less than twenty Business Days in that month), or following the due date for such payment if extended pursuant to Section 4.G.2. (Time Extensions) to this Contract, at the average daily Prime Rate for the period commencing on the Day following the Day such payment is due until the invoiced amounts (or amounts due to Subscriber Organization if determined to be less than the invoiced amounts) are paid in full. Partial payments shall be applied first to outstanding interest and then to outstanding invoice amounts.

- J. Adjustments to Invoices After Payment. In the event adjustments are required to correct inaccuracies in an invoice after payment, the Party requesting adjustment shall recompute and include in the Party's request the principal amounts due during the period of the inaccuracy together with the amount of interest from the date that such invoice was payable until the date that such recomputed amount is paid at the average daily Prime Rate for the period. The difference between the amount paid and that recomputed for the invoice, along with the allowable amount of interest, shall either be (i) paid to Subscriber Organization or set-off by Company, as appropriate, in the next invoice payment to Subscriber Organization, or (ii) objected to by the Party responsible for such payment within thirty (30) Days following its receipt of such request. If the Party responsible for such payment objects to the request, then the Parties shall work together in good faith to resolve the objection. If the Parties are unable to resolve the objection, the matter shall be resolved pursuant to Section 17. (Dispute Resolution) of the Contract. All claims for adjustments shall be waived for any amounts that were paid or should have been payable more than thirty-six (36) months preceding the date of receipt of any such request.
- K. Limitations Period. All Subscriber Organization claims for adjustments shall be submitted to the Company within three years of the end of the calendar month covered by the invoice on which the adjustment amount in question was invoiced or should have been invoiced. Claims not submitted to the Company by the end of such three-year period shall be deemed to have been waived.
- L. Company's Billing Records. Subscriber Organization, after giving reasonable advance written notice to Company, shall have the right during Company's normal working hours on Business Days to review all billing, metering and related records necessary to verify the accuracy of the data provided by Company regarding payments and credits.
- M. Subscriber Organization Responsibility for Billing Inaccuracies. The correction of any allocation of previously-applied Bill Credits among Subscribers or payments to the Subscriber Organization for Unsubscribed RDG, pertaining to a particular month due to any inaccuracy reflected in such Monthly Subscription Information with regard to a Subscriber's subscription in the CBRE Facility and the beneficial share of (RDG / NEP) exported by the CBRE Facility, or the share of Unsubscribed RDG, shall be the full responsibility of the Subscriber Organization, unless such inaccuracies are shown to have been caused by the Company.

**5. COMPANY DISPATCH.**

- A. General. Company shall have the right to dispatch all available real and reactive power delivered from the CBRE Facility to the Company System and to start up and shut down Subscriber Organization's Facility, in whole or in part, as it deems appropriate in its reasonable discretion, subject only to Company Dispatch and Subscriber Organization's operations and maintenance schedule determined in accordance with Section 4. (Maintenance of Subscriber Organization-Owned Interconnection Facilities) of Attachment F (Facility Owned by Subscriber Organization) to this Contract. Because the CBRE Facility must be available to respond to Company Dispatch, the Facility may not consume any energy generated by the Facility. Company shall not pay for reactive power.
- B. Company Dispatch. Dispatch will either be by Subscriber Organization's manual control under the direction of the Company System Operator or by remote computerized control by the EMS provided in Section 1.G (Active Power Control Interface) of Attachment F (Facility Owned by Subscriber Organization) to this Contract, in each case at Company's reasonable discretion.
- C. Company Rights of Dispatch. Company may require deration or outage in response to the CBRE Facility's failure to comply with Company Dispatch or to any conditions of Subscriber Organization-Attributable Non-Generation. A deration or outage required by Company pursuant

to the preceding sentence shall be considered a Planned Deration and shall "count against" Subscriber Organization for the purpose of calculating the PV System Equivalent Availability Factor until the conditions that led to the deration or outage are resolved by Subscriber Organization and Subscriber Organization notifies Company of same. If, after such communication, Company attempts to dispatch the CBRE Facility and determines that such conditions that led to the deration or outage are not resolved, all time from the notice of resolution to actual resolution shall be revised as continuance of the deration or outage. If Subscriber Organization requests confirmation from Company that Subscriber Organization's actions to resolve such conditions that led to the deration or outage were successfully completed, then Company shall use reasonable efforts to respond to such request within three (3) Business Days in writing (with email being acceptable) to allow Subscriber Organization the opportunity to take further appropriate corrective actions if needed. An outage or deration required by Company pursuant to the first sentence of this sub-section shall not be considered a "restriction or limitation that would lower maximum output" of the CBRE Facility for purposes of filtering the 15-minute intervals used to calculate the MPR under Section 2.A. (Calculation of Measured Performance Ratio) of Attachment C (Required Performance Metrics; Liquidated Damages) to this Contract and shall, therefore, potentially "count against" Subscriber Organization for purposes of calculating MPR until the conditions that led to such outage or deration are resolved by Subscriber Organization to Company's reasonable satisfaction. Nothing in this sub-section shall relieve Subscriber Organization of its obligation under the terms of this Contract to make available the full capability of the CBRE Facility for Company Dispatch.

D. Monthly Report. Commencing with the month during which the Commercial Operations Date is achieved, and for each calendar month thereafter during the Term, Subscriber Organization shall prepare and provide to Company a Monthly Report by the tenth (10th) Business Day of the following month in accordance with Attachment E (Monthly Reporting and Dispute Resolution by Independent AF Evaluator) to this Contract. Beginning with the Monthly Report for the last calendar month of the initial Contract Year, Subscriber Organization shall include calculations of, as applicable, (a) the PV System Equivalent Availability Factor for the LD Period, (b) the Measured Performance Ratio for the MPR Assessment Period, (c) any of the BESS Capacity Ratio, the BESS Annual Equivalent Availability Factor, the BESS Equivalent Forced Outage Factor or the RTE Performance Metric for the BESS Measurement Period (if any), as well as (d) any liquidated damages to be assessed, as set forth in the form of Monthly Report included in Attachment E (Monthly Reporting and Dispute Resolution by Independent AF Evaluator). All rights and obligations of the Parties with respect to each Monthly Report and any disagreements arising out of any Monthly Report are fully set forth in Attachment E (Monthly Reporting and Dispute Resolution by Independent AF Evaluator) to this Contract.

6. **HOUSE POWER.** The Company will sell House Power to the CBRE Facility under the rate schedule in force for the class of customer to which the Subscriber Organization belongs. A separate meter to record energy delivered to the CBRE Facility may be installed by the Company. The Subscriber Organization shall be solely responsible for arranging retail electric service exclusively from the Company in accordance with the Company's Electric Rate Book. If electrical service is not presently available to the Site, Subscriber Organization shall be solely responsible for obtaining access to House Power under Company's applicable Tariff Rule(s). The Subscriber Organization shall obtain House Power solely through separately metered retail service and shall not obtain House Power through any other means and waives any regulatory or other legal claim or right to the contrary. Because the Subscriber Organization must make all energy produced by the CBRE Facility available to the Company, the CBRE Facility may not use the energy it generates to be consumed by it. It may not net-out or use energy it generates for House Power. The Parties acknowledge and agree that the performance of their respective obligations with respect to House Power shall be separate from this Contract and shall be interpreted independently of the Parties' respective obligations under this

Contract. Notwithstanding any other provision in this Contract, nothing with respect to the arrangements for House Power shall alter or modify the Subscriber Organization's or the Company's rights, duties and obligations under this Contract. This Contract shall not be construed to create any rights between the Subscriber Organization and the Company with respect to the arrangements for House Power.

**7. METERING REQUIREMENTS, CHARGES AND TESTING.**

- A. Company shall install, operate and maintain for the benefit of the CBRE Facility, one or more revenue metering package(s) suitable for measuring the export of renewable energy (AC) produced by the CBRE Facility in kilowatts and kilowatt-hours on a time-of-day basis and reactive power flow in kilovars and true root mean square kilovar-hours (the "Revenue Meter"). The metering point for the Revenue Meter shall be as close as possible to the Point of Interconnection as allowed by Company.
- B. Subscriber Organization, subject to Company review and approval, shall purchase, install, and maintain the infrastructure and other related equipment ("Meter Infrastructure") including meter housing, socket replacement and rewiring as required to install the Revenue Meter and any additional service meter(s), including, but not limited to, such meters for measuring House Power. Subscriber Organization shall install the Meter Infrastructure in adherence with requirements set forth in the latest edition of the Company's Electric Service Installation Manual (ESIM). Company shall test the Production Meter prior to installation and at the request and expense of the Subscriber Organization.
- C. Subscriber Organization shall reimburse Company for the costs reasonably incurred for the purchase and installation of the Revenue Meter. Subscriber Organization shall be responsible for the ongoing costs incurred by Company to operate, maintain (including maintenance replacements) and test the Revenue Meter during the Term.
- D. Metering Charge per Month: \$25.00. Subscriber Organization shall be charged each month during the Term an administrative metering fee of a \$25.00 for the Revenue Meter. The administrative metering fee is addition to the costs associated with the purchase, installation, maintenance and testing of the Revenue Meter and Meter Infrastructure.
- E. Meter Testing. Company shall provide at least forty-eight (48) hours' notice to Subscriber Organization prior to any test it may perform on the Revenue Meter or metering equipment. Subscriber Organization may request tests in addition to the every fifth-year test and Subscriber Organization shall pay the cost of such tests. Company may perform tests in addition to the fifth-year test. If any of the revenue meters or metering equipment is found to be inaccurate at any time, as determined by testing in accordance with this section, Company shall promptly cause such equipment to be made accurate, and the period of inaccuracy, as well as an estimate for correct meter readings, shall be determined as provided in Company's Tariff Rule No.11 (Billing Error, Meter Tests and Adjustment for Meter Errors).

**8. CBRE TARIFF REQUIREMENTS.**

- A. CBRE Framework and CBRE Tariff. The Subscriber Organization shall comply with and assure that the requirements of the CBRE Framework and CBRE Tariff applicable to the CBRE Facility are met.
- B. Subscriber Agreement. Subscriber Organization shall require all prospective Subscribers to execute a Subscriber Agreement as a precondition to enrollment as a Subscriber in the CBRE Facility. The Subscriber Agreement must satisfy the requirements of the CBRE Tariff, the CBRE Framework, this Contract and any additional guidance from the PUC. Prior to executing the

Subscriber Agreement, the Subscriber Organization shall make to the Subscriber the disclosures required under the Disclosure Checklist (attached as an Appendix to the CBRE Tariff). A copy of the Disclosure Checklist signed by both the Subscriber Organization and the Subscriber shall be attached to the executed Subscriber Agreement. For each Subscriber, there must be a completed and fully executed Subscriber Agency Agreement and Consent Form (attached as an Appendix to the CBRE Tariff), which is delivered to the Company prior to the Commercial Operations Date, or prior to adding each Subscriber. The Subscriber Organization shall provide to each Subscriber a copy of the Subscriber's Bill of Rights (attached as an Appendix to the CBRE Tariff).

- C. Funds Received From Subscribers Prior to the Commercial Operations Date. Any payments made to Subscriber Organization by Subscribers prior to the Commercial Operations Date shall be deposited into an escrow account or other alternative proposed by Subscriber Organization and approved by the Company or CBRE IO ("Pre-COD Escrow"), to hold or segregate any pre-development enrollment fees or deposits from Subscribers (with appropriate mechanisms to refund such fees/deposits to Subscribers should the Subscriber Organization not complete its Facility), which shall be released to Subscriber Organization upon commercial operation of the Facility. These funds may not be withdrawn from the Pre-COD Escrow by the Subscriber Organization until the Commercial Operations Date. The Pre-COD Escrow must conform to the CBRE Tariff, the CBRE Framework, applicable Laws, and any additional guidance from the PUC or the CBRE IO.
- D. Subscriber Organization Fees.
1. Subscriber Organization shall pay to Company the Subscriber Organization fees required under the CBRE Tariff.
  2. If Company has not received prior payment of such fees, Company may set off the unpaid amounts against Company payments to Subscriber Organization for Unsubscribed RDG, draw from the Security Funds, or, in its sole discretion, Company shall invoice Subscriber Organization for payment to Company of the foregoing fees. Subscriber Organization shall make payment to Company within 15 Days of Subscriber Organization's receipt of such invoice.
- E. Facility Compliance.
1. The Subscriber Organization shall be responsible for ensuring that the equipment installed at the CBRE Facility meets all applicable codes, standards, and regulatory requirements at the time of installation and throughout its operation.
  2. Subscriber Organization shall comply with all of the rules stated in the Company's applicable electric tariff rules related to the CBRE Program, as the same may be revised from time to time, and this Contract, as may be amended from time to time, as allowed by an amendment to this Contract approved, or deemed approved, by the PUC. In the event of any conflict between the terms of this Contract and Company's electric tariff rules related to the CBRE Program, the provisions of the tariff shall control.
- F. Financial Compliance.
1. If Company reasonably believes the provisions of this Section 8.F apply to the CBRE Facility, Company shall notify Subscriber Organization in writing and Subscriber Organization shall provide or cause to be provided to Company on a timely basis, all information, including but not limited to information that may be obtained in any audit referred to below (the "Financial Compliance Information"), reasonably requested by Company for purposes of permitting Company and its parent company, Hawaiian Electric Industries, Inc. ("HEI") to comply with the requirements (initial and on-going) of (i) the accounting principles of Financial Accounting



- Standards Board ("FASB") Accounting Standards Codification 810, Consolidation ("FASB ASC 810"), (ii) FASB ASV 842 Leases ("FASB ASC 842"), (iii) Section 404 of the Sarbanes-Oxley Act of 2002 ("SOX 404") and (iv) all clarifications, interpretations and revisions of and regulations implementing FASB ASC 810, FASB ASC 842, and SOX 404 issued by the FASB, Securities and Exchange Commission, the Public Company Accounting Oversight Board, Emerging Issues Task Force or other Governmental Authorities. In addition, if required by Company in order to meet its compliance obligations, Subscriber Organization shall allow Company or its independent auditor to audit, to the extent reasonably required, Subscriber Organization's financial records, including its system of internal controls over financial reporting; provided, however, that Company shall be responsible for all costs associated with the foregoing, including but not limited to Subscriber Organization's reasonable internal costs. Company shall limit access to such Financial Compliance Information to Company and HEI personnel involved with such compliance matters and restrict any Company or HEI personnel involved in Company's monitoring, dispatch or scheduling of the Subscriber Organization and/or the CBRE Facility, the administration of this Contract, or in developing potential CBRE projects, from having access to such Financial Compliance Information (unless approved in writing in advance by Subscriber Organization).
2. Confidentiality. As a condition to obtaining the Financial Compliance Information, Company shall, and shall cause HEI to, maintain the confidentiality of said Financial Compliance Information pursuant to a mutually agreed to confidentiality and non-disclosure agreement to be executed among Company, HEI and Subscriber Organization.
  3. Consolidation. Company does not want to be subject to consolidation as set forth in FASB ASC 810, as issued and amended from time to time by FASB. Company represents that, as of the Effective Date, it is not required to consolidate Subscriber Organization into its financial statements in accordance with FASB ASC 810. If for any reason, at any time during the Term, Company determines, in its sole but good faith discretion, that it is required to consolidate Subscriber Organization into its financial statements in accordance with FASB ASC 810, then Subscriber Organization shall immediately provide audited financial statements (including footnotes) in accordance with U.S. generally accepted accounting principles (and as of the reporting periods Company is required to report thereafter) in order for Company to consolidate and file its financial statements within the reporting deadlines of the Securities and Exchange Commission. Notwithstanding the foregoing requirement that Subscriber Organization provide audited financial statements to Company, the Parties will take all commercially reasonable steps, which may include modification of this Contract to eliminate the consolidation treatment, while preserving the economic "benefit of the bargain" to both Parties.
- G. Audits. The Company reserves the right to inspect the CBRE Facility as necessary to assure the safety and reliability of the system at any time during the Term, and for an additional period of one (1) year thereafter.

**9. REQUIREMENTS APPLICABLE TO SUBSCRIBER ORGANIZATION'S RELATIONSHIP WITH ITS SUBSCRIBERS.** The Subscriber Organization must comply with all of the following:

- A. Subscriber Information. The Subscriber Organization shall issue subscriptions in the CBRE Facility only to eligible retail electric service customers of the Company and provide to the Company the name, account number and service address attributable to each subscription and the Subscriber Allocation for each Subscriber's subscription. The Subscriber Organization shall take care to preserve the privacy expectations of the Subscribers, such as not publicly providing a Subscriber's Confidential Account Information, Subscriber Energy Usage Data, or Bill Credits. The Subscriber Organization will not disclose or share such information except as permitted by the

Subscriber Agency Agreement and Consent Form executed by Subscriber in connection with Subscriber's acquisition of its subscription in the CBRE Facility or otherwise unless the Subscriber has provided explicit informed consent or if such disclosure is compelled by Law.

- B. Subscriber Exit or Transfer of Interest in CBRE Facility. The transfer, cancellation, termination and/or exit of a Subscriber's interest in the CBRE Facility shall be completed in full accordance with applicable CBRE Framework or CBRE Tariff rules, in addition to any other terms, conditions or requirements imposed by the Subscriber Organization in the Subscriber Agreement, which Subscriber Organization shall ensure is also consistent with and in compliance with applicable CBRE Framework or CBRE Tariff rules. The CBRE Framework and/or CBRE Tariff requirements shall take precedence over any inconsistent or conflicting provisions found in the Subscriber Agreement.
- C. Updating Subscriber Information. The Subscriber Organization shall provide to the Company the Monthly Subscriber Information together with any and all updates to the Monthly Subscription Information as provided in Section 4. (Updating Monthly Subscriber Information Used to Calculate Bill Credits and Other Matters) to Attachment B (Company Payments for Energy, Dispatchability and Availability of Bess) to this Contract.
- D. Responsibility for Verification.
1. Subscriber Verification. If not already qualified by the CBRE Online Portal, the Subscriber Organization shall verify that each Subscriber is eligible to be a Subscriber in the CBRE Facility and that the CBRE Tariff requirements are met.
  2. LMI Subscriber Verification. For CBRE LMI Projects (as defined in the CBRE Tariff) or for CBRE Mid-Tier Projects or CBRE Large Projects (as defined in the CBRE Tariff) which commit to a certain percentage of LMI Subscribers, in addition to the requirements of Section 9.D.1., Subscriber Organization must comply with CBRE Tariff provisions to collect the completed the LMI certification from each LMI Subscriber.
- E. Disclosure of Production Information. The Subscriber Organization acknowledges and agrees that, in order for the Company to carry out its responsibilities in applying Bill Credits to each Subscriber's retail electric bills, the Company may be required and shall be permitted to provide access or otherwise disclose and release to any Subscriber any and all production data related to the PV System and BESS in its possession and information regarding the total Bill Credits applied by the Company with respect to the CBRE Facility and any information pertaining to a Subscriber's subscription. Any additional detailed information requested by a Subscriber shall be provided only upon the Subscriber Organization's consent in writing or email to the Company, or unless the Commission or the CBRE IO requests that the Company provide such information to the Subscriber, or as otherwise required by law.
- F. Disclosure of CBRE Facility Information. The Subscriber Organization acknowledges and agrees that the Company may publicly disclose the CBRE Facility location, Subscriber Organization, nameplate capacity and production data of the CBRE Facility. Additionally, the Company will periodically provide a bill message to Subscribers clarifying that questions or concerns related to their subscription should be directed to the Subscriber Organization, including a statement that the Subscriber Organization is solely responsible for resolving any disputes with the Company or the Subscriber about the accuracy of the CBRE Facility data and that the Company is solely responsible for resolving any disputes with the Subscriber about the applicable rate used to determine the amount of the Bill Credit.
- G. Certain Tax and Securities Law Issues. The Company makes no warranty or representation concerning the taxable consequences, if any, to Subscriber Organization or its Subscribers with

respect to its Bill Credits to the Subscribers for participation in the CBRE Facility's CBRE Program. Additionally, the Company makes no warranty or representation concerning the implication of any federal or state securities laws on how subscriptions to the CBRE Program are handled.

- H. Full Cooperation with the PUC. The Parties agree to fully cooperate with any request for information from the PUC or the CBRE IO pertaining in any way to the CBRE Facility and will provide such information upon request in a timely manner. To the extent to which any request calls for producing a specific Subscriber's Confidential Account Information, Subscriber Energy Usage Data or Bill Credits, such information shall be provided and marked as Confidential Information.
- I. New Energy Generating Systems. The PV System must not be built or previously interconnected at the time of application to the CBRE Program, except as may be permitted under the CBRE Tariff.
- J. Fair Disclosure; Disclosure Checklist. Prior to the time when any person or entity becomes a Subscriber, the Subscriber Organization will fairly disclose the future costs and benefits of the subscription and all other matters specified in the Disclosure Checklist and provide to the potential Subscriber a copy of this Contract. The Subscriber Organization shall comply with all other requirements of the PUC and applicable Laws with respect to communications with Subscribers.

#### **10. GENERAL PROVISIONS FOR CBRE FACILITY DESIGN, CONSTRUCTION AND OPERATION.**

- A. The following provisions generally set forth the minimum requirements of Subscriber Organization in designing, constructing and operating the CBRE Facility and are more fully described in Attachment F (Facility Owned by Subscriber Organization). In the event of any inconsistency or conflict between the terms and provisions of this Section 10, the terms and provisions of Attachment F shall control.
- B. Permits and Licenses. Subscriber Organization shall be responsible for the design, installation, operation, and maintenance of the CBRE Facility and shall obtain at its expense and maintain any required governmental authorizations and/or permits for the construction and operation of the CBRE Facility.
- C. Control and Protection of Equipment. Design, installation, operation and maintenance of the CBRE Facility shall include control and protection equipment as specified by the Company, including but not limited to the Telemetry and Control interface identified in Section 10.H (Telemetry and Control) below, and an automatic load-break device such as a circuit breaker or inverter and a manual disconnect that has a visible break or breaker with rack-out capability to isolate the CBRE Facility from the Company System. The manual disconnect device must be accessible by the Company and be capable of being locked by the Company in the open position, to establish working clearance for maintenance and repair work in accordance with the Company's safety rules and practices. The disconnect devices shall be furnished and installed by the Subscriber Organization and are to be connected between the CBRE Facility and the Company system. The disconnect devices shall be located in the immediate vicinity of the electric meter serving the Subscriber Organization. The manual disconnect device shall be, at a minimum, clearly labeled "Subscriber Organization System Disconnect." With permission of the Company, the disconnect devices may be located at an alternate location which is readily and safely accessible to the Company on a 24-hour basis. Such alternate location shall be clearly identified with signage placed in the immediate vicinity of the electric meter serving the Subscriber Organization.
- D. Access. The Subscriber Organization grants access to the Company to utilize the disconnect device, if needed. Subscriber Organization shall obtain the authorization from the owner and/or

occupants of the premises where the CBRE Facility is located that allows the Company to access the CBRE Facility for the purpose specified in this Contract. Company may enter premises where the CBRE Facility is located, as permitted by law or tariff, for the following purposes: (1) to inspect CBRE Facility's protective devices and read or test meter(s); and (2) to disconnect the CBRE Facility and/or service to Subscriber Organization, whenever in Company's sole opinion, a hazardous condition exists and such immediate action is necessary to protect persons, Company's facilities, or property of others from damage or interference caused by the CBRE Facility, or the absence or failure of properly operating protective device.

- E. Prior Written Approval. Under no circumstances shall a Subscriber Organization interconnect and operate the CBRE Facility in parallel with the Company's electric system without prior written approval by the Company.
- F. Equipment Modifications. Once the CBRE Facility is interconnected to the Company's system, the Company reserves the right to require the installation of, or modifications to, equipment determined by the utility to be necessary to facilitate the delivery of reliable electric service to its customers, subject to the requirement that such installation or modification be consistent with the terms of this Contract and applicable interconnection standards (e.g., Rule 14H). If any interconnection standards outside of this Contract conflict with the terms of this Contract, the provisions in this Contract shall apply. The Company shall provide a written explanation of the need for such installation or modification. Any disputes related to this provision shall be resolved according to the dispute resolution process set forth in Section 17. (Dispute Resolution) of this Contract.
- G. [Reserved]
- H. Telemetry and Control Interface. The CBRE Facility must comply with the communications and controllability requirements set forth in Section 1.B (Certain Specifications for the Facility), Sub-section 3.e. of Attachment F (Facility Owned by Subscriber Organization) to this Contract.
- I. Project Completion.
  - 1. The Subscriber Organization shall achieve the Commercial Operations Date for the CBRE Facility within eighteen (18) months from the execution date of this Contract, as the same may be extended as provided herein or in the CBRE Tariff (the "Commercial Operations Date Deadline"). The Commercial Operations Date Deadline shall be extended day-for-day for a CBRE Facility that, in the Company's determination, has suffered a Force Majeure event as set forth in Section 27. (Force Majeure) of this Contract prior to the Commercial Operations Date, or for any delay caused by Company.
  - 2. Notwithstanding the foregoing, a local-government moratorium to issuing a permit may extend the 18-month Project Completion period for no more than an additional six (6) months. Failure to seek a permit, delay in seeking a permit, or permit-processing time not subject to a moratorium is not included in this 6-month extension.
  - 3. If Substantial Progress, as defined herein, has been achieved, but the Commercial Operations Date has not been achieved by the Commercial Operations Date Deadline, and Subscriber Organization still intends to complete its CBRE Facility, then the Subscriber Organization shall pay a "late fee" to Company of \$200/day/MW nameplate capacity of the PV System until the CBRE Facility achieves the Commercial Operations Date. For example, if the CBRE Facility has a nameplate capacity of 500 kW, and it achieves the Commercial Operations Date thirty (30) Days late, the "late fee" would be \$3,000. The "late fee" shall be paid to Company before the Commercial Operations Date. However, if Company fails to collect in full such amount by this date, such unpaid amount may be set off against any refund that may be due to Subscriber Organization for Total Estimated Interconnection Costs paid by Subscriber Organization that

- exceeds the Actual Interconnection Costs. All “late fee” payments received by Company will be credited back through the appropriate regulatory mechanism to offset the costs to Company ratepayers for the CBRE Program. A prerequisite to showing that Substantial Progress has been achieved in a timely manner is that before the Commercial Operations Date Deadline the Subscriber Organization must submit a signed letter to Company attesting to the fact that Substantial Progress as defined in this Contract has been made, and attach photographs to that letter demonstrating this.
4. If: (i) Substantial Progress has not been achieved by the Commercial Operations Date Deadline, or (ii) Subscriber Organization does not wish to complete its CBRE Facility upon the Commercial Operations Date Deadline, or (iii) the Commercial Operations Date that is extended due to a permit issuance moratorium is not achieved within six (6) months from the originally required Commercial Operations Date Deadline, then the application for the CBRE Facility and this Contract will be terminated by Company without further notice. No additional concurrence from the CBRE IO shall be necessary for such termination. The Application Fee and any other deposits paid by the Subscriber Organization shall be forfeited.
  5. After termination, the Subscriber Organization, if it still intends to proceed with the CBRE Facility, must submit a new application and pay any applicable deposit and/or fees which will be subject to the then current CBRE Tariff, Bill Credit Rate and other applicable CBRE requirements for new projects, including CBRE Program capacity availability.

#### **11. INTERCONNECTION REQUIREMENTS.**

- A. Rule 14H Compliance. If the CBRE Facility is interconnecting at the distribution level the Subscriber Organization must comply with all of the terms, conditions and requirements of Rule 14H (Interconnection of Distributed Generating Facilities Operating in Parallel With The Company’s Electric System), including without limitation Appendix I (Distributed Generation Facility Interconnection Standards Technical Requirements). In the event of any inconsistency or conflict between the terms and provisions of this Contract and Rule 14H, the terms and provisions of this Contract shall control.
- B. Sub-Transmission and Transmission Interconnection. If the CBRE Facility is a facility interconnecting at the Sub-Transmission and Transmission levels, the CBRE Facility shall follow the interconnection process applicable to such CBRE Facility at the time of interconnection.
- C. Subscriber Organization-Owned Interconnection Facilities.
  1. The Subscriber Organization shall furnish, install, operate and maintain, at its cost, the interconnection facilities (such as circuit breakers, relays, switches, synchronizing equipment, monitoring equipment, and control and protective devices and schemes identified in Exhibit F-1 (Description of Generation and Battery Storage Facilities) of Attachment F (Facility Owned by Subscriber Organization) to this Contract.
  2. The point of interconnection is shown on the single-line diagram and three-line diagram (provided by the Subscriber Organization and reviewed by the Company) which are appended to Attachment F, herein. Pursuant to Rule 14H, Appendix I (Distributed Generation Facility Interconnection Standards Technical Requirements), Section 6.c (Review of Design Drawings), the Company must review and approve Subscriber Organization’s single-line and three-line diagrams prior to Subscriber Organization constructing of the CBRE Facility interconnection.
  3. The Subscriber Organization shall not operate equipment that superimposes a voltage or current upon the Company’s system that interferes with the Company’s operations, service to the

- Company's customers, or the Company's communication facilities. Such interference shall include, but not be limited to, overcurrent, voltage imbalance, and abnormal waveforms. If such interference occurs, the Subscriber Organization must diligently pursue and take corrective action at its own expense after being given notice and reasonable time to do so by the Company. If the Subscriber Organization does not take timely corrective action or continues to operate the equipment causing interference without restriction or limit, the Company may, without liability, disconnect the Subscriber Organization's equipment from the Company's system.
4. The Subscriber Organization agrees to test the CBRE Facility, to maintain operating records, and to follow such operating procedures, as may be specified by the Company to protect the Company's system from damages resulting from the parallel operation of the CBRE Facility, including such testing, records and operating procedures as more fully described Attachment F (Facility Owned by Subscriber Organization) to this Contract.
  5. The Company may inspect the CBRE Facility and Subscriber Organization's interconnection facilities.
- D. System Capacity. The CBRE Facility must have a nameplate capacity, in the aggregate, of no more than \_\_\_\_\_ (\_\_\_\_\_) kW/MW to assure that the CBRE Facility has a nameplate capacity of no more than 2.5MW (islands of Maui, Moloka'i, and Hawai'i); 5 MW (island of O'ahu, only).
- E. Company-Owned Interconnection Facilities.
1. The Company agrees to furnish, install, operate and maintain such interconnection facilities on its side of the point of interconnection with the CBRE Facility as required for the parallel operation with the CBRE Facility and more fully described in Attachment G (Company-Owned Interconnection Facilities) to this Contract.
  2. All Company-Owned Interconnection Facilities shall be the property of the Company. Where portions of the Company-Owned Interconnection Facilities are located on the Subscriber Organization's premises, the Subscriber Organization shall provide, at no expense to the Company, a suitable location for and access to all such equipment. If a 120/240 Volt power source or sources are required, the Subscriber Organization shall provide these at no expense to the Company.
  3. Subscriber Organization agrees to pay to the Company a non-refundable initial payment for the development of the Company-Owned Interconnection Facilities and to pay for all other interconnection costs (the "Total Estimated Interconnection Costs"), as more fully described in Attachment G (Company-Owned Interconnection Facilities). The Total Estimated Interconnection Costs shall not include the cost of an initial technical screening (under Rule 14H) of the impact of the CBRE Facility on the Company's system.
  4. Governmental Approvals for Company-Owned Interconnection Facilities. Subscriber Organization shall obtain at its sole cost and expense all Governmental Approvals necessary to the construction, ownership, operation and maintenance of the Company-Owned Interconnection Facilities. Subscriber Organization shall provide all Governmental Approvals necessary for the construction of such Company-Owned Interconnection Facilities prior to the commencement of construction by Company.
- F. Credit Assurance and Security. Subscriber Organization is required to post and maintain Development Security and Operating Security based on the requirements of this Section 11.F (Credit Assurance and Security).

1. Development Security. To guarantee undertaking the performance of Subscriber Organization's obligations under the Contract for the period prior to the Commercial Operations Date (including but not limited to Subscriber Organization's obligation to meet the Commercial Operations Date Deadline), Subscriber Organization shall post and maintain development period security ("Development Security") in an amount not less than twenty-five percent (25%) of the Total Estimated Interconnection Costs for the Company-Owned Interconnection Facilities within thirty (30) Days of Execution Date of the Contract.
2. Return of Development Security. The Development Security shall be returned to Subscriber Organization, subject to Company's right to draw from the Development Security as set forth in Section 11.F.6 (Company's Right to Draw from Security Funds), in the following circumstances: (i) this Contract is declared null and void under Section 3.E (Contract Null and Void) or this Contract is terminated prior to the Commercial Operations Date but, in each case, only after all amounts which may be due and owing to Company are paid in full by Subscriber Organization, including by draw upon such Development Security or (ii) following Company's receipt of Operating Security pursuant to Section F.3 (Operating Security).
3. Operating Security. To guarantee the performance of Subscriber Organization's obligations under this Contract for the period starting from the Commercial Operations Date to the expiration or termination of this Contract, Subscriber Organization shall provide satisfactory operating period security to Company in the amount of \$75/kW based on the Contract Capacity (the "Operating Security"). Subscriber Organization shall provide such Operating Security to Company within five (5) Business Days after the Commercial Operations Date, provided that, at all times, some form of Security Funds shall be in place and available to Company, whether Development Security or Operating Security.
4. Form of Security. Subscriber Organization shall supply the Development Security and Operating Security required in the form of an irrevocable standby letter of credit with no documentation requirement substantially in the form attached to this Contract as Attachment G-1 (Form of Letter of Credit) from a bank chartered in the United States with a credit rating (as measured by Standard & Poor's) of "A-" or better. If the rating of the bank issuing the standby letter of credit falls below A-, Company may require Subscriber Organization to replace, within thirty (30) Days' notice by Company, the standby letter of credit with a standby letter of credit from another bank chartered in the United States with a credit rating of "A-" or better. Such letter of credit shall be issued for a minimum term of one (1) year and shall be automatically renewed for at least an additional one (1) year term so that at the time of such renewal, the remaining term of any such security shall not be less than one (1) year. The reasonable costs and expenses of establishing, renewing, substituting, canceling, increasing, reducing, or otherwise administering the letter of credit shall be borne by Subscriber Organization.
5. Security Funds. The Development Security and Operating Security, including L/C Proceeds therefrom (collectively referred to as the "Security Funds") established, funded, and maintained by Subscriber Organization pursuant to the provisions of this Section 11.F (Credit Assurance and Security) shall provide security for the performance of Subscriber Organization's obligations under this Contract and shall be available to be drawn on by Company as provided in Section 11.F.6 (Company's Right to Draw from Security Funds). Subscriber Organization shall maintain the Security Funds at the contractually-required level throughout the Term of this Contract. Subscriber Organization shall replenish the Security Funds to such required level within fifteen (15) Business Days after any draw on the Security Funds by Company or any reduction in the value of Security Funds below the required level for any other reason. Notwithstanding the foregoing, Subscriber Organization's obligation to replenish the

Development Security shall not exceed in total four (4) times the original amount of the Development Security required under Section 11.F.1 (Development Period Security) of this Contract.

6. Company's Right to Draw from Security Funds. In addition to any other remedy available to it, Company may, before or after termination of this Contract, draw from the Security Funds such amounts as are necessary to recover amounts Company is owed pursuant to this Contract, any accompanying letter agreements associated with the Contract for other work, such as the IRS, to be paid by Subscriber Organization, including, without limitation, any damages due Company, any interconnection costs owed pursuant to Attachment G (Company-Owned Interconnection Facilities) and any amounts for which Company is entitled to indemnification under this Contract. Company may, in its sole discretion, draw all or any part of such amounts due Company from any of the Security Funds to the extent available pursuant to this Section 11.F (Credit Assurance and Security), and from all such forms, and in any sequence Company may select. Any failure to draw upon the Security Funds or other security for any damages or other amounts due Company shall not prejudice Company's rights to recover such damages or amounts in any other manner.
  7. Failure to Renew or Extend Letter of Credit. If the letter of credit is not renewed or extended at least thirty (30) Days prior to its expiration or earlier termination, Company shall have the right to draw immediately upon the full amount of the letter of credit and, at Company's sole option, to place the proceeds of such draw (the "L/C Proceeds"), at Subscriber Organization's cost, in an escrow account until and unless Subscriber Organization provides a substitute letter of credit meeting the requirements of this Section 11.F (Credit Assurance and Security). If Company elects, the L/C Proceeds shall be deposited with a reputable escrow agent acceptable to Company ("Escrow Agent"). Without limitation to the generality of the foregoing, a federally-insured bank shall be deemed to be a "reputable escrow agent." Company shall have the right to apply the L/C Proceeds as necessary to recover amounts Company is owed as specified in Section 11.F.6 (Company's Right to Draw from Security Funds). The documentation governing such escrow account shall be in form and content satisfactory to Company and shall give Company the sole authority to draw from the escrow account. Subscriber Organization shall not be a party to such documentation and shall have no rights to the L/C Proceeds. If an adequate substitute letter of credit is obtained and provided to Company, the net L/C Proceeds remaining as of the date that such substitute letter of credit is provided, shall be returned to Subscriber Organization, or as Subscriber Organization directs in writing.
  8. Release of Security Funds. Upon the end of the Term and the complete performance of all of Subscriber Organization's obligations under this Contract, including but not limited to the obligation to pay any and all amounts owed by Subscriber Organization to Company under this Contract, Company shall release the Security Funds to Subscriber Organization.
- 12. PERSONNEL AND SYSTEM SAFETY.** Notwithstanding any other provisions of this Contract, if at any time Company determines that the Facility may endanger Company's personnel, and/or the continued operation of the Facility may endanger the integrity of the Company System or have an adverse effect on Company's other customers' electric service, Company shall have the right to disconnect the Facility from the Company System, as determined in the sole discretion of the Company System Operator. The Facility shall immediately comply with the dispatch instruction, which may be initiated through remote control, and shall remain disconnected (and in Subscriber Organization-Attributable Non-Generation status if so determined), until such time as Company is satisfied that the condition(s) referred to above have been corrected. If Company disconnects the Facility from the Company System for personnel or system safety reasons, it shall as soon as practicable notify



Subscriber Organization by telephone, and thereafter make reasonable efforts to confirm, in writing (with email being acceptable), within three (3) Days of the disconnection, the reasons for the disconnection. If the reason for the disconnection constitutes Subscriber Organization-Attributable Non-Generation, Company will notify Subscriber Organization (i) whether the conditions resulting in such disconnection have been resolved (in which case no additional time after such confirmation shall count as Subscriber Organization-Attributable Non-Generation); or (ii) that conditions resulting in such disconnection have not been resolved so that Subscriber Organization can take such appropriate corrective actions. Subscriber Organization shall notify Company in writing when such corrective action has been completed; provided, however, that Subscriber Organization shall remain in Subscriber Organization-Attributable Non-Generation until Company is satisfied that the condition resulting in the disconnection has been corrected. Company shall use reasonable efforts to inspect such corrective measures (if necessary) and confirm the resolution of such condition within three (3) Business Days after Subscriber Organization's notification.

**13. EVENTS OF DEFAULT BY SUBSCRIBER ORGANIZATION.**

- A. The occurrence of any of the following shall constitute an “Event of Default” by Subscriber Organization:
1. If at any time during the Term, Subscriber Organization delivers or attempts to deliver to the Point of Interconnection for sale under this Contract renewable energy that was not produced by the CBRE Facility and Subscriber Organization fails to cease such delivery or attempt to deliver such renewable energy within ten (10) Days after Company’s written notice of such delivery or attempt.
  2. If at any time subsequent to the Commercial Operations Date, the PV System Equivalent Availability Factor is less than **84%** for each of three consecutive Contract Years.
  3. If at any time subsequent to the Commercial Operations Date, the Measured Performance Ratio for each of three consecutive Contract Years falls below the Tier 2 Bandwidth for such Contract Year.
  4. If at any time subsequent to the Commercial Operations Date, the Subscriber Organization fails to demonstrate satisfaction of the BESS Capacity Performance Metric prior to the expiration of the BESS Capacity Cure Period.
  5. If at any time subsequent to the Commercial Operations Date, the Subscriber Organization fails to achieve a BESS Annual Equivalent Availability Factor of not less than **75%** for each of six (6) consecutive BESS Measurement Periods as provided in Section 4.B (BESS Annual Equivalent Availability Factor; Liquidated Damages; Termination Rights) of Attachment C (Required Performance Metrics; Liquidated Damages) to this Contract.
  6. If at any time subsequent to the Commercial Operations Date, Subscriber Organization fails to demonstrate satisfaction of the RTE Performance Metric prior to the expiration of the RTE Cure Period.
  7. If at any time subsequent to the Commercial Operations Date, the Facility is unavailable to provide electric energy in response to dispatch by Company for a period of three hundred sixty-five (365) or more consecutive Days.
  8. If at any time during the Term, Subscriber Organization fails to satisfy the requirements of Section 11.F (Credit Assurance and Security) of this Contract.

9. If at any time subsequent to the Commercial Operations Date, Subscriber Organization fails to take all corrective actions specified by the Company's written notice that the CBRE Facility is out of compliance with the terms of this Contract, within the timeframe set forth in such notice.
10. If at any time subsequent to the Commercial Operations Date, Subscriber Organization fails to install, operate, maintain, or repair the Facility in accordance with Good Engineering and Operating Practices if such failure is not cured within thirty (30) Days after written notice of such failure from Company unless such failure cannot be cured within said thirty (30) Day period and Subscriber Organization is making commercially reasonable efforts to cure such failure, in which case Subscriber Organization shall have a cure period of three hundred sixty-five (365) Days after Company's written notice of such failure.
11. The failure to make any payment required pursuant to this Contract when due if such failure is not cured within ten (10) Business Days after written notice is received by Subscriber Agreement.
12. If any representation or warranty made to Company by Subscriber Organization herein is false and misleading in any material respect when made.
13. Subscriber Organization becomes insolvent, or makes an assignment for the benefit of creditors; or shall have an order for relief in an involuntary case under the bankruptcy Laws as now or hereafter constituted entered against it, or shall commence a voluntary case under the bankruptcy Laws as now or hereafter constituted, or shall file any petition or answer seeking for itself any arrangement, composition, adjustment, liquidation, dissolution or similar relief to which it may be entitled under any present or future Law; or seeks or consents to or acquiesces in the appointment of or taking possession by, any custodian, trustee, receiver or liquidator of it or of all or a substantial part of its properties or assets; or takes action looking to its dissolution or liquidation, and Subscriber Organization is unable to remedy such actions within one hundred eighty (180) Days of the occurrence of such breach or default.
14. Subscriber Organization fails to comply with the applicable term, conditions and minimum requirements specified in the CBRE Tariff governing Subscriber Organization's CBRE Facility, if such failure is not cured within thirty (30) Days after written notice of such failure from Company.
15. Subscriber Organization fails to comply with a decision under Section 17 (Dispute Resolution) within thirty (30) Days after such decision or, if such decision cannot be complied with within thirty (30) Days, Subscriber Organization fails to have commenced commercially reasonable efforts designed to achieve compliance within such thirty (30) Days and diligently continue such commercially reasonable efforts until compliance is attained, but no longer than one hundred twenty (120) Days;
16. Other than the events of default specified in this Section 13.A.1 through Section 13.A.15, should Subscriber Organization, by act or omission, materially breach or default on any other material covenant, condition or other provision of this Contract, and if such breach or default is not cured within thirty (30) Days after written notice of such breach or default from Company, such failure to cure shall constitute an Event of Default; provided, however, that if it is objectively impossible to cure such breach or default within said thirty (30) Day period, then, for so long as Subscriber Organization is making the same effort to cure such breach or default as would be expected of an experienced independent power producer willing and able to exert commercially reasonable efforts to achieve such cure, Subscriber Organization shall have a cure period equal to three hundred sixty-five (365) Days beginning on the date of Company's written notice of such breach or default; provided, further, that if the material breach

in question involves Subscriber Organization's failure to meet the operational and performance standards set forth in Attachment F (Facility Owned by Subscriber Organization), the provisions of Section 1.J (Demonstration of Facility) of Attachment F (Facility Owned by Subscriber Organization) for consultant's study and Subscriber Organization implementation of such study's recommendation shall apply in lieu of the extended cure period provided under the preceding proviso.

**14. TERMINATION FOR CAUSE.**

- A. Upon an Event of Default by the Subscriber Organization:
1. Company shall provide written notice to the Subscriber Organization to remedy the Event of Default within the applicable cure period specified for such Event of Default, if any.
  2. If after the cure period, if any, provided for in the Company's notice, Subscriber Organization is still not in compliance with this Contract, then the Company shall have the right to terminate the Contract, as follows:
    - a. Company shall issue a written a Notice of Intent to Terminate the Contact for just cause;
    - b. Subscriber Organization shall have five (5) Business Days in which to provide evidentiary documentation reasonably establishing that Company's decision to terminate the Contract is in error.
    - c. If the Subscriber Organization fails to provide such proof or if the Company reasonably determines that such proof is insufficient to reverse the Company's decision to terminate, Company may proceed to terminate the Contract by providing a written Notice of Termination to Subscriber Organization. A copy of such notice shall be provided to all Subscribers of the CBRE Facility, the PUC, and the CBRE IO, if applicable.
  3. The termination date in the notice of termination shall not be earlier than thirty (30) Days from the date of such notice.
  4. Subscriber Organization acknowledges that Company is a public utility and is relying upon Subscriber Organization's performance of its obligations under this Contract, and that Company and/or its customers may suffer irreparable injury as a result of the failure of Subscriber Organization to perform any of such obligations, whether or not such failure constitutes an Event of Default or otherwise gives rise to a termination for cause of this Contract. Accordingly, Company shall have right to seek specific performance injunctions or other available equitable remedies for Subscriber Organization's failure to perform any of its obligations under this Contract, irrespective of whether such failure constitutes an Event of Default.
  5. In the event of any breach of this Contract by Company, the Subscriber Organization shall provide Company with a written notice of the breach. Company shall have up to thirty (30) Days to cure the breach. If the breach is not cured within the thirty (30) Days, the Subscriber Organization may utilize the procedures set forth in Section 17. (Dispute Resolution) of this Contract. If the breach results in Bill Credits not being issued to one or more individual Subscribers, in the absence of a cure by Company within the allowed time following the notice, the Subscriber Organization may also seek a remedy on behalf of the affected Subscribers for any past due Bill Credits pursuant to the process set forth in Section 17. (Dispute Resolution) of this Contract.
- B. Following Termination, applicable provisions shall continue in effect after termination to the extent necessary to enforce and complete the duties, obligations or responsibilities of the Parties arising prior to termination and, as applicable, to provide for final billings and adjustments related to the

period prior to termination, repayment of any money due and owing to either Party pursuant to this Contract.

**15. DAMAGES IN THE EVENT OF TERMINATION BY COMPANY.**

- A. Termination Due to an Event of Default. If the Contract is terminated by Company in accordance with this Contract due to an Event of Default, Company shall be entitled to Termination Damages calculated by multiplying the Contract Capacity by [\$75/kW].
- B. Termination Damages Appropriate. Subscriber Organization agrees and acknowledges that (i) the damages that Company would incur due to early termination of the Contract would be difficult or impossible to calculate with certainty, (ii) the Termination Damages are an appropriate approximation of such damages, and (iii) payment of Termination Damages does not relieve Subscriber Organization of liability for costs and balances incurred prior to the effective date of such termination. The Termination Damages are not intended to limit Company's rights or remedies, or Subscriber Organization's liabilities or duties, with respect to losses arising independent of the termination of this Contract for an Event of Default before the Commercial Operations Date, including, without limitation, Company's right to recover under Section 16. (Limitation of Liability).

**16. LIMITATION OF LIABILITY.**

- A. Each Party shall at all times indemnify, defend, and save the other Party harmless from any and all damages, losses, claims, including claims and actions relating to injury or death of any person or damage to property, costs and expenses, reasonable attorneys' fees and court costs, arising out of or resulting from the Party's performance of its obligations under this Contract, except to the extent that such damages, losses or claims were caused by the negligence or intentional acts of the other Party.
- B. Each Party's liability to the other Party for failure to perform its obligations under this Contract shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any punitive, incidental, indirect, special, or consequential damages of any kind whatsoever, including for loss of business opportunity or profits, regardless of whether such damages were foreseen.
- C. Notwithstanding any other provision of the Contract or this Section 16., with respect to the Company's duties or performance or lack of performance under this Contract, the Company's liability to the Subscriber Organization shall be limited as set forth in the Company's rate book and terms and conditions for electric service, which shall not be affected by the terms of this Contract. There are no third-party beneficiaries of any Company duty under this Contract other than the Company's duty to Subscribers to issue Bill Credits as set forth in this Contract.
- D. Indemnification of Company Against Third Party Claims. Subscriber Organization shall indemnify, defend, and hold harmless Company, its successors, permitted assigns, affiliates, controlling persons, directors, officers, employees, agents, contractors, subcontractors and the employees of any of them (collectively referred to as an "Indemnified Company Party"), from and against any Losses suffered, incurred or sustained by any Indemnified Company Party due to any Claim (whether or not well founded, meritorious or unmeritorious) by a third party not controlled by, or under common ownership and/or control with, Company relating to (i) the Subscriber Agreement between Subscriber Organization and its Subscribers or (ii) Subscriber Organization's development, permitting, construction, ownership, operation and/or maintenance of the CBRE Facility.

**17. DISPUTE RESOLUTION.**

- A. Notwithstanding the provisions of this Contract allowing for early termination following an Event of Default, each Party agrees to attempt to resolve all disputes arising hereunder promptly, equitably and in a good faith manner.
- B. Before submitting any claims, controversies or disputes ("Dispute(s)") under this Contract to the Dispute Resolution Procedures set forth below in Section C., the presidents, vice presidents, or authorized delegates from both Subscriber Organization and Company having full authority to settle the Dispute(s), shall personally meet in Hawai'i and attempt in good faith to resolve the Dispute(s) (the "Management Meeting").
- C. Dispute Resolutions Procedures, Mediation. Any and all Dispute(s) arising out of or relating to this Contract, (i) which remain unresolved for a period of 20 Days after the Management Meeting takes place or (ii) for which the Parties fail to hold a Management Meeting within sixty (60) Days of the date that a Management Meeting was requested by a Party, may upon the agreement of the Parties, first be submitted to confidential mediation in Honolulu, Hawai'i pursuant to the administration by, and in accordance with the Mediation Rules, Procedures and Protocols of, Dispute Prevention & Resolution, Inc. (or its successor) or, in their absence, the American Arbitration Association ("DPR") then in effect. If the Parties agree to submit the dispute to confidential mediation, the parties shall each pay 50% of the cost of the mediation (i.e., the fees and expenses charged by the mediator and DPR) and shall otherwise each bear their own mediation costs and attorneys' fees. If the Parties do not submit the Dispute(s) to mediation, or if they do submit the Dispute(s) to mediation but settlement of the Dispute(s) is not reached within 60 Days after commencement of the mediation, either Party may initiate legal proceedings in a court of competent jurisdiction in the State of Hawai'i.

- 18. ENVIRONMENTAL CREDITS.** Included in the purchase and sale of renewable energy are all of the Environmental Credits associated with the renewable energy. Company will not reimburse Subscriber Organization for any taxes or fees imposed on Subscriber Organization including, but not limited to, State of Hawai'i general excise tax. To the extent not prohibited by law, Company shall have the sole and exclusive right to use the renewable energy purchased hereunder to meet RPS and any Environmental Credit shall be the property of Company; provided, however, that such Environmental Credits shall be to the benefit of Company's ratepayers in that the value must be credited "above the line." Subscriber Organization shall use all commercially reasonable efforts to ensure such Environmental Credits are vested in Company, and shall execute all documents, including, but not limited to, documents transferring such Environmental Credits, without further compensation; provided, however, that Company agrees to pay for all reasonable costs associated with such efforts and/or documentation.

**19. REPRESENTATIONS AND WARRANTIES.**

- A. Company and Subscriber Organization represent and warrant, respectively, that:
  - 1. Each respective Party has all necessary right, power and authority to execute, deliver and perform this Contract.
  - 2. The execution, delivery and performance of this Contract by each respective Party will not result in a violation of any Laws, or conflict with, or result in a breach of, or cause a default under, any agreement or instrument to which such Party is also a party or by which it is bound. No consent of any person or entity not a Party to this Contract, other than governmental agencies whose approval is necessary for construction of the CBRE Facility and interconnection facilities, is required for such execution, delivery and performance by either Party.

B. Subscriber Organization represents, warrants and covenants that:

1. Subscriber Organization has obtained all Land Rights necessary for the construction, ownership, operation and maintenance of the CBRE Facility during the Term, and Subscriber Organization shall maintain such Land Rights in effect throughout the Term.
2. As of the commencement of construction, Subscriber Organization shall have obtained all permits or approvals from any applicable governmental agency necessary for the construction, ownership, operation and maintenance of the CBRE Facility and all interconnection facilities.
3. Subscriber Organization warrants that the CBRE Facility complies with all applicable federal and state Laws, including but not limited to (a) all applicable securities Laws and shall continue to be in compliance for the duration of the Term; (b) complies with all applicable Laws concerning the dissemination of personally identifiable information, and shall continue to be in compliance for the longer of (i) the Term and (ii) for as long as Subscriber Organization continues to hold or otherwise have access to any personally identifiable information of Subscribers or customers of Company; (c) complies with all applicable Laws concerning consumer protection, and shall continue to be in compliance for the duration of the Term; (d) complies with all applicable Laws and regulations concerning renewable energy grid interconnections, and shall continue to be in compliance for the duration of the Term.

**20. SUBSCRIBER ORGANIZATION AND CBRE FACILITY INFORMATION.** By signing this Contract, the Subscriber Organization expressly agrees and authorizes the Company to request and obtain from Subscriber Organization and its contractors, vendors, subcontractors, installers, suppliers or agents (collectively “Subscriber Organization Agents”), at no cost to Company, information related to the CBRE Facility, including but not limited to Watts, Vars, Watt Hours, current and voltage, status of the CBRE Facility, inverter settings, any and all recorded event or alarm logs recorded, (collectively “CBRE Facility Data”) that Company reasonably determines are needed to ensure the safe and reliable operation of the CBRE Facility or the Company’s system. Subscriber Organization expressly agrees and irrevocably authorizes Subscriber Organization Agents to disclose such Subscriber Organization Data to Company upon request by Company.

**21. ADDITIONAL INFORMATION.** The Company reserves the right to request additional information from Subscriber Organization relating to the CBRE Facility, where reasonably necessary, to serve the Subscriber Organization under this Contract or to ensure reliability, safety of operation, and power quality of the Company’s system.

**22. NO MATERIAL CHANGES TO CBRE FACILITY.** The Subscriber Organization agrees that no material changes or additions to the CBRE Facility shall be made without having obtained prior written consent from the Company, which consent shall not be unreasonably withheld. In no event may the Total Rated Capacity of the CBRE Facility exceed \_\_\_\_\_ kW. If the CBRE Facility changes ownership, the Company may require the new Subscriber Organization to complete and execute an amended Contract or new Contract, as may be applicable.

**23. CERTIFICATION BY LICENSED ELECTRICAL CONTRACTOR.** The CBRE Facility and all interconnection systems must comply with all applicable safety and performance standards of the National Electrical Code (NEC), Institute of Electrical and Electronic Engineers (IEEE), and accredited testing laboratories such as the Underwriters Laboratories (UL), and where applicable, the rules of the Commission, or other applicable governmental laws and regulations, and the Company's interconnection requirements, in effect at the time of signing this Contract. This requirement shall include, but not be limited to, the interconnection standards and procedures of the Company’s Rule 14H, as well as any other requirements as may be specified in this Contract, its Attachments, Exhibits,

and as authorized by the Commission. Upon request by Company, Subscriber Organization shall cause a Licensed Electrical Contractor, as agent for Subscriber Organization, to certify that once approved by the Company, the proposed CBRE Facility will be installed to meet all preceding requirement(s).

**24. GOOD ENGINEERING PRACTICE.**

- A. Each Party agrees to install, operate and maintain its respective equipment and facilities and to perform all obligations required to be performed by such Party under this Contract in accordance with good engineering practice in the electric industry and with applicable laws, rules, orders and tariffs.
- B. Wherever in this Contract and its Attachments and Exhibits the Company has the right to give specifications, determinations or approvals, such specifications, determinations and/or approvals shall be given in accordance with the Company’s standard practices, policies and procedures, which may include the Company’s Electric Service Installation Manual, the Company’s Engineering Standard Practice Manual and the IEEE Guides and Standards for Protective Relaying Systems.

**25. INSURANCE.** The following insurance provisions are only applicable to CBRE Facilities with a Total Rated Capacity 250 kW or greater but not exceeding 2.5 MW:

- A. The Subscriber Organization shall, at its own expense and during the term of the Contract and any other time that the CBRE Facility is interconnected with the Company’s system, maintain in effect with a responsible insurance company authorized to do insurance business in Hawai‘i and with a rating by A.M. Best Company, Inc. of “A-VII” or better, the following insurance or its equivalent at Company’s discretion that will protect the Subscriber Organization and the Company with respect to the CBRE Facility, the CBRE Facility’s operations, and the CBRE Facility’s interconnection with the Company’s system:
  - 1. A Commercial General Liability policy covering bodily injury and property damage with combined single limit of liability of at least the following amounts based on the Total Rated Capacity of the generator (for solar systems—Total Rated Capacity of the generator or inverter, whichever is lower, can be used with appropriate technical documentation on inverter, if not higher Total Rated Capacity will be used), for any occurrence. The limits below may be satisfied through the use of umbrella or excess liability insurance sufficient to meet these requirements:

COMMERCIAL GENERAL LIABILITY COVERAGE AMOUNT	TOTAL RATED CAPACITY OF THE CBRE FACILITY
\$5,000,000	Greater than 1 MW and less than or equal to 5 MW
\$2,000,000	250 kW and less than or equal to 1 MW

- 2. Said insurance by endorsement to the policy or policies shall: name the Company, its directors, officers, agents, and employees as additional insured; include contractual liability coverage for written agreements; include provisions stating that the insurance will respond to claims or suits by additional insureds against the Subscriber Organization or any other insured thereunder; provide that the insurance is primary with respect to the Subscriber Organization and the Company; and provide that the insurance company waives all rights of subrogation which Subscriber Organization or the insurance company may have against Company, its directors,

- officers, agents, and employees. Any insurance carried by Company will be excess only and not contribute with this insurance.
- B. Said insurance by endorsement to the policy or policies shall provide written notice within thirty (30) Days to the Company should the required insurance be cancelled, limited in scope, or not renewed upon expiration. "Claims made" policies are not acceptable, unless the Subscriber Organization agrees to maintain coverage in full effect at all times during the term of this Contract and for three (3) years thereafter. The adequacy of the coverage afforded by the required insurance shall be subject to review by the Company from time to time, and if it appears in such review that risk exposures require an increase in the coverages and/or limits of this insurance, the Subscriber Organization shall make such increase to that extent and any increased costs shall be borne by the Subscriber Organization. The Subscriber Organization has the responsibility to determine if higher limits are desired and purchased. The Subscriber Organization shall provide certificates of insurance to the Company prior to executing the Contract and any parallel interconnection. Receipt of any certificate showing less coverage than required shall not operate as a waiver by the Company of the Subscriber Organization's obligation to fulfill the applicable requirements of this Section 25. The Subscriber Organization's indemnity and other obligations shall not be limited by the foregoing insurance requirements. Any deductible shall be the responsibility of the Subscriber Organization.
- C. Alternatively, where the Subscriber Organization is a governmental entity, Subscriber Organization may elect to be self-insured for the amounts set forth above in lieu of obtaining insurance coverage to those levels from an insurance company.

**26. MISCELLANEOUS.**

- A. Disconnection and Survival of Obligations. Upon termination of this Contract, the CBRE Facility shall be disconnected from the Company's system. The termination of this Contract shall not relieve the Parties of their respective liabilities and obligations, owed or continuing at the time of termination.
- B. Governing Law and Regulatory Authority. This Contract was executed in the State of Hawai'i and must in all respects be interpreted, governed, and construed under the laws of the State of Hawai'i. This Contract is subject to, and the Parties' obligations hereunder include, operating in full compliance with all valid, applicable federal, state, and local laws or ordinances, and all applicable rules, regulations, orders of, and tariffs approved by, duly constituted regulatory authorities having jurisdiction.
- C. Amendment, Modifications, or Waiver; Entire Agreement. This Contract may not be altered or modified by either of the Parties, except by an instrument in writing executed by each of them. None of the provisions of this Contract shall be considered waived by a Party unless such waiver is given in writing. The failure of a Party to insist in any one or more instances upon strict performance of any of the provisions of this Contract or to take advantage of any of its rights hereunder shall not be construed as a waiver of any such provisions or the relinquishment of any such rights for the future, but the same shall continue and remain in full force and effect. This Contract contains the entire agreement and understanding between the Parties, their agents, and employees as to the subject matter of this Contract. Each Party also represents that in entering into this Contract, it has not relied on any promise, inducement, representation, warranty, agreement or other statement not set forth in this Contract.
- D. Notices. Any notice required under this Contract shall be in writing and mailed at any United States Post Office with postage prepaid and addressed to the Party, or personally delivered to the Party at the address identified on the last page of the Contract. Changes in such designation may be made



by notice similarly given. Notice sent by mail shall be deemed to have been given on the date of actual delivery or at the expiration of the fifth day after the date of mailing, whichever is earlier.

- E. Assignment. This Contract may not be assigned by either Party without the prior written consent of the other Party. Such consent shall not be unreasonably withheld. In the event of an assignment for financing, to the extent necessary, Company shall, if requested by Subscriber Organization and if its costs (including reasonable attorneys' fees of outside counsel) in responding to such request are paid by Subscriber Organization execute such Hawai'i-law-governed documents as may be reasonably requested by a lender in connection with CBRE Facility debt and reasonably acceptable to Company, to acknowledge an assignment of such debt and/or pledge/mortgage.
- F. Binding Effect. This Contract shall be binding upon and inure to the benefit of the Parties hereto and their respective successors, legal representatives, and permitted assigns.
- G. Relationship of Parties. Nothing in this Contract shall be deemed to constitute any Party hereto as partner, agent or representative of the other Party or to create any fiduciary relationship between the Parties.
- H. Limitations. Nothing in this Contract shall limit the Company's ability to exercise its rights or expand or diminish its liability with respect to the provision of electrical service pursuant to the Company's tariffs as filed with the Commission, or the Commission's Standards for Electric Utility Service in the State of Hawai'i, which currently are included in the Commission's General Order Number 7, as either may be amended from time to time.
- I. Non-Warranty. Neither by inspection, if any, or non-rejection, nor in any other way, does the Company give any warranty, express or implied, as to the adequacy, safety, or other characteristics of any structures, equipment, wires, appliances or devices owned, installed or maintained by the Subscriber Organization or leased by the Subscriber Organization from third parties, including without limitation the CBRE Facility and any structures, equipment, wires, appliances or devices appurtenant thereto.
- J. Hawai'i General Excise Tax. [See Project Specific Addendum]
- K. Execution of Contract; Multiple Counterparts. The Parties agree that this Contract, including amendments, may be executed and delivered by exchange of electronic signatures, which may be transmitted by facsimile, e-mail, or other acceptable means. A party's electronic signature shall be considered an "original" signature which is binding and effective for all purposes. This Contract may be executed in counterparts, each of which shall be deemed an original, and all of which shall together constitute one and the same instrument binding all Parties.
- L. Survival. The rights and obligations of the Parties in this Contract which, by its express terms or nature and context is intended to survive termination or expiration of this Contract, will survive any such termination or expiration.

**27. FORCE MAJEURE.**

- A. Definition of Force Majeure. The term "Force Majeure", as used in this Contract, means any occurrence that:
  - 1. In whole or in part delays or prevents a Party's performance under this Contract;
  - 2. Is not the direct or indirect result of the fault or negligence of that Party;
  - 3. Is not within the control of that Party notwithstanding such Party having taken all reasonable precautions and measures in order to prevent or avoid such event; and

4. The Party has been unable to overcome by the exercise of due diligence.
- B. Events That Could Qualify as Force Majeure. Subject to the foregoing, events that could qualify as Force Majeure include, but are not limited to, the following: acts of God, flooding, lightning, landslide, earthquake, fire, drought, explosion, epidemic, quarantine, storm, hurricane, tornado, volcano, other natural disaster or unusual or extreme adverse weather-related events; war (declared or undeclared), riot or similar civil disturbance, acts of the public enemy (including acts of terrorism), sabotage, blockade, insurrection, revolution, expropriation or confiscation; or strikes, work stoppage or other labor disputes (in which case the affected Party shall have no obligation to settle the strike or labor dispute on terms it deems unreasonable).
- C. Exclusions From Force Majeure. Force Majeure does not include:
1. any acts or omissions of any Third Party, including, without limitation, any vendor, materialman, customer, or supplier of Subscriber Organization, unless such acts or omissions are themselves excused by reason of Force Majeure;
  2. any full or partial reduction in the electric output of Facility that is caused by or arises from (i) a mechanical or equipment breakdown or (ii) other mishap or events or conditions attributable to normal wear and tear or defects, unless such mishap is caused by Force Majeure;
  3. changes in market conditions that affect the cost of Subscriber Organization's supplies, or that affect demand or price for any of Subscriber Organization's products, or that otherwise render this Contract uneconomic or unprofitable for Subscriber Organization;
  4. Subject to Section 10. I. of this Contract, Subscriber Organization's inability to obtain Governmental Approvals or Land Rights for the construction, ownership, operation and maintenance of Facility and the Company-Owned Interconnection Facilities, or Subscriber Organization's loss of any such Governmental Approvals or Land Rights once obtained;
  5. the lack of wind, sun or any other resource of an inherently intermittent nature;
  6. Subscriber Organization's inability to obtain sufficient fuel, power or materials to operate its Facility, except if Subscriber Organization's inability to obtain sufficient fuel, power or materials is caused solely by an event of Force Majeure;
  7. Subscriber Organization's failure to obtain additional funds, including funds authorized by a state or the federal government or agencies thereof, to supplement the payments made by Company pursuant to this Contract;
  8. a Forced Outage except where such Forced Outage is caused by an event of Force Majeure;
  9. litigation or administrative or judicial action pertaining to the Contract, the Site, the Facility, the Land Rights, the acquisition, maintenance or renewal of financing or any Governmental Approvals, or the design, construction, ownership, operation or maintenance of the Facility, the Company-Owned Interconnection Facilities or the Company System;
  10. a strike, work stoppage or labor dispute limited only to any one or more of the Indemnified Subscriber Organization Parties or any other third party employed by Subscriber Organization to work on the Project; or
  11. any full or partial reduction in the availability of the Facility to produce and deliver to the Point of Interconnection electric energy in response to Company Dispatch which is caused by any Third Party including, without limitation, any vendor or supplier of Subscriber Organization or Company, except to the extent due to Force Majeure.

- D. Satisfaction of Certain Conditions. This Contract defer or limit certain liabilities of a Party for delay and/or failure in performance to the extent such delay or failure is the result of conditions or events of Force Majeure; provided, however, that a Non-performing Party is only entitled to such limitations or deferrals of liabilities as and to the extent the following conditions are satisfied:
1. the Non-performing Party gives the other Party, within five (5) Days after the Non-performing Party becomes aware or should have become aware of the Force Majeure condition or event, but in any event no later than thirty (30) Days after the Force Majeure condition or event begins, written notice (the "Force Majeure Notice") stating that the Non-performing Party considers such condition or event to constitute Force Majeure and describing the particulars of such Force Majeure condition or event, including the date the Force Majeure commenced;
  2. the Non-performing Party gives the other Party, within fourteen (14) Days after the Force Majeure Notice was or should have been provided, a written explanation of the Force Majeure condition or event and its effect on the Non-performing Party's performance, which explanation shall include evidence reasonably sufficient to establish that the occurrence constitutes Force Majeure;
  3. the suspension of performance is of no greater scope and of no longer duration than is required by the condition or event of Force Majeure;
  4. the Non-performing Party exercises commercially reasonable efforts to remedy its inability to perform and provides written weekly progress reports to the other Party describing actions taken to end the Force Majeure; and
  5. when the condition or event of Force Majeure ends and the Non-performing Party is able to resume performance of its obligations under this Contract, that Party shall give the other Party written notice to that effect.
- E. Termination for Force Majeure. If Force Majeure delays or prevents a Party's performance for more than three hundred sixty-five (365) Days from the occurrence or inception of the Force Majeure, as stated in the Force Majeure Notice, and such delay or failure of performance would have otherwise constituted an Event of Default under Section 13. (Events of Default by Subscriber Organization), the other Party shall have the right to terminate this Contract by written notice. Such notice shall designate the date such termination is to be effective, which date shall be no later than thirty (30) Days after such notice is deemed to be received by the Party whose performance has been delayed or prevented. In the event of termination pursuant to this Section 27.E (Termination for Force Majeure), neither Party shall be liable for any damages nor have any obligations to the other, except as provided in Section 26.L (Survival).
- F. Effect of Force Majeure. Other than as provided in Section 27.E. (Termination for Force Majeure), neither Party shall be responsible or liable for any delays or failures in its performance under this Contract as and to the extent (i) such delays or failures are substantially caused by conditions or events of Force Majeure, and (ii) the conditions of Section D. (Satisfaction of Certain Conditions) are satisfied.
- G. No Relief of Other Obligations. Except as otherwise expressly provided for in this Contract, the existence of a condition or event of Force Majeure shall not relieve the Parties of their obligations under this Contract (including, but not limited to, payment obligations) to the extent that performance of such obligations is not precluded by the condition or event of Force Majeure.
- H. No Extension of the Term. In no event will any delay or failure of performance caused by any conditions or events of Force Majeure extend this Contract beyond its stated Term.

**28. COMMUNITY OUTREACH.**

- A. The Parties acknowledge that, prior to the Execution Date, Subscriber Organization provided to Company a comprehensive community outreach and communications plan to work with and inform neighboring communities and stakeholders to gain their support for the Project ("Community Outreach and Engagement Plan"). Subscriber Organization agrees to work with neighboring communities and stakeholders and provide them timely information during all phases of the Project, including but not limited to the following information: Project description, Project stakeholders, community concerns and Subscriber Organization's efforts to address such concerns, Project benefits, government approvals, Project schedule, and a Community Outreach and Engagement Plan. Subscriber Organization's Community Outreach and Engagement Plan is a public document and shall remain available to members of the community on the Subscriber Organization's website for the Term of this Contract and upon request. Subscriber Organization shall also provide Company with links to its Project website and Community Outreach and Engagement Plan.
- B. Public Meeting; Public Comment Period. The Parties also acknowledge that, prior to the Execution Date, Subscriber Organization provided reasonable advance notice and hosted a public meeting for community and neighborhood groups in and around the vicinity of the Project site that provided neighboring community, stakeholders, and the general public with: (i) a reasonable opportunity to learn about the proposed Project; (ii) an opportunity to engage in a dialogue about concerns, mitigation measures, and potential community benefits of the proposed Project; and (iii) information concerning the process and/or intent for the public's input and engagement, including advising attendees that they will have thirty (30) Days from the date of said public meeting to submit written comments to Company and/or Subscriber Organization. Subscriber Organization shall collect all public comments, and then provide Company copies of all comments received in their original, unedited form. Subscriber Organization agrees that it will post all comments with personal information redacted on its website for public review. Comments should remain on the Subscriber Organization's website for at least two years after the Commercial Operations Date.
- C. Subscriber Organization acknowledges and agrees that any written comments from the public regarding the CBRE Project it receives after the 30-day public comment period will be submitted to Company in their original, unedited form. Subscriber Organization further agrees to post these subsequent public comments, with personal information redacted, on its website for public review for at least two years after the Commercial Operations Date.
- D. The Parties acknowledge and agree that Subscriber Organization is responsible for community outreach and engagement for the Project, and that the public meeting and comment solicitation process described in this Section 28 (Community Outreach) do not represent the only community outreach and engagement activities that can or should be performed by Subscriber Organization. Without limitation to the generality of the preceding sentence, Subscriber Organization agrees to take into account the Project's potential impacts on historical and cultural resources and, at a minimum, Subscriber Organization shall describe: (i) any valued cultural, historical, or natural resources in the area in question, including the extent to which traditional and customary native Hawaiian rights are exercised in the area; (ii) the extent to which those resources – including traditional and customary native Hawaiian rights – will be affected or impaired by the Project; and (iii) the feasible action, if any, to be taken to reasonably protect native Hawaiian rights if they are found to exist. Subscriber Organization shall determine and implement such additional means as may be reasonably necessary to share information with and involve the community and neighborhood groups in and around the vicinity of the Facility during the Project planning and development process through the Term of this Contract, and shall timely inform Company of its plans and activities in this regard.

E. Upon the Execution Date and at all times during the Term of this Contract, Subscriber Organization shall designate an individual as the "Subscriber Organization's Community Representative." The Subscriber Organization's Community Representative shall be the primary contact between the community and the Subscriber Organization and shall be available during the Term of this Contract to receive and answer questions from the community. As of the Execution Date, the Subscriber Organization's Community Representative shall be:

- Name: [name of Subscriber Organization's Community Representative]
- Contact Information: [email address]
- Subscriber Organization shall notify Company in writing upon designation of any new Subscriber Organization's Community Representative.

**29. GENERATOR/EQUIPMENT CERTIFICATION.** CBRE Facilities that utilize inverter technology must be compliant with Institute of Electrical and Electronics Engineers IEEE Std 1547-2018, Underwriters Laboratories UL 1741 and the Company's Source Requirement Document Version 2.0 (though not preferred, Company will accept compliance with the Company's Source Requirement Document Version 1.1 for CBRE Projects executed prior to or on June 30, 2021) as well as the Company's Rule 14H and any additional requirements contained herein that apply to CBRE Facilities. CBRE Facilities that use a rotating machine must be compliant with applicable National Electrical Code, Underwriters Laboratories, and Institute of Electrical and Electronics Engineers standards and rules and orders of the Commission in effect at the time this Contract is executed. By signing below, the Applicant certifies that the installed generating equipment will meet the appropriate preceding requirement(s) and can supply documentation that confirms compliance, including a certification of the same from the Installing Electrical Contractor upon request by the Company. Notwithstanding the above, the CBRE Facility must still comply with the Performance Standards required in this Contract.

**30. NOTICE AND DISCLAIMER REGARDING FUTURE TARIFF MODIFICATIONS.**

A. This Contract shall, at all times, be subject to modification by the Commission as said Commission may, from time to time, direct in the exercise of its jurisdiction. Without limiting the foregoing, Subscriber Organization expressly acknowledges the following:

1. The CBRE Tariff is subject to modification by the Commission.
2. The CBRE Facility shall be subject to any future modifications ordered by the Commission. Subscriber Organization agrees to abide by and comply with and to pay for any costs related to such Commission-ordered modifications for the term of the Contract.

B. BY SIGNING BELOW, SUBSCRIBER ORGANIZATION ACKNOWLEDGES IT HAS READ, UNDERSTANDS AND AGREES TO ABIDE BY THE ABOVE SECTION 30. NOTICE AND DISCLAIMER.

**IN WITNESS WHEREOF**, the Parties hereto have caused this Contract to be executed by their duly authorized representatives. This Contract is effective as of the Effective Date set forth above.

[Subscriber Organization]	[Hawaiian Electric Company, Inc; Hawai'i Electric Light Company, Inc. Maui Electric Company, Limited], a Hawai'i corporation
By: _____ Name: _____ Date: _____	By: _____ Name: _____ Date: _____

MAILING ADDRESS [select as appropriate]

Hawaiian Electric Company, Inc. Attn: Customer Energy Resources Division P.O. Box 2750 Honolulu, HI 96840]	Maui Electric Company, Ltd. Attn: Renewable Energy Projects Division P.O. Box 398 Kahului, HI 96733-6898]	Hawai'i Electric Light Company, Inc.  <u>Hilo:</u> Hawai'i Electric Light Engineering Attn: DER Program 54 Halekauila Street Hilo, HI 96720  <u>Kona:</u> Hawai'i Electric Light Engineering Attn: DER Program 74-5519 Kaiwi Street Kailua Kona, HI 96740]
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**ATTACHMENT A**  
**SCHEDULE OF DEFINED TERMS**

For the purposes of this Contract, the following capitalized terms shall have the meanings set forth below:

"Acceptance Test": A test conducted by Subscriber Organization and witnessed by Company, within thirty (30) Days of completion of all Interconnection Facilities and in accordance with criteria and test procedures determined by Company to determine conformance with Attachment F (Facility Owned by Subscriber Organization) and in accordance with Good Engineering and Operating Practices. Exhibit F-8 (Acceptance Test General Criteria) provides general criteria to be included in the written protocol for the Acceptance Test. Successful completion of the Acceptance Test shall be a condition precedent for the performance of the Control System Acceptance Test and the Commercial Operations Date.

"Active Power Control Interface": Shall have the meaning set forth in Section 1.G (Active Power Control Interface) of Attachment F (Facility Owned by Subscriber Organization) of this Contract.

"Account Holder": The primary account holder for each physical residence or business address on the island serviced by the Company, as identified in Company's records. An Account Holder is not a Subscriber until such Account Holder has been successfully enrolled in Facility's CBRE Program.

"Actual Output": The total quantity of electric energy (measured in kilowatt hours) produced by the CBRE Facility over a given time period and delivered to the Point of Interconnection, as measured by the Revenue Meter. "Actual Output" is the equivalent of "Net Energy."

"Allowed Capacity": Shall have the meaning set forth in Section 5(f) of Exhibit F-1 (Description of Generation and Battery Storage Facilities) to this Contract.

"Applicable Period Lump Sum Payment": For each applicable period, the total amount of Lump Sum Payment payable during such period, as such amount may be calculated and adjusted from time to time as set forth in Section 4.B (Lump Sum Payment) of this Contract and/or Section 3 (Calculation of Lump Sum Payment) of Attachment B (Company Payments for Energy, Dispatchability and Availability of BESS) to this Contract.

"Applicable NEP Verification Date": For the Initial OEPR, the Initial NEP Verification Date. For any Subsequent OEPR, the first Day of the calendar month following the calendar month during which there occurs the first anniversary of the event (e.g., completion of equipment replacement) which occasioned the preparation of such Subsequent OEPR.

"Battery Energy Storage System" or "BESS": The battery energy storage system as described in Attachment F (Facility Owned by Subscriber Organization) to the Contract, together with all other equipment, devices, and associated appurtenances owned, controlled, operated and managed by Subscriber Organization in connections, with or to facilitate, the storage, transmission, delivery or furnishing by Subscriber Organization to Company of the electric energy stored in the BESS.

"BESS Allocated Portion of the Lump Sum Payment": For each BESS Measurement Period and for any other applicable period, an amount equal to fifty percent (50%) of the total of the three monthly Lump Sum Payments for such period without taking into account any set-offs against such monthly Lump Sum Payments.

"BESS Annual Equivalent Availability Factor": Shall be as described in Attachment C (Required Performance Metrics; Liquidated Damages), Section 4. (BESS Annual Equivalent Availability Factor; Liquidated Damages; Termination Rights) to this Contract.

"BESS Capacity Performance Metric": Shall have the meaning set forth in Attachment H (BESS Requirements), Section 1 (BESS Tests) to this Contract.

"BESS Capacity Cure Period": Shall have the meaning set forth in Attachment C (Required Performance Metrics; Liquidated Damages), Section 3. (BESS Capacity Test; Liquidated Damages; Termination Rights).

"BESS Capacity Ratio": Shall have the meaning set forth in Attachment H (BESS Requirements), Section 1 (BESS Tests) to this Contract.

"BESS Capacity Test": Shall have the meaning set forth in Attachment H (BESS Requirements), Section 1 (BESS Tests) to this Contract.

"BESS Contract Capacity": The storage capacity, in MWh, of the BESS, or \_\_\_ MWh.

"BESS EAF Performance Metric": Shall have the meaning set forth in Attachment C (Required Performance Metrics; Liquidated Damages) Section 4. (BESS Annual Equivalent Availability Factor; Liquidated Damages; Termination Rights).

"BESS EFOF Performance Metric": Shall have the meaning set forth in Attachment C (Required Performance Metrics; Liquidated Damages) Section 4. (BESS Annual Equivalent Forced Outage Factor; Liquidated Damages; Termination Rights).

"BESS Measurement Period": Shall mean, in any Contract Year, the following periods of three calendar months each: (i) the period beginning on the first day of the first calendar month of such Contract Year and extending through the last day of the third calendar month of such Contract Year; (ii) the period beginning on the first day of the fourth calendar month of such Contract Year and extending through the last day of the sixth calendar month of such Contract Year; (iii) the period beginning on the first day of the seventh calendar month of such Contract Year and extending through the last day of the ninth calendar month of such Contract Year; and (iv) the period beginning on the first day of the tenth calendar month of such Contract Year and extending through the last day of the twelfth calendar month of such Contract Year.

"BESS Measurement Period Report": For each BESS Measurement Period, the report of the data necessary for calculation of the Performance Metrics for such BESS Measurement Period to be provided by Subscriber Organization to Company in the form set forth in Section 1 (Monthly Report) of Attachment E (Monthly Reporting and Dispute Resolution by Independent AF Evaluator) to this Contract or such other form as the Company may approve in writing.

"Bill Credit": shall mean the dollar amount payable by means of a credit by the Company to each Subscriber on the Subscriber's retail electric service bill, which represents the Subscriber's beneficial share of the Contract Capacity by which renewable energy is produced by the CBRE Facility and exported to the Company, and offsetting Subscriber's current renewable energy usage on such service bill.

"Bill Credit Rate": shall mean the then current applicable "Credit Rate" as determined by the CBRE Tariff. The CBRE Tariff prescribes a specific Credit Rate in the event that CBRE Small Project Phase 2 Capacity (as defined in the CBRE Tariff) is not filled for any island and a competitive credit rate procurement ("CCRP") mechanism to set the Credit Rate if there are more applications for CBRE Small Project Phase 2 Capacity than is available for any island.

"Bill of Material": A list of equipment to be installed at the Facility including, but not necessarily limited to, items such as relays, breakers, and switches.

"Business Day": Any calendar day that is not a Saturday, a Sunday, or a federal or Hawai'i state holiday.

"CBRE Facility" or "Facility": Subscriber Organization's renewable electric energy facility that is the subject of this Contract, including the PV System, the BESS, all Subscriber Organization-Owned Interconnection Facilities and all other equipment, devices, associated appurtenances owned, controlled, operated and managed by Subscriber Organization in connection with, or to facilitate, the production, generation, storage, transmission, delivery or furnishing of electric energy by Subscriber Organization to



Company and required to interconnect with the Company System. As described in Attachment F (Facility Owned by Subscriber Organization).

"CBRE Framework": means the CBRE Framework (Phase 1), as amended and supplemented by the CBRE Framework (Phase 2).

"CBRE Framework (Phase 1)": means that certain "Community-Based Renewable Energy – A Program Framework" issued by the PUC and attached as Attachment A to that certain Decision and Order No. 35137, filed December 22, 2017, in Docket No. 2015-0389, portions of which are applicable to Phase 2 of the CBRE Program as specified in the CBRE Tariff.

"CBRE Framework (Phase 2)": means that certain Order No. 37070, filed April 9, 2020, in Docket No, 2015-0389. The CBRE Framework (Phase 2) provides the basis and framework for Phase 2 of the CBRE Program and is implemented by the CBRE Tariff.

"CBRE IO": means the Independent Observer contracted with the Company but answering to the PUC to carry out the responsibilities assigned to the Independent Observer under the Phase 2 CBRE Framework.

"CBRE Online Portal": is the interactive, internet website-based interface maintained by or on behalf of the Company through which the Subscriber Organization may establish qualifications, provide information and complete documents necessary for acceptance in the CBRE Program, and may enter or change the Monthly Subscription Information reflecting updated information for each Subscriber, including any changes to any Subscriber's name, account number, address, and Subscriber Allocation. For Phase One of the CBRE Program, the CBRE Online Portal will be a manually administered application form-based process managed by Company until the CBRE Online Portal is online and ready for commercial operation. The CBRE Online Portal should be completed in time for the commencement of Phase Two of the CBRE Program.

"CBRE Program": The program established under the CBRE Tariff to allow developers of renewable energy projects to provide Account Holders with an opportunity to avail themselves of the benefits of the CBRE Tariff

"CBRE Project": A community-based renewable energy project subject to the CBRE Tariff.

"CBRE Subscriber Thresholds": Each of the following is a CBRE Subscriber Threshold: (i) the requirement that Unsubscribed RDG not exceed 15% of Contract Capacity; (ii) the requirement that the Facility's CBRE Program have a minimum of four individual Subscribers; (iii) the requirement that the total Subscriber Allocations for all Residential Subscribers be not less than 40% of Contract Capacity; (iv) the requirement that, if Subscriber Organization's Response to RFP included an Enhanced Residential Threshold, the total Subscriber Allocations for all Residential Subscribers be not less than the Enhanced Residential Threshold; (v) the requirement for a CBRE LMI Project that the total Subscriber Allocations be allocated 100% to LMI Subscribers in accordance with the CBRE Tariff; and (vi) if Subscriber Organization's Response to RFP included an LMI Minimum Threshold, the total Subscriber Allocations for all LMI Subscribers be not less than the LMI Minimum Threshold.

"CBRE Tariff": The rules for Phase 2 of the CBRE Program approved by the PUC as Tariff Rule 29 based on the CBRE Framework (Phase 2).

"Commercial Operations": Upon satisfaction of the following conditions, the Facility shall be considered to have achieved Commercial Operations on the Day specified in Subscriber Organization's written notice described below: (i) the Acceptance Test has been passed, (ii) all generating units have passed Control System Acceptance Tests, (iii) the Transfer Date has occurred, (iv) Subscriber Organization has (1) provided to Company the Required Models (as defined in Section 6.A (Subscriber Organization's Obligation to Provide Models) of Attachment F (Facility Owned by Subscriber Organization) in the form of Source Code, (2) placed the current version of the Source Code for the Required Models with the Source

Code Escrow Agent as required in Section 6.B.1.a.(Establishment of Source Code Escrow) of Attachment F (Facility Owned by Subscriber Organization), or (3) if Subscriber Organization is unable to arrange for the placement of the appropriate Source Code into the Source Code Escrow account, obtained the required standby letter of credit, as required in Section 6.B.2.a (Establishment of Source Code Security) of Attachment F (Facility Owned by Subscriber Organization), and (v) Subscriber Organization provides Company with written notice that (aa) Subscriber Organization is ready to declare the Commercial Operations Date and (bb) the Commercial Operations Date will occur within 24 hours (i.e., the next Day).

"Commercial Operations Date" or "COD": The date on which Facility first achieves Commercial Operations.

"Commercial Operations Date Deadline": Shall have the meaning set forth in Section 10.I.1 of this Contract.

"Company": Shall have the meaning set forth in the preamble to this Contract.

"Company-Designated NEP Estimate": The estimated Net Energy Potential of the CBRE Facility as designated by Company pursuant to Section 1.C. (NEP IE Estimate and Company-Designated NEP Estimate) of Attachment D (Calculation and Adjustment of Net Energy Potential) this Contract.

"Company Dispatch": Company's right, through supervisory equipment or otherwise, to direct or control both the capacity and the energy output of the CBRE Facility from its minimum output rating to its maximum output rating consistent with this Contract (including, without limitation, Good Engineering and Operating Practices, which dispatch shall include real power, reactive power, voltage, frequency, the determination to take generating or storage equipment offline or online, frequency droop setting, the ramp rate setting, and other characteristics of such electric energy output whose parameters are normally controlled or accounted for in a utility dispatching system.

"Company-Owned Interconnection Facilities": Shall have the meaning set forth in of Attachment G (Company-Owned Interconnection Facilities).

"Company System": The electric system owned and operated by Company (to include any non-utility owned facilities) consisting of power plants, transmission and distribution lines, and related equipment for the production and delivery of electric power to the public.

"Company System Operator": The authorized representative of Company who is responsible for carrying out Company dispatch and curtailment of electric energy generation interconnected to the Company System.

"Company's Recommendations": Shall have the meaning set forth in Section 4.Cof Attachment F (Facility Owned by Subscriber Organization) to this Contract.

"Competitive Bidding Framework": The Framework for Competitive Bidding contained in Decision and Order No. 23121 issued by the Public Utilities Commission on December 8, 2006, and any subsequent orders providing for modifications from those set forth in Order No. 23121 issued December 8, 2006.

"Consultants List": Shall have the meaning set forth in Exhibit F-2 (Consultants List) of Attachment F (Facility Owned by Subscriber Organization) to this Contract.

"Contract": The Mid-Tier Standard Form Contract for the CBRE Facility, and all Attachments, Exhibits and related documents attached to such Mid-Tier Standard Form Contract, together with the Project Specific Agreement for the CBRE Facility, and all Attachments, Exhibits and related documents attached to such Project Specific Agreement, including, if required, the DC-Coupled Storage Attachment.

"Contract Capacity": Shall have the meaning set forth in Attachment F - Exhibit F-1 (Description of Generation and Battery Storage Facilities) to this Contract.

"Contract Year": A twelve (12) calendar month period commencing on either: (i) the Commercial Operations Date (if the Commercial Operations Date occurs on the first Day of a calendar month) and thereafter on each anniversary of the Commercial Operations Date; or (ii) the first Day of the calendar month following the month during which the Commercial Operations Date occurs, and thereafter on each anniversary of the first Day of such month; provided, however, that, in the latter case, the initial Contract Year shall also include the Days from the Commercial Operations Date to the first Day of the succeeding calendar month.

"Control System Acceptance Test(s)" or "CSAT": A test or tests performed on the centralized and collective control systems and Active Power Control Interface of the CBRE Facility, which includes successful completion of the Control System Telemetry and Control List, in accordance with procedures set forth in Exhibit F-7 (Control System Acceptance Test Criteria) to Attachment F (Facility Owned by Subscriber Organization) of the Contract.

"Control System Telemetry and Control List": The Control System Telemetry and Control List includes, but is not limited to, all of the Facility's equipment and generation performance/quality parameters that will be monitored, alarmed and/or controlled by Company's Energy Management System (EMS) throughout the Term of this Contract.

"Day": A calendar day.

"DC-Coupled Storage Attachment": The DC-Coupled Storage Attachment for the CBRE Facility including any and all attachments, exhibits and related documents attached to such DC-Coupled Storage Attachment.

"Development Period Security": Shall have the meaning set forth in Section 11.F.1. (Development Security) of this Contract.

"Disconnection Event": Shall have the meaning set forth in Section 4.A of Attachment F (Facility Owned by Subscriber Organization) to this Contract.

"Dispute": Shall have the meaning set forth in Section 17. of this Contract.

"DPR": Shall have the meaning set forth in Section 17. of this Contract.

"EMS" or "Energy Management System": The real-time, computer-based control system, or any successor thereto, used by Company to manage the supply and delivery of electric energy to its consumers. It provides the Company System Operator with an integrated set of manual and automatic functions necessary for the operation of the Company System under both normal and emergency conditions. The EMS provides the interfaces for the Company System Operator to perform real-time monitoring and control of the Company System, including but not limited to monitoring and control of the Facility for system balancing, supplemental frequency control and economic dispatch as prescribed in this Contract.

"Enhanced Residential Threshold": A specific percentage of Contract Capacity in excess of 40% committed to by Subscriber Organization in its proposal as the percentage to be represented by Subscriber Allocations for Residential Subscribers. The Enhanced Residential Threshold for this Contract is \_\_%. **[Drafting note: If there is no Enhanced Residential Threshold enter "N/A" in the blank.]**

"Environment": Shall have the meaning set forth in Section 1.B.3.g.4.(iii) (Malware) of Attachment F (Facility Owned by Subscriber Organization) to this Contract.

"Environmental Credits": Any environmental credit, offset, or other benefit allocated, assigned or otherwise awarded by any Governmental Authority, international agency, or non-governmental renewable energy certificate accounting and verification organization to Company or Subscriber Organization based in whole or in part on the fact that the CBRE Facility is a non-fossil fuel facility. Such Environmental Credits shall include, without limitation, the non-energy attributes of renewable energy including, but not limited to, any

avoided emissions of pollutants to the air, soil, or water such as sulfur dioxide, nitrogen oxides, carbon monoxide, particulate matter, and hazardous air pollutants; any other pollutant that is now or may in the future be regulated under the pollution control laws of the United States; and avoided emissions of carbon dioxide and any other greenhouse gas, along with the renewable energy certificate reporting rights to these avoided emissions, but in all cases shall not mean tax credits.

"Event of Default": Shall have the meaning set forth in Section 13. (Events of Default by Subscriber Organization) of this Contract.

"Excess Energy Conditions": An operating condition on the Company System that may occur when Company has more energy available than is required to meet the load on the Company System at any point in time and the generating assets interconnected with the Company System are operating at or near their minimum levels, taking into consideration factors such as the need to maintain system reliability and stability under changing system conditions and configurations, the need for downward regulating reserves, the terms and conditions of power purchase Contracts for base-loaded firm capacity or scheduled energy, and the normal minimum loading levels of such units.

"Execution Date": The date designated as such on the first page of this Contract or, if no date is so designated, the date the Parties exchanged executed signature pages to this Contract.

"Facility's CBRE Program": The program offered by Subscriber Organization whereby Subscribers are afforded the opportunity to obtain benefits of the CBRE Tariff by acquiring a beneficial interest in the Contract Capacity by which renewable energy is produced by the Facility and exported to Company. The Facility's CBRE Program includes the entire process of marketing and sales of, or subscriptions to, the Subscriber Allocations, enrolling Subscribers, providing Company with the information necessary to afford each Subscriber the Bill Credit to which such Subscriber is entitled, responding to Subscriber inquiries, facilitating the transfer of Subscriber interests and buying back Subscriber interests. The Facility's CBRE Program shall have a duration of 20 years commencing on the Commercial Operations Date.

"Federal Non-Refundable Tax Credit": Shall mean any U.S. federal tax credit for which the federal government is not required to refund any tax credit which exceeds the tax payments due to the federal government by the Claiming Entity or to provide a cash rebate in lieu of such credit to the Claiming Entity.

"Federal Refundable Tax Credit": Shall mean any U.S. federal tax credit for which the federal government is required to refund any tax credit which exceeds the tax payments due to the federal government by the Claiming Entity or to provide a cash rebate in lieu of such credit to the Claiming Entity.

"First Benchmark Period": The period commencing on the Commercial Operations Date and ending on the last Day of the calendar month during which an OEPR Evaluator issues the Initial OEPR. During the First Benchmark Period, the First NEP Benchmark shall be the estimate of Net Energy Potential that is used to calculate the Lump Sum Payment as provided in Section 3.A. (Lump Sum Payment During First Benchmark Period) of Attachment B (Company Payments for Energy, Dispatchability and Availability of BESS) to this Contract.

"First NEP Benchmark": The estimate of Net Energy Potential that is used to calculate the Lump Sum Payment during the First Benchmark Period as provided in Section 3.A. (Lump Sum Payment During First Benchmark Period) of Attachment B (Company Payments for Energy, Dispatchability and Availability of BESS) to this Contract. The "First NEP Benchmark" shall consist of whichever of the following is applicable as of the Commercial Operation Date, as more fully provided in Section 1.C. (NEP IE Estimate and Company-Designated NEP Estimate) and Section 1.D. (NEP IE Estimate, Liquidated Damages and Subscriber Organization's Null and Void Right) of Attachment D (Calculation and Adjustment of Net Energy Potential) to this Contract: (i) NEP RFP Projection, (ii) NEP IE Estimate, (iii) Company-Designated NEP Estimate or (iv) such other amount as the Parties may agree in writing.

"First OEPR": Shall have the meaning set forth in Section 2.F. (Timeline and Fees) of Attachment D (Calculation and Adjustment of Net Energy Potential) to this Contract.

"Force Majeure": An event that satisfies the requirements of Section 27.A. (Definition of Force Majeure), Section 27.B. (Events That Could Qualify as Force Majeure) and Section 27.C. (Exclusions from Force Majeure).

"Forced Outage": A start failure or unplanned outage reported consistently with the principles in the NERC GADS REPORTING INSTRUCTIONS for SF, U1, U2 and U2 events. This may be a startup failure, a condition resulting in immediate shutdown or trip, or an outage which requires removal from the in-service state before the end of the next weekend (Sunday at 2400 or before Sunday turns into Monday). This type of outage can only occur while the resource is in service.

"Full Dispatch": A time period during which all inverters are available and there are no technical restrictions or limitations affecting generation imposed to meet Company Dispatch.

"Good Engineering and Operating Practices": The practices, methods and acts engaged in or approved by a significant portion of the electric utility industry for similarly situated U.S. facilities, considering Company's isolated island setting, that at a particular time, in the exercise of reasonable judgment in light of the facts known or that reasonably should be known at the time a decision is made, would be expected to accomplish the desired result in a manner consistent with law, regulation, reliability for an island system, safety, environmental protection, economy and expedition. With respect to the CBRE Facility, Good Engineering and Operating Practices include, but are not limited to, taking reasonable steps to ensure that:

- (i) Adequate materials, resources and supplies, are available to meet the CBRE Facility's needs under normal conditions and reasonably foreseeable abnormal conditions.
- (ii) Sufficient operating personnel are available and are adequately experienced and trained to operate the CBRE Facility properly, efficiently and within manufacturer's guidelines and specifications and are capable of responding to emergency conditions.
- (iii) Preventive, routine and non-routine maintenance and repairs are performed on a basis that ensures reliable long-term and safe operation, and are performed by knowledgeable, trained and experienced personnel utilizing proper equipment, tools, and procedures.
- (iv) Appropriate monitoring and testing is done to ensure equipment is functioning as designed and to provide assurance that equipment will function properly under both normal and reasonably foreseeable abnormal conditions.
- (v) Equipment is operated in a manner safe to workers, the general public and the environment and in accordance with equipment manufacturer's specifications, including, without limitation, defined limitations such as temperature, current, frequency, polarity, synchronization, control system limits, etc.

"Governmental Approvals": All permits, licenses, approvals, certificates, entitlements and other authorizations issued by Governmental Authorities, as well as any agreements with Governmental Authorities, required for the construction, ownership, operation and maintenance of the CBRE Facility and the Company-Owned Interconnection Facilities, and all amendments, modifications, supplements, general conditions and addenda thereto.

"Governmental Authority": Any federal, state, local or municipal governmental body; any governmental, quasi-governmental, regulatory or administrative agency, commission, body or other authority exercising or entitled to exercise any administrative, executive, judicial, legislative, policy, regulatory or taxing authority or power; or any court or governmental tribunal.

"GPR": Shall have the meaning set forth in Section 4.C. (Assurance of Capability of CBRE Facility to Deliver Net Energy Potential and Availability of BESS) of this Contract.

"GPR Performance Metric": Shall be as determined under Attachment C (Required Performance Metrics; Liquidated Damages), Section 2.C. (Determination of GPR Performance Metric) of this Contract.

"Hawai'i Investment Tax Credit": Shall mean a credit against Hawai'i source income for which Subscriber Organization is eligible on the Commercial Operations Date or thereafter because of investment in renewable energy technologies incorporated into the CBRE Facility.

"Hawai'i Non-Refundable Tax Credit": Shall mean any Hawai'i Investment Tax Credit for which the State of Hawai'i is not required to refund any tax credit which exceeds the tax payments due to the State of Hawai'i by the Claiming Entity or to provide a cash rebate in lieu of such credit to the Claiming Entity.

"Hawai'i Production Tax Credit": Shall mean a credit against Hawai'i source income for which Subscriber Organization is eligible on the Commercial Operations Date or thereafter because of the energy produced by the CBRE Facility.

"Hawai'i Refundable Tax Credit": Shall mean any Hawai'i Investment Tax Credit for which the State of Hawai'i is required to refund any tax credit which exceeds the tax payments due to the State of Hawai'i by the Claiming Entity or to provide a cash rebate in lieu of such credit to the Claiming Entity.

"Hawai'i Renewable Energy Tax Credit": The Hawai'i Investment Tax Credit and the Hawai'i Production Tax Credit.

"HERA": The Hawai'i Electricity Reliability Administrator.

"HERA Law": Act 166 (Haw. Leg. 2012), which was passed by the 27th Hawai'i Legislature in the form of S.B. No. 2787, S.D. 2, H.D.2, C.D.1 on May 2, 2012 and signed by the Governor on June 27, 2012. The effective date for the law is July 1, 2012. The HERA Law authorizes (i) the PUC to develop, adopt, and enforce reliability standards and interconnection requirements, (ii) the PUC to contract for the performance of related duties with a party that will serve as the HERA, and (iii) the collection of a Hawai'i electricity reliability surcharge to be collected by Hawai'i's electric utilities and used by the HERA. Reliability standards and interconnection requirements adopted by the PUC pursuant to the HERA Law will apply to any electric utility and any user, owner, or operator of the Hawai'i electric system. The PUC also is provided with the authority to monitor and compel the production of data, files, maps, reports, or any other information concerning any electric utility, any user, owner or operator of the Hawai'i electric system, or other person, business, or entity, considered by the Commission to be necessary for exercising jurisdiction over interconnection to the Hawai'i electric system, or for administering the process for interconnection to the Hawai'i electric system.

"House Power": shall mean the electricity needed to assist in the operation of the CBRE Facility including system performance monitoring and associated communications, except for energy directly required for the local control and safe operation of the PV System and BESS. It also means other electricity used by the CBRE Facility, such as for perimeter lighting, a visitor's center or any other structures or facilities at the CBRE Facility site.

"Independent AF Evaluator": A person empowered, pursuant to Section 2.E (Appointment of Independent AF Evaluator) of Attachment E (Monthly Reporting and Dispute Resolution by Independent AF Evaluator) to resolve disagreements due to failure of the Parties to resolve a Monthly Report Disagreement.

"Initial NEP OEPR Estimate": The NEP OEPR Estimate set forth in or derived from the Initial OEPR, as more fully set forth in Section 2.E (Terms of Engagement) of Attachment D (Calculation and Adjustment of Net Energy Potential) to this Contract.

"Initial NEP Verification Date": The first Day of the calendar month following the fifteenth (15th) calendar month after the Commercial Operations Date.

"Initial OEPR": The OEPR to be prepared pursuant in Section 1.E. (Initial OEPR) of Attachment D (Calculation and Adjustment of Net Energy Potential) to this Contract.

"Interconnection Facilities": The equipment and devices required to permit the CBRE Facility to operate in parallel with, and deliver electric energy to, the Company System and provide reliable and safe operation of, and power quality on, the Company System (in accordance with applicable provisions of the PUC's General Order No. 7, Company tariffs, operational practices, interconnection requirements studies, and planning criteria), such as, but not limited to, transmission and distribution lines, transformers, switches, and circuit breakers.

"Interconnection Requirements Study" or "IRS": A study consisting of a system impact study and a Facility study, performed in accordance with the terms of the IRS Letter Agreement to determine, among other things, (a) the system requirements and equipment requirements to interconnect the CBRE Facility with the Company System, (b) the Performance Standards for the CBRE Facility, and (c) an estimate of interconnection costs and project schedule for interconnection of the CBRE Facility.

"IRS Amendment": Shall have the meaning ascribed to such term in Section 3.C.1 (Interconnection Requirements Study).

"IRS Amendment Deadline": The 75th Day following the date the completed IRS is provided to Subscriber Organization, or such later date as Company and Subscriber Organization may agree to by written agreement.

"IRS Letter Agreement or IRS Letter Agreements": The system impact study and Facility study letter agreements (which may combined into one letter agreement) and any written, signed amendments thereto, between Company and Subscriber Organization that collectively describe the scope, schedule, and payment arrangements for the Interconnection Requirements Study.

"IRS Termination Deadline": The 30th Day following the date the completed IRS is provided to Subscriber Organization, or such later date as Company and Subscriber Organization may agree to by a written agreement.

"Interface Block Diagram": The visual representation of the signals between Subscriber Organization and Company, including but not limited to, Telemetry and Control points, digital fault recorder settings, telecommunications and protection signals.

"kV": Kilovolt.

"kW": Kilowatt. Unless expressly provided otherwise, all kW values stated in this Contract are alternating current values and not direct current values.

"kWh": Kilowatt-hour.

"Land Rights": All easements, rights of way, licenses, leases, surface use agreements and other interests or rights in real estate.

"Laws": All federal, state and local laws, rules, regulations, orders, ordinances, permit conditions and other governmental actions.

"LD Assessment Date": For the last month of each LD Period, the Day following the expiration of the 10-Business Day period provided for Company to submit a Notice of Disagreement pursuant to Section 2.A (Notice of Disagreement With Monthly Report) of Attachment E (Monthly Reporting and Dispute Resolution by Independent AF Evaluator) to this Contract.

"LDT": Shall have the meaning set forth in Attachment C (Required Performance Metrics; Liquidated Damages), Section 6.A. (RTE Test and Liquidated Damages).

"LMI Minimum Threshold": A specific percentage of Contract Capacity committed to by Subscriber Organization in its proposal as the percentage to be represented by Subscriber Allocations for LMI Subscribers. The Minimum LMI Threshold for this Contract is \_\_%. **[Drafting note: The percentage shall be taken from Subscriber Organization's proposal if that proposal included a LMI Minimum Threshold. If there is no LMI Minimum Threshold enter "N/A" in the blank. For dedicated LMI projects, the LMI Minimum Threshold is 100%.]**

"LMI Subscriber": A Subscriber who satisfies the LMI requirements set forth in the CBRE Tariff.

"LD Period": A rolling period of twelve (12) calendar months each. At the end of each calendar month, the LD Period rolls forward to include the next calendar month. The initial "LD Period" shall consist of the 12 full calendar months of the initial Contract Year.

"Losses": Any and all direct, indirect or consequential damages, fines, penalties, deficiencies, losses, liabilities (including settlements and judgments), costs, expenses (including reasonable attorneys' fees and court costs) and disbursements.

"Lowest BESS Capacity Bandwidth": Shall have the meaning set forth in Attachment C (Required Performance Metrics; Liquidated Damages) Section 3. (BESS Capacity Test; Liquidated Damages; Termination Rights).

"Lump Sum Payment": The monthly lump sum as provided in Section 2. (Lump Sum Payment for) of Attachment B to this Contract (Company Payments for Energy, Dispatchability and Availability of BESS).

"Malware": means computer software, code or instructions that: (a) intentionally, and with malice intent by a third party, adversely affect the operation, security or integrity of a computing, telecommunications or other digital operating or processing system or environment, including without limitation, other programs, data, databases, computer libraries and computer and communications equipment, by altering, destroying, disrupting or inhibiting such operation, security or integrity; (b) without functional purpose, self-replicate without manual intervention; (c) purport to perform a useful function but which actually performs either a destructive or harmful function, or perform no useful function other than utilize substantial computer, telecommunications or memory resources with the intent of causing harm; or (d) without authorization collect and/or transmit to third parties any information or data; including such software, code or instructions commonly known as viruses, Trojans, logic bombs, worms, adware and spyware.

"Management Meeting": Shall have the meaning set forth in Section 17.B. (Dispute Resolution).

"Maximum Rated Output": Net maximum output of the BESS in MW, which shall not exceed the Allowed Capacity.

"Measured Performance Ratio" or "MPR": Shall have the meaning set forth in Attachment C (Required Performance Metrics; Liquidated Damages), Section 2.A. (Calculation of Measured Performance Ratio) of this Contract.

"MMS": Meteorological monitoring station.

"Monthly Report": The report of the data (for the calendar month and the LD Period, the MPR Assessment Period and the BESS Measurement Period ending with such calendar month) necessary for the calculation of the Performance Metrics to be provided by Subscriber Organization to Company as set forth in Section 1. (Monthly Report) of Attachment E (Monthly Reporting and Dispute Resolution by Independent AF Evaluator) to this Contract. Without limitation to the generality of the preceding sentence, references to



the Monthly Report for a month that constitutes the last month of a BESS Measurement Period shall be deemed to include the BESS Measurement Period Report for such BESS Measurement Period.

"Monthly Report Disagreement": Any disagreement arising out of the same Monthly Report.

"Monthly Subscription Information": shall mean the information stored within the CBRE Online Portal, as timely entered or changed by the Subscriber Organization via the CBRE Online Portal, setting forth the name, account number and service address each Subscriber holding subscriptions in the CBRE Facility, and the Subscriber Allocation applicable to each such Subscriber's subscription, reflecting each Subscriber's allocable portion of renewable energy produced by the CBRE Facility during a particular Production Month.

"Most Recent Prior NEP Benchmark": In the event a Subsequent OEPR is prepared for an OEPR Period of Record ending on or after the commencement of the fourth (4th) Contract Year, the "Most Recent Prior NEP Benchmark" shall be (i) for the first such Subsequent OEPR, the Second NEP Benchmark that was used to calculate the Lump Sum Payment for the last month of the Second Benchmark Period pursuant to Section 3.B. (Lump Sum Payment During Second Benchmark Period) of Attachment B (Company Payments for Energy, Dispatchability and Availability of BESS) to this Contract and (ii) for all Subsequent OEPRs prepared after the aforementioned first Subsequent OEPR, the NEP OEPR Estimate obtained from the immediately preceding Subsequent OEPR.

"MPR": Shall have the meaning set forth in Attachment C Section 2. of this Contract.

"MPR Assessment Period": Shall mean, for purposes of demonstrating a Measured Performance Ratio, a rolling period of twelve (12) calendar months each. At the end of each calendar month, the MPR Assessment Period rolls forward to include the next calendar month. The initial "MPR Assessment Period" shall consist of the 12 full calendar months of the initial contract year.

"MPR Assessment Period Lump Sum Payment": For each MPR Assessment Period, the monthly Lump Sum Payment for the twelfth month of such MPR Assessment Period after deducting the amounts (if any) payable as liquidated damages under Attachment C Section 1. (PV System Equivalent Availability Factor Performance Metric; Liquidated Damages; Termination Rights) for the same calendar month in question.

"MPR Test": Shall have the meaning set forth in Attachment C (Required Performance Metrics; Liquidated Damages), Section 2.B. (MPR Test) of this Contract.

"MW": Megawatt. Unless expressly provided otherwise, all MW values stated in this Contract are alternating current values and not direct current values.

"MWh": Megawatt-hour.

"NEP IE Estimate": The estimated Net Energy Potential of the CBRE Facility to which the IE Energy Assessment Report assigns a P-Value of 95 for a ten-year period.

"NEP OEPR Estimate": For each OEPR, the estimated Net Energy Potential of the CBRE Facility to which such OEPR assigns a P-Value of 95 for a ten-year period.

"NEP RFP Projection": The Net Energy Potential of the CBRE Facility to which the Subscriber Organization in Subscriber Organization's RFP Proposal assigns a P-Value of 95 for a ten-year period.

"NERC GADS": Shall have the meaning set forth in Section 4.C (Assurance of Capability of CBRE Facility to Deliver Net Energy Potential and Availability of BESS) of this Contract.

"Net Amount": Shall mean, with respect to any Hawai'i Renewable Tax Credit, the amount remaining after deducting any documented and reasonable financial, legal, administrative and other costs and expenses of applying for, pursuing, monetizing and receiving the applicable Hawai'i Renewable Tax Credit, and all

payments to or reserves required by Subscriber Organization's lenders or other financing parties in connection with the application for or receipt of such Hawai'i Renewable Tax Credit.

"Net Energy": The total quantity of electric energy (measured in kilowatt hours) produced by the CBRE Facility over a given time period and delivered to the Point of Interconnection, as measured by the Revenue Meter. "Net Energy" the equivalent of "Actual Output."

"Net Energy Potential": The estimated single number with a P-Value of 95 for the annual Net Energy that could be produced by the CBRE Facility based on the estimated long-term monthly and annual total of such production over a ten-year period. The Net Energy Potential is subject to adjustment as provided in Attachment D (Calculation and Adjustment of Net Energy Potential) to this Contract, but in no circumstances shall the Net Energy Potential exceed the NEP RFP Projection.

"Notice of Disagreement": Shall have the meaning set forth in Section 2.A. (Notice of Disagreement with Monthly Report) of Attachment E (Monthly Reporting and Dispute Resolution by Independent AF Evaluator) to this Contract.

"OEPR": An Operational Energy Production Report, including the Initial OEPR and each Subsequent OEPR.

"OEPR Conference": Shall have the meaning set forth in Section 2.G. (Review of the First OEPR Evaluator Report) of this Attachment D (Calculation and Adjustment of Net Energy Potential) to this Contract.

"OEPR Consultants List": The engineering firms listed in Section 2.J. (Acceptable Persons and Entities) of Attachment D (Calculation and Adjustment of Net Energy Potential) to this Contract, as such list may be expanded or contracted by the Parties as provided in Section 2.B. (Eligibility for Appointment as OEPR Evaluator) of said Attachment D (Calculation and Adjustment of Net Energy Potential) or Section 2.F. (Eligibility for Appointment as Independent AF Evaluator) of Attachment E (Monthly Reporting and Dispute Resolution by Independent AF Evaluator) to this Contract.

"OEPR Evaluator": Shall have the meaning set forth in Section 2.A. (Selection of OEPR Evaluator) of Attachment D (Calculation and Adjustment of Net Energy Potential) of this Contract.

"OEPR Period of Record": For each OEPR, the twelve-month period preceding the Applicable NEP Verification Date for such OEPR.

"Parties": Subscriber Organization and Company, collectively.

"Party": Each of Subscriber Organization or Company.

"Performance Metrics": Each of the applicable PV System Equivalent Availability Factor Performance Metric, the GPR Performance Metric, the BESS Capacity Performance Metric, the BESS EAF Performance Metric, the BESS EFOF Performance Metric, and the RTE Performance Metric.

"Performance Metrics LDs": Shall have the meaning set forth in Attachment C (Required Performance Metrics; Liquidated Damages) Section 8. (Payment of Liquidated Damages for Failure to Achieve Performance Metrics; Limitation on Liquidated Damage).

"Performance Standards": The various performance standards for the operation of the Facility and the delivery of electric energy from the Facility to Company specified in Section 3. (Performance Standards) of Attachment F (Facility Owned by Subscriber Organization), as such standards may be revised from time to time pursuant to this Contract.

"Point of Interconnection": The point of delivery of electric energy and/or capacity supplied by Subscriber Organization to Company, where the CBRE Facility owned by the Subscriber Organization interconnects with the Company System. The Subscriber Organization shall own and maintain the facilities from the

CBRE Facility to the Point of Interconnection, excluding any Company-Owned Interconnection Facilities located on the Site. The Company shall own and maintain the facilities from the Point of Interconnection to the Company's system. The Point of Interconnection will be identified in the IRS and set forth on the Single-Line Drawing and Interface Block Diagram in Attachment F, Exhibit F-5 (Single-Line Drawing and Interface Block Diagram).

"Prime Rate" shall mean the current "U.S. Prime Rate" of interest, as published from time to time by The Wall Street Journal in the "Money Rates" section of its Western Edition Newspaper. The Prime Rate shall change without notice with each change in the U.S. Prime Rate reported by The Wall Street Journal, as of the date such change is reported.

"Project": The Facility as described in Attachment F (Facility Owned by Subscriber Organization).

"Project Documents": This Contract, any ground lease or other agreement or instrument in respect of the Site and/or the Land Rights, all construction contracts to which Subscriber Organization is or becomes a party thereto, operation and maintenance agreements, and all other agreements, documents and instruments to which Subscriber Organization is or becomes a party thereto in respect of the Facility, other than the Financing Documents, as the same may be modified or amended from time to time in accordance with the terms thereof.

"Project Specific Addendum": The Project Specific Addendum for the CBRE Facility dated as of the date of the Mid-Tier Contract for the CBRE Facility, including any and all attachments, exhibits and related documents attached to such Project Specific Addendum.

"PUC" or "Commission": Shall have the meaning set forth in the Recitals.

"PUC's Standards": Standards for Small Power Production and Cogeneration in the State of Hawai'i, issued by the Public Utilities Commission of the State of Hawai'i, Chapter 74 of Title 6, Hawai'i Administrative Rules, currently in effect and as may be amended from time to time.

"PV System": The photovoltaic solar electric generating project as more particularly described in Exhibit F-1 to Attachment F to the Contract (Description of Generation and Battery Storage Facilities).

"PV System Equivalent Availability Factor Performance Metric": Shall have the meaning set forth in Attachment C, (Required Performance Metrics; Liquidated Damages).

"Renewable Portfolio Standards" or "RPS": The Hawai'i law that mandates that Company and its subsidiaries generate or purchase certain amounts of their net electricity sales over time from qualified renewable resources. The RPS requirements in Hawai'i are currently codified as Hawai'i Revised Statutes (HRS) 269-91 through 269-95.

"Renewable Resource Baseline": The estimated renewable resource potential of the Site for a typical meteorological year. For avoidance of doubt, the purpose of this term is to provide a short-hand characterization of the nature of the renewable resource risk assumed by the Subscriber Organization under this Contract in making its Site selection.

"Renewable Resource Variability": The variations, above and below the Renewable Resource Baseline, of the renewable resource actually available at the Site on a moment-to-moment basis. For avoidance of doubt, the purpose of this term is to provide a short-hand characterization of the nature of the renewable resource risk assumed by the Company under this Contract in agreeing to make fixed payments in an amount calculated on the basis of the CBRE Facility's capability to deliver the Net Energy Potential regardless of whether or not sufficient renewable resource is in fact available at any particular moment.

"Required Model" or "Required Models": Shall have the meaning set forth in Section 6.A. (Subscriber Organization's Obligation to Provide Models) of Attachment F (Facility Owned by Subscriber Organization) of this Contract.

"Residential Subscriber": A subscriber served by Company under any of the following Company rate schedules: Schedule R, TOU-R, TOU-RI, TOU-EV or any other residential option.

"Revenue Meter": The revenue meter packaging, revenue metering PTs and CTs, and secondary wiring, which will record the renewable energy produced by the CBRE Facility and dispatched to the Company at the Point of Interconnection.

"RFP": Company's Request for Proposals issued on [\_\_\_\_\_], 202\_.

"RFP Proposal": The documents and submissions comprising Subscriber Organization's proposal selected in response to the RFP.

"RTE Performance Metric": Shall have the meaning set forth in Attachment H (BESS Requirements), Section 1 (BESS Tests) to this Contract and as referenced in Attachment C (Required Performance Metrics; Liquidated Damages), Section 6. (Bess Round Trip Efficiency Test; Liquidated Damages; Termination Rights) to this Contract.

"RTE Ratio": Shall have the meaning set forth in in Section 1 (BESS Tests) of Attachment H (BESS Requirements) to this Contract.

"SCADA" or "Supervisory Control and Data Acquisition": The Company system that provides remote control and monitoring of Company's transmission and sub-transmission systems and enables Company to perform real-time control of equipment in the field and to monitor the conditions and status of the Company System.

"Second Benchmark Period": The period commencing on the first Day of the calendar month following the month during which an OEPR Evaluator issues the Initial OEPR and ending with the expiration of the third (3rd) Contract Year. For avoidance of doubt, the effect of the foregoing definition is that the Second Benchmark Period will follow immediately upon the expiration of the First Benchmark Period.

"Second NEP Benchmark": For each calendar month during the Second Benchmark Period, the estimate of Net Energy Potential to be used during such calendar month to calculate the Lump Sum Payment pursuant to Section 3. (Calculation of Lump Sum Payment) of Attachment B (Company Payments for Energy, Dispatchability and Availability of BESS) to this Contract. For avoidance of doubt, the Second NEP Benchmark may vary during the Second Benchmark Period as and to the extent provided in Section 3.B. (Lump Sum Payment During Second Benchmark Period) of Attachment B (Company Payments for Energy, Dispatchability and Availability of BESS) to this Contract.

"Second OEPR": Shall have the meaning set forth in Section 2.G. (Review of the First OEPR Evaluator Report) of Attachment D (Calculation and Adjustment of Net Energy Potential) to this Contract.

"Second OEPR Evaluator": Shall have the meaning set forth in Section 2.G. (Review of the First OEPR Evaluator Report) of Attachment D (Calculation and Adjustment of Net Energy Potential) to this Contract.

"Site": The parcel of real property on which the CBRE Facility will be constructed and located, together with any Land Rights reasonably necessary for the construction, ownership, operation and maintenance of the CBRE Facility. The Site is identified in Attachment F (Facility Owned by Subscriber Organization) to this Contract.

"Source Code": Shall mean the human readable source code of the Required Models which: (i) will be narrated documentation related to the compilation, linking, packaging and platform requirements and any other materials or software sufficient to enable a reasonably skilled programmer to build, modify and use

the code within a commercially reasonable period of time for the purposes of a Source Code Authorized Use; and (ii) can reasonably be compiled by a computer for execution.

"Source Code Authorized Use": Shall have the meaning set forth in Section 6.B.1.e (Authorized Use) of Attachment F (Facility Owned by Subscriber Organization) of this Contract.

"Source Code Escrow": Shall mean the escrow established with the Source Code Escrow Agent under the terms of the Source Code Escrow Agreement under which Source Code shall be confidentially deposited by a Source Code Owner for safekeeping and, upon the satisfaction of certain conditions, release to the Company.

"Source Code Escrow Agent": Shall mean Iron Mountain Intellectual Property Management, Inc. or such other similar escrow agent approved by Company.

"Source Code Escrow Agreement": Shall mean a multi-party escrow agreement between Company, Source Code Escrow Agent and any and all Source Code Owners depositing Source Code into the Source Code Escrow which, among other matters, names Company as beneficiary thereunder, and is otherwise acceptable in form and substance to Company.

"Source Code Owner": Shall mean the developer and/or owner of the Required Models utilizing Source Code authorized to deposit the Source Code with the Source Code Escrow Agent upon the terms of the Source Code Escrow Agreement.

"SOX 404": Shall have the meaning set forth in Section 8.F. (Financial Compliance) of the Contract.

"State of Charge": Energy in the BESS stated as a percentage of BESS Contract Capacity.

"Submission Notice": Shall have the meaning set forth in Section 2.E. (Appointment of Independent AF Evaluator) of Attachment E (Monthly Reporting and Dispute Resolution by Independent AF Evaluator) to this Contract.

"Study": Shall have the meaning set forth in Section 4.E. of Attachment F (Facility Owned by Subscriber Organization) to this Contract.

"Submission Notice": Shall have the meaning set forth in Section 2.E. (Appointment of Independent AF Evaluator) of Attachment E (Monthly Reporting and Dispute Resolution by Independent AF Evaluator) to this Contract.

"Subscriber" means a retail customer of the Company who owns one or more subscriptions of a CBRE Facility interconnected with the Company.

"Subscriber Agency Agreement and Consent Form" means the consent agreement between Subscriber Organization and Subscriber that authorizes disclosure of certain account information and energy usage data, the form of which is included in the CBRE Tariff.

"Subscriber Agreement" means the written Agreement between Subscriber Organization and its Subscribers required to contain standard information and provisions to ensure transparency and proper consumer protection in accordance with the CBRE Tariff and applicable law.

"Subscriber Allocation" shall mean, for each Subscriber, such Subscriber's percentage interest in the total nameplate capacity of the PV System, reflecting each Subscriber's allocable portion of renewable energy available for dispatch by the CBRE Facility in a particular calendar month.

"Subscriber's Confidential Account Information" consists of the Subscriber's name, account number, service address, telephone number, email address, web site URL, information on Subscriber participation in other distributed generation serving the premises of the Subscriber, and Subscriber specific Bill Credit(s).

"Subscriber Organization": Shall have the meaning set forth in the preamble to this Contract.

"Subscriber Organization-Attributable Non-Generation": Time periods during which the inverter in question (or the CBRE Facility as a whole) is not dispatched or is derated or shutdown (or the CBRE Facility is disconnected) because of any of the following:

- (i) The CBRE Facility's failure to comply with any of the Performance Standards, Good Engineering and Operating Practices, Governmental Approvals, applicable Laws or Subscriber Organization's other obligations under this Contract;
- (ii) Subscriber Organization-Attributable System Conditions;
- (iii) Conditions at or on either side of the Point of Interconnection arising from the acts or omissions of Subscriber Organization or any of its affiliates, employees, agents, contractors, vendors, materialmen, independent contractors or suppliers of Subscriber Organization, acting in such capacity for the benefit of Subscriber Organization ("Subscriber Organization Representatives"), unless such acts or omissions are themselves excused by reasons of Force Majeure pursuant to Section 27. (Force Majeure) of the Contract;
- (iv) A disconnection initiated by the Company pursuant to Section 12. (Personnel and System Safety) of this Contract that is caused by Subscriber Organization or any Subscriber Organization Representatives;
- (v) The Company has reasonably decided that it is inadvisable for such generating equipment, inverter, or BESS, (or the CBRE Facility as a whole) to continue normal operations without a further Control System Acceptance Test as provided in Attachment F (Facility Owned by Subscriber Organization) to the Contract;
- (vi) The CBRE Facility is deemed to be in Subscriber Organization-Attributable Non-Generation status under any of the following sections of Attachment F: Section 1.G.6., Section 1.J. (Demonstration of Facility) or Section 4.E.;
- (vii) The CBRE Facility is shutdown at the direction of Company, and such shutdown is caused by Subscriber Organization or any Subscriber Organization Representatives or the lack of reliable real time data; and
- (viii) The CBRE Facility fails to comply with Company Dispatch or other outage or duration as provided in Section 5.C. (Company Rights of Dispatch)

Each time period of Subscriber Organization-Attributable Non-Generation shall constitute an Outage or Deration, as applicable.

"Subscriber Organization-Attributable System Conditions": Conditions on the Company System:

- (i) that result from either (a) the CBRE Facility's generation and delivery of electric power to the Company System or (b) any condition arising from the acts or omissions of Subscriber Organization or any Subscriber Organization Representative, unless such acts or omissions are themselves excused by reasons of Force Majeure pursuant to Section 27. (Force Majeure) of the Contract; and
- (ii) caused by or attributable to the CBRE Facility or Subscriber Organization or any Subscriber Organization Representatives that Company reasonably determines to either (a) be inconsistent with Good Engineering and Operating Practices on the Company System or (b) jeopardize the safety, reliability or stability of the Company System.

For avoidance of doubt, the Company's inability to dispatch the CBRE Facility due to the existence of Excess Energy Conditions on the Company System shall not constitute Subscriber Organization-Attributable System Conditions.

"Subscriber Organization-Owned Interconnection Facilities": The Interconnection Facilities constructed and owned by Subscriber Organization.

"Subscriber's Confidential Account Information" consists of the Subscriber's name, account number, service address, telephone number, email address, web site URL, information on Subscriber participation in other distributed generation serving the premises of the Subscriber, and Subscriber specific Bill Credit(s).

"Subscriber's Usage Data" refers to data collected from the utility Subscriber meters that reflects the quantity, quality, or timing of electric usage or renewable energy production attributable to the Subscriber for the service address and account number identified for participation in the CBRE Facility.

"Subsequent NEP OEPR Estimate": For each Subsequent OEPR, the NEP OEPR Estimate derived from such Subsequent OEPR.

"Subsequent OEPR": Any OEPR prepared pursuant to Section 1.F. (Subsequent OEPRs) of Attachment D (Calculation and Adjustment of Net Energy Potential) to this Contract.

"Subsequent NEP OEPR Estimate": For each Subsequent OEPR, the NEP OEPR Estimate derived from such Subsequent OEPR.

"Subsequent OEPR": Any OEPR prepared pursuant to Section 1.F. (Subsequent OEPRs) of Attachment D (Calculation and Adjustment of Net Energy Potential) to this Contract.

"Substantial Progress": means that on or before the last Day of the 18-month period (including day-for-day extensions) to achieve the Commercial Operations Date, the Subscriber Organization has achieved all of the following: (1) installed one-hundred percent (100%) of the PV System foundation (including pier, helical screw, ballasts, or similar) to enable mounting of the nameplate capacity as collectively set forth in Attachment F to this Contract; (2) built, or otherwise has in place, a permanent drivable (road) surface on the parcel or parcels of land associated with the CBRE Facility so that (i) Company on a 24 hour a day, seven days a week, basis can access its equipment, including but not limited to lines, poles, transformers, billing meters, underground facilities and other facilities, but excluding production meters; and (ii) the drivable road surface is reasonably sufficient to support operation and maintenance vehicles; and (3) built, or otherwise has in place, a permanent fence surrounding the entirety of the CBRE Facility location.

"Telemetry and Control": The interface between Company's EMS and the physical equipment at the Facility.

"Term": means the term of this Contract and shall begin when this Contract is signed by the Parties and end twenty (20) years after the Commercial Operations Date unless otherwise provided for in this Contract.

"Termination Damages": Liquidated damages calculated in accordance with Section 15. (Damages in the Event of Termination by Company) of this Contract.

"Third OEPR": Shall have the meaning set forth in Section 2.H. (Review of the Second OEPR Evaluator Report) of Attachment D (Calculation and Adjustment of Net Energy Potential) to this Contract.

"Third OEPR Evaluator": Shall have the meaning set forth in Section 2.H. (Review of the Second OEPR Evaluator Report) of Attachment D (Calculation and Adjustment of Net Energy Potential) to this Contract.

"Third Party": Any person or entity other than Company or Subscriber Organization, and includes, but is not limited to, any subsidiary or affiliate of Subscriber Organization.

"Tier 1 Bandwidth": The Tier 1 bandwidth set forth in Attachment C (Required Performance Metrics; Liquidated Damages), Section 2.D. (GPR Performance Metric and Liquidated Damages) of this Contract.

"Tier 2 Bandwidth": The Tier 2 bandwidth set forth in Attachment C (Required Performance Metrics; Liquidated Damages), Section 2.D. (GPR Performance Metric and Liquidated Damages) of this Contract.

"Total Estimated Interconnection Costs": Shall have the meaning set forth in Section 11.E.3 of this Contract and as further described in Attachment G (Company-Owned Interconnection Facilities).

"Transfer Date": The date, prior to the Commercial Operations Date, upon which Subscriber Organization transfer to Company all right, title and interest in and to Company-Owned Interconnection Facilities to the extent, if any, that such facilities were constructed by Subscriber Organization and/or its contractors.

"Unit Price": \$ \_\_\_ per \_\_\_ MWh of Net Energy Potential annually. [TO BE CALCULATED FROM RESPONSE TO RFP.]

"Unsubscribed RDG": That portion of the Contract Capacity during a particular calendar month that is not associated with any Subscriber and is therefore not included in any Subscriber Allocation for such month. The Unsubscribed RDG for a particular calendar month is the balance of the Contract Capacity remaining after subtracting the Contract Capacity represented by the total of the Subscriber Allocations for such month. For purposes of allocating to Subscriber Organization a portion of the monthly Lump Sum Payment for a particular month: (i) the Unsubscribed RDG for such month is associated with the Subscriber Organization; and (ii) the portion of the monthly Lump Sum Payment for such month that is payable to Subscriber Organization for such Unsubscribed RDG is the balance of such monthly Lump Sum Payment remaining after subtracting that portion of the monthly Lump Sum Payment that is payable in the form of Bill Credits or any payment reduction attributable to Subscriber Organization's failure to meet any of the CBRE Subscriber Thresholds.

--END--



**ATTACHMENT B**

**COMPANY PAYMENTS FOR ENERGY, DISPATCHABILITY AND AVAILABILITY OF BESS**

1. **PRICE FOR PURCHASE OF ELECTRIC ENERGY.** Commencing on the Commercial Operations Date, Company shall pay Subscriber Organization for electric energy produced by the Facility and delivered to the Point of Interconnection in response to Company Dispatch in accordance with this Contract at the rate of \$0.00/MWh. Company shall also not pay for electric energy delivered to the Point of Interconnection from the BESS.
2. **LUMP SUM PAYMENT.** Commencing on the Commercial Operations Date, Company shall pay for (i) the Actual Output produced by the Facility and delivered to the Point of Interconnection in response to Company Dispatch of the Facility; (ii) the availability of the Facility's Net Energy Potential for Company Dispatch in accordance with this Contract, and (iii) the availability of the BESS, a monthly Lump Sum Payment as calculated and adjusted as set forth in Section 3. (Calculation of Lump Sum Payment), below. The monthly Lump Sum Payment shall be calculated and adjusted to reflect changes in the estimate of the Facility's Net Energy Potential as such estimate is revised from time to time as more fully set forth in Attachment D (Calculation and Adjustment of Net Energy Potential) to this Contract.
3. **CALCULATION OF LUMP SUM PAYMENT.** The monthly Lump Sum Payment shall be calculated and adjusted as follows:
  - A. **Lump Sum Payment During First Benchmark Period.** During the First Benchmark Period, the monthly Lump Sum Payment shall be equal to one-twelfth (1/12<sup>th</sup>) of the product (rounded to the nearest cent) obtained by multiplying the Unit Price by the First NEP Benchmark.
  - B. **Lump Sum Payment During Second Benchmark Period.**
    1. One purpose of the Second Benchmark Period is to provide the Subscriber Organization, in the event that the Initial NEP OEPR Estimate is less than NEP RFP Projection, with a limited period during which Subscriber Organization will have an opportunity, by having a Subsequent OEPR prepared pursuant to Section 1.F.2. (Voluntary Subsequent OEPR) of Attachment D (Calculation Adjustment of Net Energy Potential) to this Contract, to obtain an adjustment to the NEP OEPR Estimate used to calculate the Lump Sum Payment, subject to (i) the cap on any upward adjustment imposed by the limitation that the estimate of Net Energy Potential that is used to calculate the Lump Sum Payment shall not exceed the NEP RFP Projection and (ii) the risk that any Subsequent OEPR might result in a downward adjustment to the NEP OEPR Estimate used to calculate the Lump Sum Payment. Accordingly, for each calendar month during the Second Benchmark Period, the monthly Lump Sum Payment shall be equal to one-twelfth (1/12<sup>th</sup>) of the product (rounded to the nearest cent) obtained by multiplying the Unit Price by the lesser of (w) the NEP RFP Projection or (x) the NEP OEPR Estimate of the OEPR that is most recent as of the first Day of such calendar month. For avoidance of doubt:
      - a. On the first Day of the Second Benchmark Period, the most recent OEPR will be the Initial OEPR
      - b. If no Subsequent OEPR is issued under Section 1.F. (Subsequent OEPRs) of Attachment D (Calculation and Adjustment of Net Energy Potential) to this Contract for an OEPR Period of Record ending prior to the end of the third (3<sup>rd</sup>) Contract Year, the "most recent OEPR" during the entirety of the Second Benchmark Period will be the Initial OEPR;
      - c. If any Subsequent OEPR is prepared for an OEPR Period of Record ending prior to the commencement of the fourth (4<sup>th</sup>) Contract Year, the monthly Lump Sum Payment shall, for the period commencing on the first Day of the calendar month following the month

during which an OEPR Evaluator issues such Subsequent OEPR, be equal to one-twelfth (1/12<sup>th</sup>) of the product (rounded to the nearest cent) obtained by multiplying the Unit Price by the lesser of (w) the NEP OEPR Estimate obtained from such Subsequent OEPR or (x) the NEP RFP Projection. The monthly Lump Sum Payment calculated as aforesaid shall remain in effect through the first to occur of (y) the end of the Term or (z) the end of the calendar month during which an OEPR Evaluator issues the next Subsequent OEPR (if any) that is required or permitted under Section 2, (Preparation of OEPR) of Attachment D (Calculation and Adjustment of Net Energy Potential) to this Contract.

C. Lump Sum Payment Following Second Benchmark Period.

1. As of the first Day of the fourth (4<sup>th</sup>) Contract Year, the estimate of Net Energy Potential that was used to calculate the Lump Sum Payment for the last calendar month of the Second Benchmark Period shall continue in effect as the estimate of Net Energy Potential that is used to calculate the Lump Sum Payment until the end of the calendar month during which an OEPR Evaluator issues the first Subsequent OEPR for an OEPR Period of Record ending on or after the commencement of the fourth (4<sup>th</sup>) Contract Year and, effective at the end of such calendar month, the Second NEP Benchmark that was in effect immediately prior to the issuance of such Subsequent OEPR shall constitute the "Most Recent Prior NEP Benchmark" under clause (i) of the definition of that term set forth in this Contract. For avoidance of doubt, if no Subsequent OEPR is issued for an OEPR Period of Record ending on or after the commencement of the fourth (4<sup>th</sup>) Contract Year, the Second NEP Benchmark that was used to calculate the Lump Sum Payment for the last calendar month of the Second Benchmark Period shall continue in effect for the balance of the Term as the estimate of Net Energy Potential that is used to calculate the Lump Sum Payment.
2. In order to facilitate planning for the Company System, no increase in Net Energy Potential (and hence in the monthly Lump Sum Payment) shall be permitted under this Contract as a consequence of any Subsequent OEPR that is prepared for an OEPR Period of Record ending on or after the expiration of the Second Benchmark Period. Accordingly, if any such Subsequent OEPR is prepared, the monthly Lump Sum Payment shall, for the period commencing on the first Day of the calendar month following the month during which an OEPR Evaluator issues such Subsequent OEPR, be equal to one-twelfth (1/12<sup>th</sup>) of the product (rounded to the nearest cent) obtained by multiplying the Unit Price by the lesser of (w) the NEP OEPR Estimate obtained from such Subsequent OEPR or (x) the Most Recent Prior NEP Benchmark. The monthly Lump Sum Payment calculated as aforesaid shall remain in effect through the first to occur of (y) the end of the Term or (z) the end of the calendar month during which an OEPR Evaluator issues the next following Subsequent OEPR (if any) that is required or permitted under Section 1.F.3 (Subsequent OEPRs) of Attachment D (Calculation and Adjustment of Net Energy Potential) to this Contract. If any such next following Subsequent OEPR is issued, the monthly Lump Sum Payment shall, for the period commencing on the first Day of the calendar month following the calendar month during which an OEPR Evaluator issues such Subsequent OEPR, be re-calculated and adjusted as provided in this and shall continue in effect for the period provided in the preceding sentence.

D. Lump Sum Pro-Rata Adjustments.

1. Under the Company's previous forms of as-available power purchase agreements for renewable energy, the independent power producer was compensated for the production and delivery of electrical energy and assumed the risk of non-payment for events such as Force Majeure that prevented such production and delivery. Although under this Contract most or all of Subscriber Organization's compensation will be in the form of a Lump Sum Payment rather than for the

- production and delivery of electrical energy, it is not the intent of the Parties that Subscriber Organization should be entitled to unrestricted compensation in circumstances in which an independent power producer would not have been able to earn compensation under the Company's prior form of power purchase agreements (i.e., if the Facility or any portion thereof is unable to produce and deliver electric energy). Although the liquidated damages that are payable if the PV System Equivalent Availability Factor fails to satisfy the PV System Equivalent Availability Factor Performance Metric address this issue in certain of the circumstances when the PV System or a portion thereof is unable to generate electric energy, the PV System Equivalent Availability Factor does not account for events of Force Majeure because months containing such events are excluded from the PV System Equivalent Availability Factor calculation under Section 1.A. (Calculation of the PV System Equivalent Availability Factor) of Attachment C (Required Performance Metrics; Liquidated Damages) to this Contract. Similarly, in the case of the BESS, although the liquidated damages that are payable if the BESS Annual Equivalent Availability Factor fails to satisfy the BESS EAF Performance Metric addresses this issue in certain of the circumstances when the BESS or a portion thereof is unable to respond to Company Dispatch, the BESS Annual Equivalent Availability Factor does not account for events of Force Majeure because months containing such events are excluded from the calculation under Section 2 (BESS Annual Equivalent Availability Factor) of Attachment H (BESS Requirements) of this Contract.
2. Accordingly, and without limitation to the generality of the foregoing provisions of this Section 3. (Calculation of Lump Sum Payment) of this Attachment B (Company Payments for Energy, Dispatchability and Availability of BESS), the monthly Lump Sum Payment shall be adjusted downward pro rata for each hour or portion thereof during the calendar month in question that the CBRE Facility or a portion thereof was not available to respond to Company Dispatch because of a Force Majeure condition (i) affecting the Facility or any portion thereof or (ii) that otherwise delays or prevents the Subscriber Organization from making the CBRE Facility or any portion thereof generate energy or be available for Company Dispatch.
  3. In the case of a BESS Force Majeure, such downward adjustment in the Lump Sum Payment shall be limited to the BESS Allocated Portion of the Lump Sum Payment. Further, during any periods in which there is a Force Majeure affecting both the PV System and the BESS, the Lump Sum Payment shall only be adjusted for the effect of the Force Majeure on the PV System.
  4. The hours the Facility is affected by a Force Majeure are converted to equivalent full outage hours by multiplying the actual duration of the event (hours) by (i) the size of the reduction in MWs or number of devices, divided by (ii) the Contract Capacity if the size of the reduction is in MWs or the total number of devices in the affected system if the size of the reduction is a device count. These equivalent hour(s) are then summed. The summation of equivalent full outage hours is then divided by the months total period hours (number of days in the month x 24hrs/day) to determine the pro-rated factor the Lump Sum Payment will be adjusted by.

EXAMPLE 1: if the PV System has ten inverter(s) and, during the month of May (which has 31 calendar days or 744 period hours), one inverter is not available to respond to Company Dispatch for a period of 360 hours due to a Force Majeure condition as aforesaid, the monetary amount of the resulting downward adjustment to the monthly Lump Sum Payment for the month of May would be calculated as follows:

$$\text{Monetary Amount of Downward Adjustment} = (\text{MLSP} \times 1/10) \times 360/744$$

where:

**MLSP** = The monthly Lump Sum Payment that would be payable for such month but for the downward adjustment.

EXAMPLE 2: if a Facility BESS System has forty inverters and, during the month of June (which has 720 period hours), one BESS module is not available to respond to Company Dispatch for a period of 240 hours due to a Force Majeure condition as aforesaid, the monetary amount of the resulting downward adjustment to the monthly Lump Sum Payment for the month of June would be calculated as follows:

$$\text{Monetary Amount of Downward Adjustment} = (\text{BLSP} \times 1/40) \times 240/720$$

where:

**BLSP** = The BESS Allocated Portion of the Lump Sum Payment that would be payable for such month but for the downward adjustment.

Note: The foregoing monetary amount of downward adjustments shall be rounded to the nearest cent.

**4. UPDATING MONTHLY SUBSCRIBER INFORMATION USED TO CALCULATE BILL CREDITS AND OTHER MATTERS.**

- A. No later than the last Day of each calendar month, the Subscriber Organization shall provide to the Company any and all changes to the Monthly Subscription Information to be used for such calendar month by entering new or updating previously-entered data through the CBRE Online Portal. Such data to be entered or changed by the Subscriber Organization shall include additions, deletions or changes to the listing of Subscribers, including any changes occurring by said last Day of such calendar month to the Subscriber's account number and service address attributable to each subscription and the Subscriber Allocation for each subscription.
- B. For each calendar month, the purchase or transfer of all or any portion of a Subscriber's Allocation occurring on or before the 20<sup>th</sup> Day of such calendar month of which the Company is notified, as provided for in the preceding paragraph, shall have retroactive effect as of the first Day of such calendar month; the purchase or transfer of all or any portion of a Subscriber's Allocation occurring on or after the 21<sup>st</sup> Day of such calendar month, but prior to the first Day of the following calendar month, shall have effect as of the first Day of such following calendar month. The following shall be recalculated as of the last Day of each calendar month to account for the effectiveness of such purchases and transfers as aforesaid: (i) Unsubscribed RDG; (ii) the percentage of the Contract Capacity represented by the Subscriber Allocations for all Residential Subscribers; (iii) the number of individual Subscribers; and (iv) the percentage of Contract Capacity represented by all LMI Subscribers.

**5. PAYMENT TO SUBSCRIBER ORGANIZATION; PAYMENT REDUCTIONS-LIQUIDATED DAMAGES FOR FAILURE TO ACHIEVE CBRE SUBSCRIBER THRESHOLDS.**

The dollar amount payable to Subscriber Organization for the Unsubscribed RDG for a particular calendar month shall be as follows:

- A. The balance of the monthly Lump Sum Payment remaining after deducting the total dollar value of the Bill Credits for that month.

- B. Beginning with the seventh calendar month following the Commercial Operations Date, the Subscriber Organization shall pay, and Company shall accept, payment reductions (from Subscriber Organization's payment for Unsubscribed RDG) or liquidated damages for failure of the Subscriber Organization to achieve, during the calendar month in question, any one or more of the applicable CBRE Subscriber Thresholds. The amount of such payment reductions-liquidated damages shall be determined as set forth in the CBRE Tariff. For purposes of this Section 5 (Payment to Subscriber Organization; Payment Reductions-Liquidated Damages for Failure to Achieve CBRE Subscriber Thresholds) of this Attachment B (Company Payments for Energy, Dispatchability and Availability of BESS), a provision in the CBRE Tariff that provides for a reduction in the amount to be paid to the Subscriber Organization for Unsubscribed RDG shall be deemed to provide for liquidated damages in the event that Subscriber Organization's payment for Unsubscribed RDG is insufficient to cover such payment reduction, which liquidated damages shall be in the amount of such insufficiency. The Company shall have the right to set-off liquidated damages for failure to achieve one or more of the CBRE Subscriber Thresholds from the amounts to be paid to the Subscriber Organization or to draw such liquidated damages from the Operating Period Security.
6. **TEST ENERGY.** Company shall use reasonable efforts to accept test energy that is delivered as part of the normal testing for generators (such as energy delivered to Company during the Control System Acceptance Test but not during the Acceptance Test), provided Subscriber Organization shall use reasonable efforts to coordinate such normal testing with Company so as to minimize adverse impacts on the Company System and operations. Company shall not compensate Subscribers or Subscriber Organization for test energy.
7. **TAX CREDIT PASS THROUGH.** Company acknowledges and agrees that the Federal Refundable Tax Credit and Federal Non-Refundable Tax Credit shall inure to the benefit of the Claiming Entity; provided, however, that Subscriber Organization acknowledges and expressly agrees that the Federal Refundable Tax Credit and Federal Non-Refundable Tax Credit, with regard to Subscriber Organization's Facility, have been calculated into the Contract Pricing based on the maximization of such credits. In the event that Subscriber Organization's Facility does not gain the benefit of the Federal Refundable Tax Credit and/or the Federal Non-Refundable Tax Credit, Subscriber Organization expressly acknowledges and agrees that it shall not seek to amend the Contract Pricing.
- A. Because the Hawai'i tax treatment that will apply to renewable energy technologies on the Commercial Operations Date is uncertain, the parties acknowledge that the Contract Pricing was set assuming Subscriber Organization will not be eligible for any Hawai'i Renewable Energy Tax Credit. The intent of this Section 7. (Tax Credit Pass Through) is to entitle Company, for the benefit of its customers, to a payment equal to 100% of the maximum Hawai'i Renewable Energy Tax Credit for which Subscriber Organization is eligible with respect to the Facility and receives during the Term, as more fully set forth in this Section 7. (Tax Credit Pass Through).
- B. If, as of the Commercial Operations Date, or, if not available at the Commercial Operations Date, at any subsequent time during the Term, a Hawai'i Refundable Tax Credit is reasonably available to Subscriber Organization or its affiliates with respect to the Facility, the following shall apply:
1. Subscriber Organization or Subscriber Organization's affiliate will apply for such Hawai'i Refundable Tax Credit, it being understood and agreed that if Subscriber Organization applies for a Hawai'i Refundable Tax Credit as of the Commercial Operations Date, it shall have fulfilled its obligations hereunder to apply for the Hawai'i Refundable Tax Credit;
  2. Subscriber Organization shall make a payment to Company in an amount equal to one hundred percent (100%) of the Net Amount of such Hawai'i Refundable Tax Credit within thirty (30) Days after funds are received from the Hawai'i Department of Taxation;

3. Upon application for the Hawai'i Refundable Tax Credit, an officer of Subscriber Organization will deliver to Company a notice (A) describing Subscriber Organization's efforts to apply for and obtain the Hawai'i Refundable Tax Credit, (B) confirming that Subscriber Organization has applied for the Hawai'i Refundable Tax Credit, and (C) certifying that Subscriber Organization has used commercially reasonable efforts to apply for and obtain the maximum reasonably available Hawai'i Refundable Tax Credit as provided in this Section 7. (Tax Credit Pass Through);
  4. Upon receipt of any funds from the Hawai'i Department of Taxation for the Hawai'i Refundable Tax Credit, an officer of Subscriber Organization or an affiliate of Subscriber Organization, if applicable, will deliver a notice to Company certifying (A) the amount of funds received, (B) and the amount of payment that will be made to Company, net of any documented and reasonable financial, legal, administrative, and other costs required to claim and transfer such funds to Subscriber Organization, as supported by the officer's certificate as to the amount of such costs and the reasonableness thereof.
- C. If, as of the Commercial Operations Date, a Hawai'i Refundable Tax Credit is unavailable, but a Hawai'i Non-Refundable Tax Credit is available to Subscriber Organization or its affiliates with respect to the Facility, or at any subsequent time during the Term, a Hawai'i Non-Refundable Tax Credit becomes available to Subscriber Organization or its affiliates with respect to the Facility, notwithstanding that Subscriber Organization may have applied for a Hawai'i Refundable Tax Credit, and in either case Subscriber Organization can claim, or enable its investors to claim, such Hawai'i Non-Refundable Tax Credit, the following shall apply:
1. Subscriber Organization or an affiliate of Subscriber Organization will apply for any available Hawai'i Non-Refundable Tax Credit, it being understood and agreed that if Subscriber Organization applies for a Hawai'i Non-Refundable Tax Credit as of the Commercial Operations Date, it shall have fulfilled its obligations hereunder to apply for the Hawai'i Non-Refundable Tax Credit;
  2. Subscriber Organization shall make a payment to Company in an amount equal to one hundred percent (100%) of the Net Amount of such Hawai'i Non-Refundable Tax Credit that Subscriber Organization can claim in the tax year in question within sixty (60) Days after the filing date of the applicable tax return for the tax year in which such Hawai'i Non-Refundable Tax Credit is utilized;
  3. Upon the filing of the applicable tax return(s), an officer of Subscriber Organization or an affiliate of Subscriber Organization, if applicable, will deliver a notice to Company (A) describing Subscriber Organization's efforts to apply for and obtain the Hawai'i Non-Refundable Tax Credit, (B) confirming that Subscriber Organization has applied for the Hawai'i Non-Refundable Tax Credit, and (C) certifying that Subscriber Organization has used commercially reasonable efforts to apply for and obtain the maximum reasonably available Hawai'i Non-Refundable Tax Credit as provided in this Section 7. (Tax Credit Pass Through);
  4. Upon receipt of any funds for the Hawai'i Non-Refundable Tax Credit, an officer of Subscriber Organization or an affiliate of Subscriber Organization, if applicable, will deliver a notice to Company certifying (A) the amount of funds received, (B) and the amount of payment that will be made to Company, net of any documented and reasonable financial, legal, administrative, and other costs required to claim, monetize and transfer such funds to Subscriber Organization, as supported by the officer's certificate as to the amount of such costs and the reasonableness thereof.

- D. Subscriber Organization shall use commercially reasonable efforts to apply for and obtain the maximum reasonably available Hawai'i Refundable and/or Non-Refundable Tax Credit as provided in this Section 7 (Tax Credit Pass Through). If Subscriber Organization fails to apply for and to use commercially reasonable efforts to obtain such Hawai'i Renewable Energy Tax Credit as described above, then Company shall be entitled to liquidated damages in an amount equal **[\$150,000 per MW of Contract Capacity]**. Subscriber Organization and Company agree and acknowledge that (i) the failure to use commercially reasonable efforts as provided in the preceding sentence would result in damages to Company in the form of reduction or loss of a benefit for Company's customers that would be difficult or impossible to calculate with certainty and (ii) **[Note - Insert Amount That Equals \$150,000 Per Mw Of Contract Capacity]** is an appropriate approximation of such damages. Company's right to collect liquidated damages as described in this Section 7.D. shall constitute Company's exclusive remedy and fulfillment of all Subscriber Organization's liability with respect to its obligations to maximize the amount of Hawai'i Renewable Energy Tax Credit. Such liquidated damages shall be provided to Company in the form of a lump sum payment by Subscriber Organization or as a credit against any amounts due by Company to Subscriber Organization under this Contract, as Company reasonably determines.
- E. If, prior to the application in Section 7.B. or filing in Section 7.C. of this Attachment B (Company Payments for Energy, Dispatchability and Availability of BESS), as applicable, a change in tax law occurs to introduce a Hawai'i Production Tax Credit or an alternative renewable tax credit, Subscriber Organization will use commercially reasonable efforts to determine which tax strategy is likely to result in the larger Net Amount (based on net present value for tax credits earned over time) of claimable tax credits. If, based on such efforts, Subscriber Organization determines that either Section 7.B. or Section 7.C. would result in a larger Net Amount of usable tax credits, an officer of Subscriber Organization will deliver a notice to Company certifying that Subscriber Organization has reasonably determined that the selected form of Hawai'i Renewable Energy Tax Credit is likely to result in the larger Net Amount (based on net present value for tax credits earned over time) of claimable tax credits and explaining the rationale for such determination. If, however, Subscriber Organization reasonably determines that such Hawai'i Production Tax Credit is likely to result in the larger Net Amount (based on net present value for tax credits earned over time) of claimable tax credits and that it reasonably can obtain such Hawai'i Production Tax Credit, Subscriber Organization shall promptly notify Company in writing and explain the rationale for such determination, and Subscriber Organization and Company shall negotiate in good faith and use commercially reasonable efforts to agree upon lump sum payments and/or credits or adjustments to the Contract Pricing and other terms of this Contract as may be required to best benefit Company's customers with 100% of the Net Amount of such tax benefits and preserve the intended economic benefits to the Parties arising from this Contract.
- F. Company reserves the right to have Subscriber Organization's application for the Hawai'i Renewable Energy Tax Credit in Section 7.B. or Section 7.C., or the Hawai'i Production Tax Credit or alternative tax credit under Section 7.E. of this Attachment B (Company Payments for Energy, Dispatchability and Availability of BESS) reviewed by an Independent Tax Expert to determine if such application is expected to maximize available tax credits to best benefit Company's customers, in which case, the provisions of this Section 7.F. shall apply. Company shall deliver to Subscriber Organization a written notice (the "Nomination Notice") of: (i) the names of three persons qualified and willing to accept appointment as an Independent Tax Expert; (ii) a description provided by each nominee of his or her qualifications to serve as an Independent Tax Expert; (iii) a written undertaking by each nominee to review Subscriber Organization's tax credit strategy and application, and (iv) each nominee's fee proposal. Subscriber Organization and Company shall agree on a mutually acceptable person to serve as the Independent Tax Expert within ten (10) Business Days of Subscriber Organization's receipt of Company's written notice. If the Parties fail

to agree upon a mutually acceptable Independent Tax Expert within the aforesaid ten Business Day period, such disagreement shall be resolved pursuant to Section 7.G. of this Attachment B (Company Payments for Energy, Dispatchability and Availability of BESS). Company shall pay the fees and expenses of the Independent Tax Expert and Subscriber Organization shall promptly reimburse Company for one-half of such fees and expenses.

- G. Any dispute arising under this Section 7. (Tax Credit Pass Through) of this Attachment B (Company Payments for Energy, Dispatchability and Availability of BESS) shall constitute a "Dispute" within the meaning of Section 17. (Dispute Resolution) of the Contract and shall be resolved as provided in said Section 17. (Dispute Resolution).
- H. For purposes of this Section 7. (Tax Credit Pass Through) of this Attachment B (Company Payments for Energy, Dispatchability and Availability of BESS), an affiliate of Subscriber Organization is a company that directly or indirectly controls, is controlled by, or is under common control with Subscriber Organization, and Subscriber Organization may perform its obligations under this Attachment B (Company Payments for Energy, Dispatchability and Availability of BESS) directly or through one or more affiliates.

--END--



**ATTACHMENT C**  
**REQUIRED PERFORMANCE METRICS; LIQUIDATED DAMAGES**

**1. PV SYSTEM EQUIVALENT AVAILABILITY FACTOR; LIQUIDATED DAMAGES; TERMINATION RIGHTS.**

- A. Calculation of the PV System Equivalent Availability Factor. Following the end of each LD Period, the PV System Equivalent Availability Factor shall be calculated for such LD Period as follows:

$$\text{PV System Equivalent Availability Factor} = 100\% \times \frac{AH - EDH}{PH}$$

where:

Period Hours (PH) is the total number of hours in the LD Period counting twenty-four (24) hours per day. In a normal year, PH = 8,760, and in a leap year PH = 8,784.

Available Hours (AH) is the number of hours that the PV System is not on Outage. It is the sum of all Service Hours (SH) + Reserve Shutdown Hours (RSH).

An "Outage" exists whenever the entire PV System is not online producing electric energy and is not in a Reserve Shutdown state.

Service Hours (SH) is the number of hours during the LD Period the PV System is online and producing electric energy to meet Company Dispatch and/or to maintain the BESS State of Charge.

Reserve Shutdown Hours (RSH) is the number of hours the PV System was available to the Company System but not providing electric energy or is offline at the Company's request for reasons other than Subscriber Organization-Attributable Non-Generation, or is offline due to insufficient irradiance levels based on the inverter manufacturer's minimum irradiance level for production. All hours between 7:00 pm and 6:00 am will be considered RSH. The PV System will be considered RSH in these hours, even if the system would otherwise be in an outage or derated state.

A "PV System Derating" exists if the Facility is available for Company Dispatch, but at less than full potential output for the given irradiance conditions, including deratings due to Subscriber Organization-Attributable Non-Generation or deratings by Company pursuant to Section 5.C (Company Rights of Dispatch).

For avoidance of doubt, if there is a PV System Outage occurring, there cannot also be a PV System Derating.

Equivalent Derated Hours (EDH) is the sum of ESADH, EPDH, and EUDH. For deratings due to PV System inverter unavailability, the equivalent full outage hour(s) are calculated by multiplying the actual duration of the derating (hours) by the number of inverters in the PV System unavailable and dividing by the total number of inverters in the PV System. For deratings that do not impact the availability of an entire inverter or set of entire inverters, the equivalent full outage hour(s) are calculated by multiplying the actual duration of the derating (hours) by the size of the derating (in MW) divided by the Contract Capacity.

Equivalent Subscriber Organization-Attributable Derated Hours (ESADH): A Subscriber Organization-Attributable Derating occurs when a derating exists due to Subscriber

Organization-Attributable Non-Generation or deratings by Company pursuant to Section 5.C (Company Rights of Dispatch) of the Contract. Each individual derating is transformed into equivalent full outage hour(s). These equivalent hour(s) are then summed.

Equivalent Planned Derated Hours (EPDH) includes Planned Deratings (PD) and Maintenance Deratings (D4). A Planned Derating is when the PV System experiences a derating scheduled well in advance and for a predetermined duration. A Maintenance Derating is a derating that can be deferred beyond the end of the next weekend (Sunday at midnight or before Sunday turns into Monday) but requires a reduction in capacity before the next Planned Derating (PD). Each individual Deration is transformed into equivalent full outage hour(s). These equivalent hour(s) are then summed.

Equivalent Unplanned Derated Hours (EUDH): An Unplanned Derating (Forced Derating) occurs when the PV System experiences a derating that requires a reduction in availability before the end of the nearest following weekend. Unplanned Derations include those due to Subscriber Organization-Attributable Non-Generation. Each individual Unplanned Derating is transformed into equivalent full outage hour(s). These equivalent hour(s) are then summed.

The effect of Force Majeure is taken into account in calculating the PV System Equivalent Availability Factor over the 12 calendar month LD Period as follows: When an LD Period contains any hours in a month during which the PV System or a portion of the PV System is unavailable due to Force Majeure, then such month shall be excluded from the LD Period and the LD Period shall be extended back in time to include the next previous month during which there was no such unavailability of the PV System or a portion thereof due to Force Majeure. This means the PV System Equivalent Availability Factor would not change from that determined in the month directly preceding a month containing Forced Majeure.

EXAMPLE: The following is an example of a PV System Equivalent Availability Factor calculation and is included for illustrative purposes only. Assume the following:

- PV System has 10 inverters and the Facility has a Contract Capacity of 30 MWs.
- LD Period = first 12 calendar months of the Contract (non-leap year).
- PV System was online and producing electric energy for 4,000 hours and was available but not producing electric energy due to lack of sufficient irradiance for production (i.e., not Subscriber Organization-Attributable Non-Generation) for 500 hours.
- 3 Inverters were offline for 100 hours due to a Planned Derating while not otherwise in RSH.
- 2 Inverters were offline for 50 hours due to an Unplanned Derating while not in RSH.
- The PV System had a 3 MW derating for 100 hours due to Subscriber Organization-Attributable Non-Generation while not otherwise in RSH.
- The PV System Equivalent Availability Factor would be calculated as follows:

$$PH = 8,760 \text{ hours in 12 calendar months} = 8,760 \text{ hours}$$

$$SH = 4,000 \text{ hours}$$

$$RSH = 500 \text{ hours} + (11 \text{ hours/day} \times 365 \text{ days}) = 4,515 \text{ hours}$$

$$AH = SH + RSH = 4,000 \text{ hours} + 4,515 \text{ hours} = 8,515 \text{ hours}$$

$$ESADH = 100 \text{ hours} \times \left(\frac{3 \text{ MW}}{30 \text{ MW}}\right) = 10 \text{ hours}$$

$$EPDH = 100 \text{ hours} \times \left(\frac{3 \text{ inverters}}{10 \text{ inverters}}\right) = 30 \text{ hours}$$

$$EUDH = 50 \text{ hours} \times \left(\frac{2 \text{ inverters}}{10 \text{ inverters}}\right) = 10 \text{ hours}$$

$$EDH = ESADH + EPDH + EUDH = 10 \text{ hours} + 30 \text{ hours} + 10 \text{ hours} = 50 \text{ hours}$$

$$EAF = 100\% \times \frac{8,515 - 50}{8,760} = 96.6\%$$

- B. PV System Equivalent Availability Factor Performance Metric and Liquidated Damages. For each LD Period, a PV System Equivalent Availability Factor shall be calculated as provided in accordance with Section 1. A. (Calculation of PV System Equivalent Availability Factor) of this Attachment C (Required Performance Metrics; Liquidated Damages). In the event the PV System Equivalent Availability Factor is less than **98%** (the "PV System Equivalent Availability Factor Performance Metric") for any LD Period, Subscriber Organization shall be subject to liquidated damages as set forth in this Section 1. B. (PV System Equivalent Availability Factor Performance Metric and Liquidated Damages). For avoidance of doubt, because the PV System Equivalent Availability Factor is calculated over an LD Period of 12 calendar months, the first month for which liquidated damages would be calculated under this Section 1.B. (PV System Equivalent Availability Factor Performance Metric and Liquidated Damages) would be the last calendar month of the initial Contract Year. If the PV System Equivalent Availability Factor for a LD Period is less than the PV System Equivalent Availability Factor Performance Metric, Subscriber Organization shall pay, in accordance with Attachment C (Required Performance Metrics; Liquidated Damages), Section 8 (Payment of Liquidated Damages for Failure to Achieve Performance Metrics; Limitation on Liquidated Damages), and Company shall accept, as liquidated damages for Subscriber Organization's failure to achieve the PV System Equivalent Availability Factor Performance Metric for such LD Period, an amount calculated in accordance with the following formula:

<u>PV System Equivalent Availability Factor</u>	<u>Amount of Liquidated Damages Per Calendar Month</u>
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**97.9%** and below

For each one-tenth of one percent (0.001) by which the PV System Equivalent Availability Factor for such LD Period

falls below the PV System Equivalent Availability Factor Performance Metric, an amount equal to 0.001917 of the Applicable Period Lump Sum Payment for the last calendar month of such LD Period.

For purposes of determining liquidated damages under the preceding formula, the amount by which the PV System Equivalent Availability Factor for the LD Period in question falls below the applicable threshold shall be rounded to the nearest one-tenth of one percent (0.001). Each Party agrees and acknowledges that (i) the damages that Company would incur if the Subscriber Organization fails to achieve the PV System Equivalent Availability Factor Performance Metric for a LD Period would be difficult or impossible to calculate with certainty and (ii) the aforesaid liquidated damages are an appropriate approximation of such damages.

EXAMPLE: The following is an example calculation of liquidated damages for the PV System Equivalent Availability Factor Performance Metric and is included for illustrative purposes only. Assume the monthly Lump Sum Payment is \$1,000,000 and the PV System Equivalent Availability Factor is 96.9% as calculated in the example in Section 1.A (Calculation of the PV System Equivalent Availability Factor) above.

The liquidated damages would be calculated as follows:

Applicable Period Lump Sum Payment = \$1,000,000

$\$1,000,000 \times .001917 = \$1,917$

$98.0\% - 96.9\% = 1.1\%$

$1.1\% / 0.1\% = 11$

$\$1,917 \times 11 = \$21,087$

- C. PV System Equivalent Availability Factor Termination Rights. The Parties acknowledge that, although the intent of the liquidated damages payable under Attachment C (Required Performance Metrics; Liquidated Damages) Section 1.B. (PV System Equivalent Availability Factor Performance Metric and Liquidated Damages) is to compensate Company for the damages that Company would incur if the Subscriber Organization fails to achieve the PV System Equivalent Availability Factor Performance Metric for a LD Period, such liquidated damages are not intended to compensate Company for the damages that Company would incur if a pattern of underperformance establishes a reasonable expectation that the PV System is likely to continue to substantially underperform the PV System Equivalent Availability Factor Performance Metric. Accordingly, and without limitation to Company's rights under said Section 1.B. (PV System Equivalent Availability Factor Performance Metric and Liquidated Damages) for those LD Periods during which the Subscriber Organization failed to achieve the PV System Equivalent Availability Factor Performance Metric, the failure of the Facility to achieve a PV System Equivalent Availability Factor of not less than **84%** for each of three consecutive Contract Years shall constitute an Event of Default under this Contract for which Company shall have the rights (including but not limited to the termination rights) set forth in Section 13. (Events of Default by Subscriber Organization) and Section 15. (Damages in the Event of Termination by Company) of this Contract.

2. MEASURED PERFORMANCE RATIO; LIQUIDATED DAMAGES; TERMINATION RIGHTS.

A. Calculation of Measured Performance Ratio.

1. The Measured Performance Ratio ("MPR") represents the PV System's measured AC power output compared to its theoretical DC power output as adjusted for the plane of array irradiance and weather conditions measured at the Site [**DRAFTING NOTE: MAY REQUIRE REVISION FOR DC OUTPUT**]. The net PV System output in MW will be measured at such points mutually agreed to by the Parties on the Facility's single-line diagram attached hereto as Attachment F, Exhibit F-5 (Single-Line Drawing and Interface Block Diagram) to this Contract.

- Following the end of each MPR Assessment Period, the MPR shall be calculated for such MPR Assessment Period (using the previous 12 months of data) as follows:

$$MPR_{corr} = \frac{\sum_i P_{AC_i}}{\sum_i \left[ P_{DC_{STC}} \left( \frac{G_{POA_i}}{G_{STC}} \right) \left( 1 - \frac{\delta}{100} (T_{cell\_type\_avg} - T_{cell\_i}) \right) \right]}$$

Where:

$i$  = each 15-minute interval during the MPR Assessment Period where the conditions set forth in Section 2.A.1. are met.

$P_{AC_i}$  is the measured AC power output of the PV System measured at the Point of Interconnection and BESS inverters' AC input averaged over time period  $i$  in MW.

$G_{STC}$  = plane of array irradiance at the standard condition of 1,000  $W/m^2$ .

$P_{DC_{STC}}$  is the DC rated capacity of the PV System at the standard test conditions of 1,000  $W/m^2$  and 25°C (MW), (i.e., the DC power rating of the PV panels at standard test conditions multiplied by the number of PV panels in the Facility).

$G_{POA_i}$  is the measured plane of array irradiance averaged over time period  $i$  ( $W/m^2$ ).

$T_{cell\_i}$  = cell temperature computed from measured meteorological data averaged over time period  $i$  using the equation provided below. (°C)

$T_{cell\_typ\_avg}$  = annual average irradiance-weighted cell temperature computed from one year of weather data using the GPR performance metric weather file and the equation below. (°C) Calculated once per GPR.

$\delta$  = temperature coefficient for power (%/°C, negative in sign) that corresponds to the installed photovoltaic modules.

$$T_{cell\_typ\_avg} = \frac{\sum_j [G_{POA\_typ\_j} \times T_{cell\_typ\_j}]}{\sum_j G_{POA\_typ\_j}}$$

Where:

$j$  = each hour of the year in the GPR performance metric weather file (hours 1-8760).

$G_{POA\_typ\_j}$  = Plane of array irradiance for each hour of the year determined from the GPR performance metric weather file and tracker orientation. This irradiance is zero (0) when the sun is not up. ( $W/m^2$ ).

$T_{cell\_typ\_j}$  = calculated cell operating temperature for each hour of the year computed using the GPR performance metric weather file for the weather variables in the equation for  $T_{cell\_i}$  below.

$$T_{cell\_i} = G_{POA_i} \times e^{(a+b \times WS_i)} + T_{a\_i} + \left( \frac{G_{POA_i}}{G_{STC}} \times dT_{cond} \right)$$

Where:

$T_{a\_i}$  = the measured ambient temperature averaged over time period  $i$  [ $^{\circ}C$ ]

$WS_i$  = the measured wind speed corrected to a measurement height of 10 meters (using the anemometer height and proper Hellmann coefficient) averaged over time period  $i$  [m/s]

$a$  = empirical constant reflecting the increase of module temperature with sunlight as presented in Table 2 below.

$b$  = empirical constant reflecting the effect of wind speed on the module temperature as presented in Table 2 below [s/m]

$e$  = Euler's constant and the base for the natural logarithm.

$dT_{cond}$  = conduction temperature coefficient from module to cell as presented in Table 2 below.

<b>Table 2. Empirical Convective Heat Transfer Coefficients Module Type</b>	<b>Mount</b>	<b><math>a</math></b>	<b><math>b</math></b>	<b><math>dT_{cond}</math></b>
Glass/cell/glass	Open rack	-3.47	-0.0594	3
Glass/cell/glass	Close-roof mount	-2.98	-0.0471	1
Glass/cell/polymer sheet	Open rack	-3.56	-0.0750	3
Glass/cell/polymer sheet	Insulated back	-2.81	-0.0455	0
Polymer/thin-film/steel	Open rack	-3.58	-0.1130	3

The time periods used in the foregoing calculation shall be only periods during which, for the entire 15-minute interval, the PV System output is allowed to convert all irradiance to AC power (whether directed to the BESS or Point of Interconnection) and the plane of array irradiance is not less than  $600 W/m^2$ . Data points that will be excluded are limited to data points where: (A) the GPOA is below  $600 W/m^2$ , (B) GPOA is above the maximum threshold (C) the PV System is in Reserve Shutdown, (D) when the PV System has a Planned or Unplanned Derating, (E) the PV System was not allowed to convert the full DC output to AC energy to deliver to the BESS and Point of Interconnection due to Company

Dispatch being less than the PV System potential at the measured irradiance and the BESS reaching its maximum State of Charge; (F) there is a PV System Outage; or (G) the BESS is discharging. The aforementioned 15-minute intervals are fixed intervals that commence, in sequence, at the top of each hour and at 15, 30 and 45 minutes past the hour. At the end of each month, Subscriber Organization shall provide Company a report that lists all hours when such excluded data points occur (from the Facility's SCADA system as necessary) to validate the exclusion of any data points from the calculation set forth in Section 2.A., above. This information shall be validated on a monthly basis.

The effect of the Force Majeure is taken into account in calculating the MPR for the MPR Assessment Period as follows: When an MPR Assessment Period contains any hours in a month during which the PV System or a portion of the PV System is unavailable due to Force Majeure, then such month shall be excluded from the MPR Assessment Period and the MPR Assessment Period shall be retroactively extended to include the next previous month during which there was no such unavailability of the PV System or a portion thereof due to Force Majeure. This means the MPR would not change from that determined in the month directly preceding a month containing Force Majeure.

- B. MPR Test. In the event that the set of operational data points under Section 2.A. that is available for any month to calculate the MPR cannot be validated to Company's reasonable satisfaction or in the event there were not at least 16 such data points during such month that could be used to calculate the MPR, the Company shall have the right to perform a test ("MPR Test") to collect the data points for such month to be used to calculate the MPR in lieu of the use of operational data for such month. The Company shall retain sole discretion as to when to conduct the MPR Test and the MPR Test may be conducted at any point during the month following the month for which Company was either unable to validate the set of operational data points for such month or there were not at least 16 data points available during such month, provided that Company will provide Subscriber Organization three (3) Business Days' notice prior to conducting the MPR Test. The MPR Test shall have a minimum duration of four (4) hours and shall run until at least 16 data points are collected that meet the criteria set forth in Section 2.A., subject to the limitation set forth in the last sentence of this Section 2.B). To the extent possible, the Company shall schedule the MPR Test for a period where all inverters in the PV System and BESS are fully available and weather conditions are expected to be optimum allowing the PV System to generate at full capacity for the duration of the MPR Test (if possible). However, if Company chooses a period where some of the Facility inverter(s) are unavailable,  $P_{DCSTC}$  shall be adjusted to account for any reduction in capability to accept energy from the PV System due to the unavailable inverter(s).
- For each MPR Assessment Period that includes one or more months for which a MPR Test was performed, the data points collected during said MPR Test for such month(s) shall be used together with the data points for months for which an MPR Test was not conducted to calculate the MPR for the MPR Assessment Period in question using the formula set forth in Section 2.A.1., above. The result of the calculation based on the MPR Test shall be the MPR for the MPR Assessment Period in question.

EXAMPLE: The following is an example of a Measured Performance Ratio calculation and is included for illustrative purposes only. Assume the following:

- Facility with 120,000 panels with a standard test condition rating of 300 W
- $PDCSTC = 120,000 \times 300 \text{ W} = 36 \text{ MW}$
- For illustrative purposes only, 4 hours of data which met the criteria specified in 2.6(a)(iii) have been recorded over the MPR Assessment Period. It should be noted that all

available operational data that meets the criteria specified in Section 2.A.1. shall be included in the actual calculation.

Time Period	Average Measured Plane of Array Irradiance (W/m <sup>2</sup> )	Average Measured Net AC Power at POI and BESS Inverters (MW)	Average Measured Ambient Temperature (°C)	10 Meter Elevation Average Measured Wind Speed (m/s)
1	690	16	27	3
2	850	11	26	8
...	...	...	...	...
i	750	19	29	7

$$MPR_{corr} = \frac{\sum_i P_{AC_i}}{\sum_i \left[ P_{DCSTC} \left( \frac{G_{POA_i}}{G_{STC}} \right) \left( 1 - \frac{\delta}{100} (T_{cell\_typ\_avg} - T_{cell\_i}) \right) \right]}$$

where:

$$T_{cell\_i} = G_{POA_i} \times e^{(a+b \times WS_i)} + T_{a\_i} + \left( \frac{G_{POA_i}}{G_{STC}} \times dT_{cond} \right)$$

Assuming:

The temperature coefficient ( $\delta$ ) of the installed modules is -0.4%/°C

The average irradiance-weighted cell temperature ( $T_{cell\_typ\_avg}$ ) has been calculated as 28°C

The installed modules are a glass/cell/polymer sheet module type using an open rack mount. ( $a = -3.56$ ;  $b = -0.0750$ ;  $dT_{cond} = 3$ )

$$\sum_i P_{AC_i} = 16 \text{ MW} + 11 \text{ MW} + \dots + 19 \text{ MW} = \mathbf{305 \text{ MW}}$$

$$\begin{aligned} \sum_i \left[ P_{DCSTC} \left( \frac{G_{POA_i}}{G_{STC}} \right) \left( 1 - \frac{\delta}{100} (T_{cell\_type\_avg} - T_{cell\_i}) \right) \right] &= 36 \text{ MW} \times \\ &[(690/1000) \times (1 - (0.4/100) \times (28 - ((690 \times e^{(-3.56 - 0.075 \times 3)} + 27) + ((690/1000) \times 3))) + \\ &(850/1000) \times (1 - (0.4/100) \times (28 - ((850 \times e^{(-3.56 - 0.075 \times 8)} + 26) + ((850/1000) \times 3))) + \\ &\dots + \\ &(750/1000) \times (1 - (0.4/100) \times (28 - ((750 \times e^{(-3.56 - 0.075 \times 7)} + 29) + ((750/1000) \times 3)))]) \\ &= \mathbf{374.76 \text{ MW}} \end{aligned}$$

$$MPR = 305 \text{ MW} / 374.76 \text{ MW} = \mathbf{0.814}$$

C. Determination of GPR Performance Metric.

1. Upon Commencement of Commercial Operations. If a copy of the IE Energy Assessment Report together with the supporting Year 1 P-Value of 50 8760 data (plane of array irradiance, ambient temperature, windspeed and corresponding power output) is not provided to Company in accordance with Section 1.C. (NEP IE Estimate and Company-Designated NEP Estimate) of Attachment D (Calculation and Adjustment of Net Energy Potential), the GPR Performance Metric for the period commencing on the Commercial Operations Date through the end of the



- calendar month during which the Initial OEPR is issued shall be 0.85. If a copy of the IE Energy Assessment Report together with the supporting data (plane of array irradiance, ambient temperature, windspeed and corresponding power output) is provided to Company in accordance with Section 1.C. (NEP IE Estimate and Company-Designated NEP Estimate) of Attachment D (Calculation and Adjustment of Net Energy Potential), the GPR Performance Metric shall be the GPR set forth in the IE Energy Assessment Report and based on the Year 1 P-Value of 50 8760 data, provided that such GPR is justified by such supporting data and consistent with the minimum irradiance level and points of power measurement specified in Section 2.A. of this Attachment C. In the event that the IE Assessment Report includes the supporting data (plane of array irradiance, ambient temperature, windspeed and corresponding power output) relied upon in arriving at the NEP IE Estimate, but does not set forth a GPR, the GPR Performance Metric shall be calculated using such supporting data and the Measured Performance Ratio formula in Section 2.A. of this Attachment C. Within 30 Days of Company's receipt of the IE Energy Assessment Report together with the aforementioned supporting data, Company shall provide written notice to Subscriber Organization of either (aa) the GPR Performance Metric derived from such supporting data or (bb) Company's inability to reasonably derive a GPR Performance Metric from such supporting data, in which case the GPR Performance Metric shall be 0.85.
2. Commencing With Initial OEPR. For the period commencing with the first Day of the calendar month following the establishment of the NEP OEPR Estimate for the Initial OEPR (as provided in Section 1.E. (Initial OEPR) and Sections 2.G. (Review of the First OEPR Evaluator Report) and 2.H. (Review of the Second OEPR Evaluator Report) of Attachment D (Calculation and Adjustment of Net Energy Potential) to this Contract through the end of the calendar month during which the NEP OEPR Estimate for the first Subsequent OEPR is established as provided in Section 2.F. (Subsequent OEPRs) and Sections 2.G. (Review of the First OEPR Evaluator Report) and 2.H. (Review of the Second OEPR Evaluator Report) of Attachment D (Calculation and Adjustment of Net Energy Potential) to this Contract, the GPR Performance Metric shall be the GPR as established through the Initial OEPR process as aforementioned. If no GPR has been established through the Initial OEPR process, the GPR Performance Metric shall be 0.85.
  3. Commencing With the First Subsequent OEPR and Thereafter. Commencing with the establishment of the NEP OEPR Estimate for the first Subsequent OEPR as provided in Section 2.F. (Subsequent OEPRs) and Sections 2.G. (Review of the First OEPR Evaluator Report) and 2.H. (Review of the Second OEPR Evaluator Report) of Attachment D (Calculation and Adjustment of Net Energy Potential) to this Contract, for each period commencing with the first Day of the calendar month following the establishment of the NEP OEPR Estimate for a Subsequent OEPR (including but not limited to the first Subsequent OEPR) through the end of the calendar month during which the NEP OEPR Estimate is established for the next Subsequent OEPR, the GPR Performance Metric shall be the GPR established for the applicable Subsequent OEPR. If no GPR has been established through the then applicable Subsequent OEPR process, the GPR Performance Metric shall be 0.85.
- D. GPR Performance Metric and Liquidated Damages. For each MPR Assessment Period, a Measured Performance Ratio shall be calculated as provided in Attachment C Section 2.A. (Calculation of Measured Performance Ratio) to this Contract. In the event the MPR is less than 95% of the GPR Performance Metric as adjusted by the degradation factor set forth below, Subscriber Organization shall pay, in accordance with Attachment C Section 8. (Payment of Liquidated Damages for Failure to Achieve Performance Metrics; Limitation on Liquidated Damages), and Company shall accept, as liquidated damages for Subscriber Organization's failure to achieve the GPR Performance Metric for such MPR Assessment Period, an amount calculated in accordance with the following formula:

TIER	MEASURED PERFORMANCE RATIO	AMOUNT OF LIQUIDATED DAMAGES PER MPR ASSESSMENT PERIOD
Tier 1	$\text{GPR Performance Metric} \times \text{DF} \times 0.95 > \text{Measured Performance Ratio} \geq \text{GPR Performance Metric} \times \text{DF} \times 0.90$	<p>For each one-tenth of one percent (0.001) by which the Measured Performance Ratio for such MPR Assessment Period falls below the upper limit of the bandwidth specified in this subparagraph, an amount equal to one-tenth of one percent (0.001) of the MPR Assessment Period Lump Sum Payment. The upper end of the aforementioned bandwidth is equal to the product of the GPR Performance Metric, the applicable degradation factor (DF), and 95%. The lower limit of the aforementioned bandwidth consists of and includes the product of the GPR Performance Metric, the applicable degradation factor (DF), and 90%; plus</p>
Tier 2	$\text{GPR Performance Metric} \times \text{DF} \times 0.90 > \text{Measured Performance Ratio} \geq \text{GPR Performance Metric} \times \text{DF} \times 0.80$ $\text{Measured Performance Ratio} < \text{GPR Performance Metric} \times \text{DF} \times 0.80$	<p>For each one-tenth of one percent (0.001) by which the Measured Performance Ratio for such MPR Assessment Period falls below the upper limit of the bandwidth specified in this subparagraph, an amount equal to two-tenths of one percent (0.002) of the MPR Assessment Period Lump Sum Payment. The upper end of the aforementioned bandwidth is equal to the product of the GPR Performance Metric, the applicable degradation factor (DF), and 90%. The lower limit of the aforementioned bandwidth consists of and includes the product of the GPR Performance Metric, the applicable degradation factor (DF), and 80%; plus</p> <p>For each one-tenth of one percent (0.001) by which the Measured Performance Ratio for such MPR Assessment Period falls below the product of the GPR Performance Metric, the applicable degradation factor (DF), and 80%, an amount equal to four-tenths of one percent (0.004) of the MPR Assessment Period Lump Sum Payment.</p>

For purposes of the foregoing calculations under this Section 2. (Measured Performance Metric; Liquidated Damages; Termination Rights), the degradation factor (DF) is calculated for each Contract Year (e.g., second Contract Year, third Contract Year, fourth Contract Year, etc.) as follows:  $DF = 1 - 0.005 * (\text{Applicable Contract Year} - 1)$ . For purposes of the foregoing formula, the "Applicable Contract Year" is the Contract Year within which the calendar month in question falls. If all of the months of an MPR Assessment Period fall within the same Contract Year, the Contract Year is the "Applicable Contract Year." For example, if all of the months of MPR Assessment Period fall within the third Contract Year, the value assigned to the "Applicable Contract Year" would be "3" and the formula for calculating the DF for such LD Period would be:  $DF = 1 - 0.005 * (3 - 1)$ . However, because the MPR Assessment Period is a rolling 12-month period, the MPR Assessment Period will often straddle two consecutive Contract Years. In such cases, all of the months falling within the same Contract Year will be assigned the value for such Contract Year and the value assigned to the "Applicable Contract Year" for purposes of the

foregoing formula shall be the average of the assigned monthly values for such 12-month MPR Assessment Period. For example, for an MPR Assessment Period which has four months in the third Contract Year and eight months in the fourth Contract Year, the value assigned to the "Applicable Contract Year" for such MPR Assessment Period would be 3.67, as calculated as follows:

$$(3X4) + (4X8)$$

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$$12$$

And the formula for calculating the DF for such MPR Assessment Period would be  $DF = 1 - 0.005 * (3.67 - 1)$ . For purposes of determining liquidated damages under this Section 2. (Measured Performance Metric; Liquidated Damages; Termination Rights). The amount by which the Measured Performance Ratio for the MPR Assessment Period in question falls below the applicable threshold shall be rounded to the nearest one-tenth of one percent (0.001). Each Party agrees and acknowledges that (i) the damages that Company would incur if the Subscriber Organization fails to achieve the GPR Performance Metric for a MPR Assessment Period would be difficult or impossible to calculate with certainty and (ii) the aforesaid liquidated damages are an appropriate approximation of such damages.

EXAMPLE: The following is an example calculation of liquidated damages for the GPR Performance Metric and is included for illustrative purposes only. Assume the following facts:

- The MPR Assessment Period has five months in the second Contract Year and seven months in the third Contract Year.
- The GPR for the Facility as determined by the OEPR is 0.9.
- The MPR has been calculated to be 0.694.
- Applicable Contract Year =  $[(5 \times 2) + (7 \times 3)]/12 = 2.58$
- $DF = 1 - 0.005 * (2.58 - 1) = 0.9921$
- Upper limit of the Tier 1 bandwidth =  $0.9 \times 0.9921 \times 0.95 = 0.848$
- Lower limit of the Tier 1 bandwidth/Upper limit of the Tier 2 bandwidth =  $0.9 \times 0.9921 \times 0.9 = 0.804$
- Lower limit of the Tier 2 bandwidth =  $0.8 \times 0.9921 \times 0.9 = 0.714$

$$LD = [((0.848 - 0.804) \times 1) + ((0.804 - 0.714) \times 2) + ((0.714 - 0.694) \times 4)] \times \text{MPR Assessment Period Lump Sum Payment} = 0.304 \times \text{MPR Assessment Period Lump Sum Payment}$$

- E. MPR Termination Rights. The Parties acknowledge that, although the intent of the liquidated damages payable under Section 2 (Measured Performance Ratio; Liquidated Damages; Termination Rights) is to compensate Company for the damages that Company would incur if the Subscriber Organization fails to achieve the GPR Performance Metric for a MPR Assessment Period, such liquidated damages are not intended to compensate Company for the damages that Company would incur if a pattern of underperformance establishes a reasonable expectation that the Facility is likely to continue to substantially underperform the GPR Performance Metric. Accordingly, and without limitation to Company's rights under said Section 2. (Measured Performance Metric; Liquidated Damages; Termination Rights) for those MPR Assessment Periods during which the Subscriber Organization failed to achieve the GPR Performance Metric, the failure of the PV System to achieve, for each of three consecutive Contract Years, a Measured Performance Ratio of not less than the Tier 2 Bandwidth for such Contract Year shall constitute an Event of Default under Section 13.A.4. of this Contract for which Company shall have the rights

(including but not limited to the termination rights) set forth in Section 13. (Events of Default) and Section 15. (Damages in the Event of Termination by Company).

**3. BESS CAPACITY TEST; LIQUIDATED DAMAGES; TERMINATION RIGHTS.**

- A. BESS Capacity Test and Liquidated Damages. For each BESS Measurement Period following the Commercial Operations Date, the BESS shall be required to complete a BESS Capacity Test, as more fully set forth in Section 1. (BESS Tests) to Attachment H (BESS Requirement) to this Contract. For each BESS Measurement Period for which the BESS fails to demonstrate that it satisfies the BESS Capacity Performance Metric, Subscriber Organization shall pay, in accordance with Attachment C Section 8. (Payment of Liquidated Damages for Failure to Achieve Performance Metrics; Limitation on Liquidated Damages), and Company shall accept, as liquidated damages for such shortfall, the amount set forth in the following table (on a progressive basis) upon proper demand at the end the BESS Measurement Period in question:

<b>BESS Capacity Ratio</b>	<b>Liquidated Damage Amount</b>
<b>Tier 1 95.0% - 99.9%</b>	For each one-tenth of one percent (0.001) that the BESS Capacity Ratio is below 100% and is equal to or greater than 95.0%, an amount equal to one-tenth of one percent (0.001) of the BESS Allocated Portion of the Lump Sum Payment for the BESS Measurement Period in question; plus
<b>Tier 2 85.0% - 94.9%</b>	For each one-tenth of one percent (0.001) that the BESS Capacity Ratio is below 95% and is above 84.9%, an amount equal to one and a half-tenths of one percent (0.0015) of the BESS Allocated Portion of the Lump Sum Payment for the BESS Measurement Period in question; plus
<b>Tier 3 75.0% - 84.9%</b>	For each one-tenth of one percent (0.001) that the BESS Capacity Ratio is below 85% and is above 74.9%, an amount equal to two-tenths of one percent (0.002) of the BESS Allocated Portion of the Lump Sum Payment for the BESS Measurement Period in question; plus
<b>Tier 4 60.0% - 74.9%</b>	For each one-tenth of one percent (0.001) that the BESS Capacity Ratio is below 75% and is above 59.9%, an amount equal to two and a half-tenths of one percent (0.0025) of the BESS Allocated Portion of the Lump Sum Payment for the BESS Measurement Period in question; plus
<b>Tier 5 50.0% - 59.9%</b>	For each one-tenth of one percent (0.001) that the BESS Capacity Ratio is below 60% and is above 49.9%, an amount equal to three-tenths of one percent (0.003) of the BESS Allocated Portion of the Lump Sum Payment for the BESS Measurement Period in question; plus
<b>Tier 6 49.9% and below ("Lowest BESS Capacity Bandwidth")</b>	For each one-tenth of one percent (0.001) that the BESS Capacity Ratio is below 50%, an amount equal to three and a half-tenths of one percent (0.0035) of the BESS Allocated Portion of the Lump Sum Payment for the BESS Measurement Period in question.

For purposes of determining liquidated damages under this Section 3. (BESS Capacity Test; Liquidated Damages; Termination Rights), the starting and end points for the duration of the period that the BESS discharges shall be rounded to the nearest MWh. Each Party agrees and acknowledges that (i) the damages that Company would incur if the Subscriber Organization fails to achieve the BESS Capacity Performance Metric for a BESS Measurement Period would be

difficult or impossible to calculate with certainty and (ii) the aforesaid liquidated damages are an appropriate approximation of such damages.

EXAMPLE: The following is an example calculation of liquidated damages for the BESS Capacity Performance Metric and is included for illustrative purposes only. Assume the following:

- The Maximum Rated Output for the BESS is 25 MW.
- A BESS Capacity Test was conducted, and the BESS was measured to have discharged 65 MWh
- BESS Contract Capacity = 25 MW x 4 hours = 100 MWh
- BESS Capacity Ratio = MWh Discharged/BESS Contract Capacity = 65 MWh/100 MWh = 0.65

$LD = [((1 - 0.950) \times 1) + ((0.950 - 0.850) \times 1.5) + ((0.850 - 0.750) \times 2) + ((0.750 - 0.65) \times 2.5)] \times \text{BESS Allocated Portion of the Lump Sum Payment for the BESS Measurement Period in question} = 0.65 \times \text{BESS Allocated Portion of the Lump Sum Payment for the BESS Measurement Period in question.}$

B. BESS Capacity Test Termination Rights. The Parties acknowledge that, although the intent of the liquidated damages payable under Section 3. (BESS Capacity Test; Liquidated Damages; Termination Rights) is to compensate Company for the damages that Company would incur if the BESS fails to demonstrate satisfaction of the BESS Capacity Performance Metric during a BESS Measurement Period, such liquidated damages are not intended to compensate Company for the damages that Company would incur if a pattern of underperformance establishes a reasonable expectation that the BESS is likely to continue to substantially underperform the Company's expectations. Accordingly, and without limitation to Company's rights under said Section 3. (BESS Capacity Test; Liquidated Damages; Termination Rights) for those BESS Measurement Periods during which the BESS fails to demonstrate satisfaction of the BESS Capacity Performance Metric, substantial underperformance shall give rise to a termination right as set forth in this Section 3.B. (BESS Capacity Test Termination Rights). If the BESS is in the Lowest BESS Capacity Bandwidth for any two BESS Measurement Periods during a 12-month period, an 18-month cure period (the "BESS Capacity Cure Period") will commence on the Day following the close of the second such BESS Measurement Period. For each BESS Measurement Period during such BESS Capacity Cure Period, BESS Capacity Tests shall continue to be conducted as set forth in Attachment H (BESS Requirements) to this Contract and liquidated damages paid and accepted as set forth in Section 3. (BESS Capacity Test; Liquidated Damages; Termination Rights); provided, however, that if the Subscriber Organization fails to demonstrate satisfaction of the BESS Capacity Performance Metric prior to the expiration of the BESS Capacity Cure Period, such failure shall constitute an Event of Default under this Contract for which Company shall have the rights (including but not limited to the termination rights) set forth in Section 13. (Events of Default), Section 14. (Termination for Cause) and Section 15. (Damages in the Event of Termination by Company).

**4. BESS ANNUAL EQUIVALENT AVAILABILITY FACTOR; LIQUIDATED DAMAGES; TERMINATION RIGHTS.**

A. BESS Annual Equivalent Availability Factor and Liquidated Damages. For each BESS Measurement Period following the Commercial Operations Date, a BESS Annual Equivalent Availability Factor shall be calculated as set forth in Section 2. (BESS Annual Equivalent Availability Factor) of Attachment H. (BESS Requirements). If the BESS Annual Equivalent Availability Factor for such BESS Measurement Period is less than 97% (the "BESS EAF Performance Metric"), Subscriber Organization shall pay, in accordance with Attachment C

Section 8. (Payment of Liquidated Damages for Failure to Achieve Performance Metrics; Limitation on Liquidated Damages), and Company shall accept, as liquidated damages for such shortfall, the amount set forth in the following table (on a progressive basis) upon proper demand at the end the current BESS Measurement Period:

<b>BESS Annual Equivalent Availability Factor</b>	<b>Liquidated Damage Amount</b>
<b>Tier 1 85.0% - 96.9%</b>	For each one-tenth of one percent (0.001) by which the BESS Annual Equivalent Availability Factor falls below 97% but equal to or above 85%, an amount equal to one-tenth of one percent (0.001) of the BESS Allocated Portion of the Lump Sum Payment for the BESS Measurement Period in question; plus
<b>Tier 2 80.0% - 84.9%</b>	For each one-tenth of one percent (0.001) by which the BESS Annual Equivalent Availability Factor falls below 85% but equal to or above 80%, an amount equal to two-tenths of one percent (0.002) of the BESS Allocated Portion of the Lump Sum Payment for the BESS Measurement Period in question; plus
<b>Tier 3 75.0% - 79.9%</b>	For each one-tenth of one percent (0.001) by which the BESS Annual Equivalent Availability Factor falls below 80% but equal to or above 75%, an amount equal to three-tenths of one percent (0.003) of the BESS Allocated Portion of the Lump Sum Payment for the BESS Measurement Period in question; plus
<b>Tier 4 Below 75.0%</b>	For each one-tenth of one percent (0.001) by which the BESS Annual Equivalent Availability Factor falls below 75%, an amount equal to four-tenths of one percent (0.004) of the BESS Allocated Portion of the Lump Sum Payment for the BESS Measurement Period in question.

For purposes of determining liquidated damages under this Section 4. (BESS Annual Equivalent Availability Factor; Liquidated Damages; Termination Rights), the BESS Annual Equivalent Availability Factor for the BESS Measurement Period in question shall be rounded to the nearest one-tenth of one percent (0.001). Each Party agrees and acknowledges that (i) the damages that Company would incur if the Subscriber Organization fails to achieve the BESS EAF Performance Metric for a BESS Measurement Period would be difficult or impossible to calculate with certainty and (ii) the aforesaid liquidated damages are an appropriate approximation of such damages.

EXAMPLE: The following is an example calculation of liquidated damages for the BESS Annual Equivalent Availability Factor Performance Metric and is included for illustrative purposes only. Assume the following:

The monthly Lump Sum Payment is \$1,000,000

The BESS Annual Equivalent Availability Factor Performance Metric was calculated to be 72.9%.

BESS Allocated Portion of the Lump Sum Payment = 50% x 3 calendar months x \$1,000,000 = \$1,500,000

LD =  $[(0.970-0.850) \times 1] + [(0.850-0.800) \times 2] + [(0.800-0.750) \times 3] + [(0.750-0.729) \times 4]$  x \$1,500,000

=  $[0.120 + 0.100 + 0.150 + 0.084]$  x \$1,500,000 = \$681,000

- B. BESS Annual Equivalent Availability Factor Termination Rights. The Parties acknowledge that, although the intent of the liquidated damages payable under Section 4. (BESS Annual Equivalent

Availability Factor; Liquidated Damages; Termination Rights) is to compensate Company for the damages that Company would incur if the Subscriber Organization fails to achieve the BESS EAF Performance Metric for a BESS Measurement Period, such liquidated damages are not intended to compensate Company for the damages that Company would incur if a pattern of underperformance establishes a reasonable expectation that the BESS is likely to continue to substantially underperform the BESS EAF Performance Metric. Accordingly, and without limitation to Company's rights under said Section 4. (BESS Annual Equivalent Availability Factor ; Liquidated Damages; Termination Rights) for those BESS Measurement Periods during which the Subscriber Organization failed to achieve the BESS EAF Performance Metric, the failure of the Subscriber Organization to achieve, for each of six consecutive BESS Measurement Periods, a BESS Annual Equivalent Availability Factor of not less than **75%** shall constitute an Event of Default under Section 13.A. of this Contract for which Company shall have the rights (including but not limited to the termination rights) set forth in Section 13. (Events of Default), Section 14. (Termination for Cause), and Section 15. (Damages in the Event of Termination by Company); provided, however, that if a BESS Measurement Period for which the aforementioned 75% threshold is not achieved falls within a BESS Capacity Cure Period, such BESS Measurement Period shall be excluded from the calculation of the aforementioned "six consecutive BESS Measurement Periods" if the failure to achieve the aforementioned 75% threshold was the result of unavailability caused by the process of carrying out the repairs to or replacements of the BESS necessary to remedy the failure of the BESS to achieve the BESS Capacity Performance Metric.

**5. BESS ANNUAL EQUIVALENT FORCED OUTAGE FACTOR; LIQUIDATED DAMAGES.**

- A. For each BESS Measurement Period following the Commercial Operations Date, the BESS shall maintain a BESS Annual Equivalent Forced Outage Factor of not more than **4%** (the "BESS EFOF Performance Metric") as calculated as set forth in Section 5. (BESS Annual Equivalent Forced Outage Factor). If the BESS Annual Equivalent Forced Outage Factor for such BESS Measurement Period exceeds the BESS EFOF Performance Metric, Subscriber Organization shall pay, in accordance with Attachment C Section 8. (Payment of Liquidated Damages for Failure to Achieve Performance Metrics; Limitation on Liquidated Damages), and Company shall accept, as liquidated damages for exceeding the BESS EFOF Performance Metric, the amount set forth in the following table (on a progressive basis) upon proper demand by the Company at the end of the BESS Measurement Period in question:

<b>BESS Annual Equivalent Forced Outage Factor</b>	<b>Liquidated Damage Amount</b>
<b>0.0% - 4.0%</b>	-0-
<b>4.1% - 6.9%</b>	For each one-tenth of one percent (0.001) that the BESS Annual Equivalent Forced Outage Factor is above 4.0% but less than 7.0%, an amount equal to two-tenths of one percent (0.002) of the BESS Allocated Portion of the Lump Sum Payment for the BESS Measurement Period in question; plus
<b>7.0% and above</b>	For each one-tenth of one percent (0.001) that the BESS Annual Equivalent Forced Outage Factor is above 6.9%, an amount equal to four-tenths of one percent (0.004) of the BESS Allocated Portion of the Lump Sum Payment for the BESS Measurement Period in question

For purposes of determining liquidated damages under this Attachment C Section 5, (BESS Annual Equivalent Forced Outage Factor; Liquidated Damages), the BESS Annual Equivalent Forced Outage Factor for the BESS Measurement Period in question shall be rounded to the nearest one-tenth of one percent (0.001). Each Party agrees and acknowledges that (i) the damages that Company would incur if the Subscriber Organization fails to achieve the BESS EFOF Performance Metric for a BESS Measurement Period would be difficult or impossible to calculate with certainty and (ii) the aforesaid liquidated damages are an appropriate approximation of such damages.

For example, if the BESS Equivalent Annual Forced Outage Factor was 4.1% as calculated in the example in Section 5, (BESS Annual Equivalent Forced Outage Factor; Liquidated Damages) attached hereto and the BESS Allocated Portion of the Lump Sum Payment for the BESS Measurement Period in question is \$1,000,000, the liquidated damages would be \$2,000, calculated as follows:

- $4.1\% - 4.0\% = 0.1\%$
- $0.1\%/0.1 = 1$
- $\$1,000,000 \times .002 = \$2,000$
- $\$2,000 \times 1 = \$2,000$

**6. BESS ROUND TRIP EFFICIENCY TEST; LIQUIDATED DAMAGES; TERMINATION RIGHTS.**

- A. RTE Test and Liquidated Damages. For each BESS Measurement Period following the Commercial Operations Date, the BESS shall be required to complete an RTE Test or otherwise demonstrate satisfaction of the RTE Performance Metric, as more fully set forth in Attachment H (BESS Requirements) to this Contract. For each BESS Measurement Period for which the BESS fails to demonstrate that it satisfies the RTE Performance Metric, Subscriber Organization shall pay, in accordance with Attachment C Section 8, (Payment of Liquidated Damages for Failure to Achieve Performance Metrics; Limitation on Liquidated Damages), and Company shall accept, as liquidated damages for such shortfall, in the amount to be calculated as provided in this Section 6.A, (RTE Test and Liquidated Damages) and in Attachment B (Company Payments for Energy, Dispatchability and Availability of Bess), upon proper demand at the end the BESS Measurement Period in question.

The RTE Performance Metric is     %. The RTE Performance Metric represents the lowest acceptable efficiency of the BESS for a full charge and discharge cycle if all energy to achieve the full cycle was taken from and delivered to the Point of Interconnection. **[DRAFTING NOTE: PERCENTAGE TO BE TAKEN FROM RESPONSE TO RFP. The metric will remain a “theoretical” POI to POI worse acceptable performance, even though the intake energy measurement used in the RTE test will move electrically closer to the BESS. This is in the Subscriber Organization's favor, as it can expect to gain efficiency (less losses) by moving the intake energy measurement point closer to the BESS as set forth in Attachment H.]**

The liquidated damages threshold ("LDT") is equal to the RTE Performance Metric minus 2 percentage points.

The Selected RTE Test is the RTE Test most recently completed during the BESS Measurement Period in question.

Subscriber Organization shall be liable for liquidated damages if:



$$(PM - RTE Ratio) > 2\%$$

Where:

PM = RTE Performance Metric stated as percentage

RTE Ratio = RTE Ratio from Selected RTE Test stated as percentage

For each percentage point by which the RTE Ratio is below the LDT, Subscriber Organization shall pay, and Company shall accept, liquidated damages in an amount equal to two-tenths of one percent (0.002) of the BESS Allocated Portion of the Lump Sum Payment for the BESS Measurement Period in question.

Each Party agrees and acknowledges that (i) the damages that Company would incur if the Subscriber Organization fails to achieve the RTE Performance Metric for a BESS Measurement Period would be difficult or impossible to calculate with certainty and (ii) the aforesaid liquidated damages are an appropriate approximation of such damages.

- B. RTE Test Termination Rights. The Parties acknowledge that, although the intent of the liquidated damages payable under Section 6.A. (RTE Test and Liquidated Damages) is to compensate Company for the damages that Company would incur if the BESS fails to demonstrate satisfaction of the RTE Performance Metric during a BESS Measurement Period, such liquidated damages are not intended to compensate Company for the damages that Company would incur if a pattern of underperformance establishes a reasonable expectation that the BESS is likely to continue to substantially underperform the Company's expectations. Accordingly, and without limitation to Company's rights under said Section 6. A. (RTE Test and Liquidated Damages) for those BESS Measurement Periods during which the BESS fails to demonstrate satisfaction of the RTE Performance Metric, substantial underperformance shall give rise to a termination right as set forth in this Section 6.B. (RTE Test Termination Rights). If the RTE Ratio for the Selected RTE Test for the BESS Measurement Period in question is more than 15 percentage points below the RTE Performance Metric for any two BESS Measurement Periods during a 12-month period, an 18-month cure period (the "RTE Cure Period") will commence on the Day following the close of the second such BESS Measurement Period. For each BESS Measurement Period during such RTE Cure Period, RTE Tests shall continue to be conducted as set forth in Attachment H (BESS Requirements) and liquidated damages paid and accepted as set forth in Section 6.A. (RTE Test and Liquidated Damages); provided, however, that if the Subscriber Organization fails to demonstrate satisfaction of the RTE Performance Metric prior to the expiration of the RTE Cure Period, such failure shall constitute an Event of Default under Section 13.6 of this Contract for which Company shall have the rights (including but not limited to the termination rights) set forth in Section 13. (Events of Default) and Section 15. (Damages in the Event of Termination by Company) of this Contract.

7. **[RESERVED]**

8. **PAYMENT OF LIQUIDATED DAMAGES FOR FAILURE TO ACHIEVE PERFORMANCE METRICS; LIMITATION ON LIQUIDATED DAMAGE.**

- A. Payment of Performance Metrics LDs by Subscriber Organization. With respect to the liquidated damages payable under Section 1. (PV System Equivalent Availability Factor Performance Metric; Liquidated Damages; Termination Rights), Section 2. (Measured Performance Metric; Liquidated Damages; Termination Rights) Section 3. (BESS Capacity Test; Liquidated Damages; Termination Rights), Section 4. (BESS Annual Equivalent Availability Factor ; Liquidated Damages; Termination Rights), Section 5. (BESS Annual Equivalent Forced Outage Factor; Liquidated Damages) and Section 6. (BESS Round Trip Efficiency Test; Liquidated Damages; Termination

Rights) (collectively, the "Performance Metrics LDs"), Company shall have the right, at any time on or after the LD Assessment Date for the liquidated damages in question, at Company's option, to set-off such liquidated damages from the amounts to be paid to Subscriber Organization for the Unsubscribed RDG or, to draw such liquidated damages from the Operating Period Security, as follows:

1. [Reserved]
2. if the Monthly Report for the calendar month, MPR Assessment Period, or BESS Measurement Period in question, as applicable, shows a failure to achieve one or more of the Performance Metrics required for the LD Period in question, the MPR Measurement Period in question, or the BESS Measurement Period in question, as applicable, and Company does not submit a Notice of Disagreement with respect to such Monthly Report, the Company shall have the right to set-off or draw the amount of liquidated damages owed for such failure as calculated as provided in Section 1. (PV System Equivalent Availability Factor Performance Metric; Liquidated Damages; Termination Rights), Section 2. (Measured Performance Metric; Liquidated Damages; Termination Rights), Section 3. (BESS Capacity Test; Liquidated Damages; Termination Rights), Section 4. (BESS Annual Equivalent Availability Factor; Liquidated Damages; Termination Rights), Section 5. (BESS Annual Equivalent Forced Outage Factor; Liquidated Damages), and Section 6. (BESS Round Trip Efficiency Test; Liquidated Damages; Termination Rights) as applicable;
3. in all cases in which Company submits a Notice of Disagreement for a given Monthly Report, Company shall have the right to set-off or draw all or any portion of the amount of liquidated damages for the calendar month in question, MPR Assessment Period in question, or BESS Measurement Period in question, as applicable, as calculated on the basis of the shortfall(s) in the achievement of the Performance Metric(s) in question, as shown in such Notice of Disagreement; and
4. in the event of any disagreement as to the liquidated damages owed under clause 8.A.1. and 8.A.3.above:
  - a. if the amount set-off or drawn by the Company exceeds the amount of liquidated damages for such calendar month, BESS Measurement Period or MPR Assessment Period that are eventually found to be payable for the LD Period in question as determined under Section 2. (Monthly Report Disagreements) of Attachment E (Monthly Reporting and Dispute Resolution by Independent AF Evaluator) to this Contract, Company shall promptly (and in no event more than forty-five (45) Business Days from the date of such determination) repay such excess to Subscriber Organization together with, unless the Parties otherwise agree in writing, interest from the date of Company's set-off or draw until the date that such excess is repaid to Subscriber Organization at the average Prime Rate for such period; and
  - b. if Company does not exercise its rights to set-off or draw liquidated damages for such calendar month, BESS Measurement Period or MPR Assessment Period, or does not set-off or draw the full amount of the liquidated damages for such calendar month, BESS Measurement Period or MPR Assessment Period that are eventually found to be payable for the LD Period, BESS Measurement Period or MPR Assessment Period in question as determined under Section 2. (Monthly Report Disagreements) of Attachment E (Monthly Reporting and Dispute Resolution by Independent AF Evaluator) to this Contract, Subscriber Organization shall promptly, upon such determination as aforesaid, pay to Company the amount of liquidated damages that are found to be owing together with, unless otherwise agreed by the Parties in writing, interest on the amount of such liquidated damages that went unpaid from the applicable LD Assessment Date for such liquidated damages until the date such liquidated damages are paid to Company in full at the average

Prime Rate for such period, and Company shall have the right, at its option, to set-off such interest from the amounts to be paid to Subscriber Organization for the Unsubscribed RDG or to draw from the Operating Period Security

a. .

- Any delay by Company in exercising its rights to set-off liquidated damages and/or interest from the amounts to be paid to Subscriber Organization for the Unsubscribed RDG or to draw such liquidated damages and/or interest from the Operating Period Security shall not constitute a waiver by Company of its right to do so.
- B. Limitation on Liquidated Damages. Notwithstanding any other provision of this Contract to the contrary, the aggregate liquidated damages paid by Subscriber Organization during each Contract Year for the Performance Metrics LDs, such payments by Subscriber Organization to include but not be limited to any set-offs or draws made by Company during such Contract Year pursuant to Section 8.A. (Payment of Performance Metrics LDs by Subscriber Organization) of this Attachment C (Required Performance Metrics; Liquidated Damages), shall not exceed the total of the twelve (12) monthly Lump Sum Payments payable during such Contract Year pursuant to Section 4.B. (Lump Sum Payment) and Section 4.G. (Payment Procedures) of the Contract. For avoidance of doubt: A monthly Lump Sum Payment that is invoiced by Subscriber Organization to Company pursuant to Section 4.F. (Subscriber Organization's Preparation of the Monthly Invoice) for, e.g., the twelfth (12th) calendar month of Contract Year N but is paid during Contract Year N+1 as provided in Section 4.G. (Payment Procedures) shall, for purposes of determining the limitation on Performance Metrics LDs under this Section 8.B. (Limitation on Liquidated Damages) of Attachment C (Required Performance Metrics; Liquidated Damages), be included in the total of the twelve (12) monthly Lump Sum Payments payable during Contract Year N+1. As a result of the foregoing, the total of the monthly Lump Sum Payments used to establish the limitation on Performance Metrics LDs for the initial Contract Year under this Section 8.B. (Limitation on Liquidated Damages) of Attachment C (Required Performance Metrics; Liquidated Damages) will be less than twelve (12). The Parties acknowledge that, because the monthly Lump Sum Payment is subject to adjustment (including downward adjustment) as provided in Section 4.B. of the Contract (Lump Sum Payment), it is possible that a downward adjustment in some or all of the monthly Lump Sum Payments payable during a Contract Year might cause the Performance Metrics LDs paid by Subscriber Organization during the course of such Contract Year to exceed the limitation on the Performance Metrics LDs for such Contract Year established at the close of such Contract Year pursuant to the first sentence of this Section 8.B. (Limitation on Liquidated Damages). In such case, Company shall promptly upon the determination that the Performance Metrics LDs paid during the course of such Contract Year exceeded the limitation on Performance Metrics LDs for such Contract Year (and in no event more than forty-five (45) Business Days from the end of such Contract Year) repay such excess amount to Subscriber Organization without interest.
- C. Payment of Shortfall Performance Metrics LDs by Reduction of Bill Credits.
1. If Performance Metrics LDs remain unpaid after Company has exercised its rights under Attachment C Section 8.A. (Payment of Performance Metrics LDs by Subscriber Organization) to set off such liquidated damages from the amounts to be paid to Subscriber Organization and to draw such liquidated damages from the Operating Period Security, the Company shall have the right to pay such unpaid Performance Metrics LDs ("Shortfall Performance Metrics LDs") by reducing Bill Credits in the aggregate amount of such unpaid Shortfall Performance Metrics LDs. The reduction in Bill Credits shall be proportionate so that the burden of paying the Shortfall Performance Metrics LDs is shared equitably among the Subscribers.

2. In the event of any disagreement under Attachment C Section 8.A. (Payment of Performance Metrics LDs by Subscriber Organization) as to the amount of liquidated damages owing:
  - a. Upon the resolution of such disagreement pursuant to Section 2. (Monthly Report Disagreements) of Attachment E (Monthly Reporting and Dispute Resolution by Independent AF Evaluator) to this Contract, if such resolution has the effect of reducing the Shortfall Performance Metrics LDs, and if such reduction in the Shortfall Performance Metrics LDs has the effect of causing the reduction in Bill Credits previously implemented by Company to exceed the actual amount of the Shortfall Performance Metrics LDs (the amount of such excess being referred to herein on the "Excess Reduction in Bill Credits"), Company shall promptly (and in no event later than the second billing cycle for each Subscriber following the date of the resolution of such disagreement as aforesaid) afford to such Subscriber a Bill Credit (referred to herein as a "Compensatory Bill Credit") in an amount equivalent to the total of (i) such Subscriber's proportionate share of the Excess Reduction in Bill Credits and (ii), unless the Company and Subscriber Organization otherwise agree in writing as provided Section 4.A. (Purchase and Sale of Renewable Energy, Dispatchability of CBRE Facility and Availability of the BESS) of the Contract, interest on the amount of the Excess Reduction in Bill Credits from the date Company implemented such Excess Reduction in Bill Credits with respect to such Subscriber until the date that Company applies the Compensatory Bill Credit against such Subscriber's retail electric service bill, at the average Prime Rate for such period; and
  - b. Upon the resolution of such disagreement pursuant to Section 2. (Monthly Report Disagreements) of Attachment E (Monthly Reporting and Dispute Resolution by Independent AF Evaluator) to this Contract, if Company has not previously exercised -its rights to set-off or draw liquidated damages pursuant to Section 8.A. (Payment of Performance Metrics LDs by Subscriber Organization), or has not previously set-off or drawn from the Performance Security the full amount of the liquidated damages that are eventually found to be payable as a result of the resolution of such disagreement, ,Company shall have the right to reduce Subscriber Bill Credits in an amount equal to the total of Subscribers' share of pay such Shortfall Performance Metrics LDs

--END--

**ATTACHMENT D**  
**CALCULATION AND ADJUSTMENT OF NET ENERGY POTENTIAL**

**1. NET ENERGY POTENTIAL.**

A. Net Energy Potential and the Intent of the Parties. The essence of this Attachment D is that Company is paying to Subscriber Organization a Lump Sum Payment in exchange for Company's right to dispatch, subject to Renewable Resource Variability, the Facility's Net Energy Potential. Under this Attachment D, "Net Energy Potential": (i) constitutes an estimated single number with a P-Value of 95 for annual Net Energy that could be produced by the Facility based on the estimated long-term monthly and annual total of such production over a period of ten years excluding losses due to availability and Company Dispatch; (ii) is subject to adjustment from time to time as provided in this Attachment D (Calculation and Adjustment of Net Energy Potential); and (iii) as so adjusted, provides a basis for calculating and adjusting the Lump Sum Payment, as provided in Section 3. (Calculation of Lump Sum Payment) of Attachment B (Company Payments for Energy, Dispatchability and Availability of BESS) to the Contract. The Net Energy Potential shall be calculated using, but not limited to, long-term resource data correlated with on-site measurements (if available), the most current construction design and equipment specifications, and industry-accepted energy simulation models. Loss factors and uncertainty analysis are to be determined using industry best practices and standard assumptions. Loss factors shall include, but not be limited to, electrical losses. Loss factors will exclude losses due to availability and Company Dispatch. In the case of the Initial OEPR and any Subsequent OEPR evaluation, the Net Energy Potential shall also consider historical operational data further described in this Attachment D Section 2.E (Terms of Engagement). It is the intent of the Parties that the estimate of Net Energy Potential, as calculated and adjusted as aforesaid, should reflect the following risk allocation between the Parties under the Contract:

1. Subscriber Organization has assumed the risk of downward adjustment to the Net Energy Potential (and hence the Lump Sum Payment) to account for any of the following circumstances:
  - a. if the Renewable Resource Baseline (as estimated on the basis of the typical meteorological year as derived from the Site's measured meteorological data) is lower than Subscriber Organization had assumed when it submitted its RFP Proposal;
  - b. if the as-built design and construction of the Facility is not as efficient in generating electrical energy and delivering such electric energy to the Point of Interconnection as Subscriber Organization had assumed when it submitted its RFP Proposal; and
  - c. if the Facility's level of operational efficiency is below the standard of comparable facilities;
  - d. Company has assumed the risk of the following (i.e., the following are to be disregarded for purposes of estimating Net Energy Potential (and hence the Lump Sum Payment)):
    - e. Renewable Resource Variability; and
    - f. the possibility that, at any given moment, Company does not need to dispatch any or all of the electric energy that the Facility is then capable of generating and delivering to the Point of Interconnection.
2. The foregoing is not intended as an exhaustive list of the risks assumed by either Party under this Attachment D or as a limitation on the circumstances that an OEPR Evaluator, in its professional judgment, may decide to take into account in preparing its OEPR under Section

- 2.E. (Terms of Engagement) of this Attachment D (Calculation and Adjustment of Net Energy Potential).
- B. NEP RFP Projection. In its RFP Proposal, the Subscriber Organization projected that the Facility would have a Net Energy Potential (as defined in this Attachment D) of [REDACTED] MWh [NOTE – INSERT NEP FROM RFP PROPOSAL] and provided the plane of array irradiance data used in arriving at the NEP RFP Projection, and Company relied on Subscriber Organization's NEP RFP Projection in deciding to contract with Subscriber Organization in lieu of other developers. Among the fundamentals of the bargain evidenced in this Attachment D is that there will be consequences to Subscriber Organization if (i) the IE Energy Assessment does not support the NEP RFP Projection and/or (ii) the operational performance of the Facility indicates a Net Energy Potential that is below the applicable thresholds set forth in this Attachment D (Calculation and Adjustment of Net Energy Potential).
- C. NEP IE Estimate and Company-Designated NEP Estimate. Prior to the closing of the construction financing for the Facility but in no event later than the Commercial Operations Date, the Subscriber Organization shall provide Company with a copy of the IE Energy Assessment Report and the data on plane of array irradiance and corresponding power output used in arriving at the NEP IE Estimate. In addition, Subscriber Organization shall obtain from the administrative agent of the Facility Lender and provide to Company, at financial close of the construction debt financing, a confirmation letter confirming to Company that the IE Energy Assessment Report including the data on plane of array of irradiance and corresponding power output used in arriving at the NEP IE Estimate provided by Subscriber Organization to Company is the final energy assessment prepared for the Facility Lender as part of the Facility Lender's due diligence leading up to the Facility Lender's legally binding commitment (subject to certain conditions precedent) to provide a specific amount of financing for the Project as evidenced by the Facility Lender's execution of the Financing Documents. If the IE Energy Assessment Report fails to provide a NEP IE Estimate that is consistent with the requirements of this Attachment D in all material respects, or if the data on plane of array of irradiance and corresponding power output used in arriving at the NEP IE Estimate is not provided, or if the aforementioned confirmation letter is not provided, Company shall have the option, exercisable by written notice to Subscriber Organization issued no later than 30 Days, or such longer period as the Parties may agree in writing, following the first to occur of Company's receipt of (i) the IE Energy Assessment Report or (ii) notice that Company will not be provided with a copy of the IE Energy Assessment Report and the data on plane of array of irradiance, ambient temperature, wind speed and corresponding power output used in arriving at the NEP IE Estimate, to designate such Company-Designated NEP Estimate as Company, in its sole discretion, determines to be reasonable in light of the information then available to Company. In connection with Company's decision as to whether to designate a Company-Designated NEP Estimate, Company shall have the right to require Subscriber Organization to pay for an energy assessment to be performed by an independent engineer selected by Company. In such case, the aforesaid 30-Day period for Company's decision to designate a Company-Designated NEP Estimate shall be tolled for the time necessary to prepare such assessment. If Company fails, within the aforesaid 30-Day period as such period may be tolled as provided in the preceding sentence, to designate a Company-Designated NEP Estimate, the NEP RFP Projection shall constitute the First NEP Benchmark, unless the Parties agree in writing on a lower First NEP Benchmark.
- D. NEP IE Estimate, Liquidated Damages and Subscriber Organization's Null and Void Right. If the NEP IE Estimate is higher than the NEP RFP Projection, the NEP RFP Projection shall constitute the First NEP Benchmark. In any other case, Subscriber Organization shall have the option to declare the Contract null and void by written notice to Company as follows:

1. if (aa) the NEP IE Estimate is lower than the NEP RFP Projection and (bb) Subscriber Organization issues its null and void notice to Company not later than 30 Days after issuance of the IE Energy Assessment Report; or
  2. if (aa) Company exercises its right to designate a Company-Designated NEP Estimate under Section 1.C. (NEP IE Estimate and Company-Designated NEP Estimate) of this Attachment D (Calculation and Adjustment of Net Energy Potential), (bb) such Company-Designated NEP Estimate is lower than the NEP RFP Projection, and (cc) Subscriber Organization issues its null and void notice to Company not later than 30 Days after Company's notice of the Company-Designated NEP Estimate.
  3. If Subscriber Organization fails to declare this Contract null and void under the conditions set forth in either clause (1) or clause (2) above, then: (x) the NEP IE Estimate or the Company-Designated NEP Estimate, as applicable, shall thereafter constitute the First NEP Benchmark and (y) Subscriber Organization shall, within five (5) Business Days following the expiration of the applicable 30-Day period for the issuance of Subscriber Organization's null and void notice, pay liquidated damages equal to \$10 for every MWh by which the NEP RFP Projection exceeds the First NEP Benchmark for the initial Contract Year.
- E. Initial OEPR. Following the Initial NEP Verification Date, the Initial OEPR shall be prepared pursuant to the process set forth in Section 2. (Preparation of OEPR) of this Attachment D (Calculation and Adjustment of Net Energy Potential) and the Initial NEP OEPR Estimate shall be as set forth in or derived from the Initial OEPR, as more fully set forth in Section 2. E. (Terms of Engagement) of this Attachment D (Calculation and Adjustment of Net Energy Potential). If the Initial NEP OEPR Estimate differs from the First NEP Benchmark, the Lump Sum Payment shall be recalculated and adjusted as provided in Section 3.B. (Lump Sum Payment during Second Benchmark Period) of Attachment B (Company Payments for Energy, Dispatchability and Availability of BESS) to the Contract.
- F. Subsequent OEPRS.
1. Required Subsequent OEPR. If Subscriber Organization makes any changes to the Facility that involve (i) replacing any step-up transformer(s) or (ii) making any other changes (e.g., changing the characteristics of the Facility equipment or the specifications used in the IRS) that Company reasonably determines require an updated IRS, then Subscriber Organization shall also be required to have a subsequent OEPR prepared as of the first Day of the calendar month following the second anniversary of the date such change to the Facility was completed.
  2. Voluntary Subsequent OEPR. Without limitation to the generality of Section 1.F.1. (Required Subsequent OEPR) of this Attachment D (Calculation and Adjustment of Net Energy Potential), if the Subscriber Organization makes any changes to the Facility (e.g., replacing original equipment) that does not trigger a required Subsequent OEPR but which changes Subscriber Organization has reasonable grounds to believe will improve the Facility's Net Energy Potential, Subscriber Organization shall have a one-time option, exercisable by written notice to Company issued not less than 120 Days prior to the Applicable NEP Verification Date, of having a subsequent OEPR prepared as of a date no sooner than 12 months following completion of the then most recent OEPR.
  3. Subsequent OEPR and Adjustment to Lump Sum Payment. If the Subsequent NEP OEPR Estimate differs from the Most Recent Prior NEP Benchmark, the Lump Sum Payment shall be recalculated and adjusted as provided in Section 3.B. (Lump Sum Payment Following Second Benchmark Period) of Attachment B (Company Payments for Energy, Dispatchability and Availability of BESS) to the Contract.

2. **PREPARATION OF OEPR.** The following provisions apply to the Initial OEPR and any Subsequent OEPR:
- A. **Selection of OEPR Evaluator.** No later than 90 Days prior to the Applicable NEP Verification Date, Company and Subscriber Organization shall select, in accordance with the terms of this Section 2.A. (Selection of OEPR Evaluator), an independent engineering firm from the firms listed on the OEPR Consultants List (the "OEPR Evaluator") to prepare an operational energy production report ("OEPR"). Each party shall select the names of two (2) firms from the OEPR Consultants List. If there is mutual agreement on one or both of the named firms, then the Subscriber Organization shall select one of the named firms to serve as the OEPR Evaluator. If there is no agreement on any of the named firms, then Subscriber Organization shall select one of the firms named by the Company.
  - B. **Eligibility for Appointment as OEPR Evaluator.** Both Parties agree that the engineering firms listed in Section 2. J. (Acceptable Persons and Entities) of this Attachment D (Calculation and Adjustment of Net Energy Potential) are fully qualified to prepare the OEPR. By mutual agreement between the Parties in writing, both Parties acting reasonably, a name or names may be added to or removed from the OEPR Consultants List at any time. In no event shall there be less than three (3) names on the OEPR Consultants List.
  - C. **OEPR Period of Record.** It is the intent of the Parties that the OEPR shall be prepared using measured meteorological and production data from the OEPR Period of Record. However, although the OEPR Period of Record is a twelve-month period, the Parties acknowledge that, in certain circumstances (e.g., Force Majeure), there may not be twelve months of data available for the OEPR Period of Record. In such case, (i) it is the intent of the Parties that the OEPR be prepared using such measured meteorological and production data that is available from the OEPR Period of Record and (ii) Parties may, by written agreement, direct the OEPR Evaluator to use such additional data outside of the OEPR Period of Record as the Parties may agree. The preceding sentence does not constitute a limitation on the professional judgment of the OEPR Evaluator as to the appropriateness of using measured meteorological and/or production from outside of the OEPR Period of Record.
  - D. **Participation of Parties.** Promptly following the Applicable NEP Verification Date, Subscriber Organization and Company shall provide the OEPR Evaluator with such data from the OEPR Period of Record as they consider to be material to the preparation of the OEPR. Subscriber Organization and Company shall also provide such additional data and information as the OEPR Evaluator may reasonably request. The Parties shall assist the OEPR Evaluator throughout the process of preparing the OEPR, including making key personnel and records available to the OEPR Evaluator, but neither Party shall be entitled to participate in any meetings with personnel of the other Party or review of the other Party's records. However, the OEPR Evaluator will have the right to conduct meetings, hearings or oral arguments in which both Parties are represented. Subscriber Organization and Company shall have forty-five (45) Days from issuance of the draft OEPR Report to review and provide feedback to the OEPR Evaluator on such report.
  - E. **Terms of Engagement.** Upon selection of the OEPR Evaluator, as set forth in this Attachment D (Calculation and Adjustment of Net Energy Potential), the Subscriber Organization shall retain and contract with the OEPR Evaluator in accordance with the terms of this Attachment D (Calculation and Adjustment of Net Energy Potential). The OEPR Evaluator's scope of work and expected deliverables for all OEPRs must be acceptable to Company and shall, among other things, require the OEPR Evaluator to provide (i) an estimated single number with a P-Value of 95 for annual Net Energy that could be produced by the Facility based on the estimated long-term monthly and annual total of such production over a period of ten years; (ii) the data on plane of array of irradiance and corresponding power output used in arriving at the aforementioned estimated annual Net Energy;



(iii) the GPR Performance Metric as provided in Section 1.E. ( Initial OEPR) or Section 1.F. (Subsequent OEPR and ) of this Attachment D, as applicable; and (iv) any additional information that may be reasonably required by a Party with respect to the methodology used by the OEPR Evaluator to reach its conclusion. The provisions of this Attachment D (Calculation and Adjustment of Net Energy Potential) do not impose a limit on the OEPR Evaluator's professional judgment as to what other estimates (if any) to include in the OEPR. Without limiting the professional judgment of the OEPR Evaluator in estimating the Net Energy Potential and GPR Performance Metric, the following is a general description of how the Parties anticipate that the OEPR Evaluator will proceed:

1. The purpose of an OEPR is to implement the intent of the Parties as set forth in Section 1. A. (Net Energy Potential and the Intent of the Parties) of this Attachment D (Calculation and Adjustment of Net Energy Potential) by evaluating (i) whether, when the Renewable Resource Baseline (as estimated by the OEPR Evaluator on the basis of the typical meteorological year as derived from the Site's measured meteorological data) is present and the Facility is in Full Dispatch, the Facility is capable of doing what the Parties expected the Facility to do: i.e., generating and delivering to the Point of Interconnection electric energy in an amount consistent with the then applicable Net Energy Potential of the Facility (i.e., the estimate of Net Energy Potential then being used to calculate the monthly Lump Sum Payment pursuant to Section 3. (Calculation of Lump Sum Payment) of Attachment B (Company Payments for Energy, Dispatchability and Availability of BESS to the Contract); and (ii) if the Facility is not doing what the parties expected in this regard, identifying a new estimated single number with a P-Value of 95 for annual Net Energy that could be generated and delivered by the Facility based on the estimated long-term monthly and annual total of such production over a period of the next ten years.
  2. At a high level, the analysis relies on reported Actual Output (i.e., energy delivered to the Point of Interconnection) during the OEPR Period of Record to estimate Facility performance over a future evaluation period of ten years. The data from the OEPR Period of Record are first quality screened and evaluated. One-time events are assessed and removed from the record where appropriate. Values for potential energy are then calculated from the reported energy production measured at the Point of Interconnection by adjusting for 100% availability and undischarged energy. Suitable long-term reference data sets are then identified by analyzing the reference for irradiance and the normalized values for potential energy production at the Point of Interconnection over the OEPR Period of Record. Relationships between selected long-term reference irradiance data sets and normalized values for potential energy production at the Point of Interconnection are used to calculate long-term values for such on a monthly and annual basis. Finally, estimates of future Facility availability (taking into account anticipated maintenance) and losses (such as system degradation and balance of plant losses) are applied in order to calculate the Net Energy Potential. For this purpose, no reductions are made for future estimates of energy that Company may choose not to dispatch. If a copy of the IE Energy Assessment Report is available to the OEPR Evaluator, the OEPR Evaluator should review such Report before commencing preparation of the OEPR and evaluate whether it is appropriate for the OEPR Evaluator to take into account any of the work reflected in the IE Energy Assessment Report.
- F. Timeline and Fees. The terms of engagement with the OEPR Evaluator shall require the OEPR Evaluator to provide, for Party review, a draft OEPR that shall include a NEP OEPR Estimate and a Guaranteed Measured Performance Ratio Benchmark within 30 Days following the NEP Applicable Verification Date ("First OEPR"). The OEPR Evaluator shall be required to provide its completed OEPR within 30 Days following the end of the Parties' 45-Day review period under Section 2.D. (Participation of Parties) of this Attachment D (Calculation and Adjustment of Net

Energy Potential)The Parties shall each pay fifty percent (50%) of the fees and expenses charged by the OEPR Evaluator in connection with the Initial OEPR. For the Initial OEPR, the OEPR Evaluator's fees and costs must be acceptable to Company. Subscriber Organization shall pay all of the fees and expenses charged by the OEPR Evaluator in connection with any Subsequent OEPR. Subscriber Organization shall also pay for any reasonable internal fees and costs incurred by the Company as a result of its participation in the process set forth in Section 2.D. (Participation of Parties) of this Attachment D (Calculation and Adjustment of Net Energy Potential).

- G. Review of the First OEPR or and Subsequent OEPR Report. In the event Company or Subscriber Organization does not agree with the NEP OEPR Estimate or GPR Performance Metric determined by the First OEPR Evaluator, Subscriber Organization or Company may, within 30 Days of issuance of the First OEPR, engage, at its own cost, a different expert evaluator from the OEPR Consultants List (the "Second OEPR Evaluator") to prepare a second OEPR that shall include a NEP OEPR Estimate or GPR Performance Metric, as applicable ("Second OEPR"). The terms of engagement with the Second OEPR Evaluator shall require the Second OEPR Evaluator to issue the Second OEPR within 60 Days following the date of its appointment. In the event the NEP OEPR Estimates or GPR Performance Metric, as applicable, provided by the First OEPR Evaluator and the Second OEPR Evaluator are different then, within ten (10) Days of the issuance of the Second OEPR, the Parties shall, with the two evaluators, confer in an attempt to mutually agree upon a NEP OEPR Estimate or GPR Performance Metric, as applicable ("OEPR Conference").
- H. Review of the Second OEPR Evaluator Report. If the Parties are unable to agree upon an NEP OEPR Estimate or GPR Performance Metric, as applicable, within 30 Days of the OEPR Conference, then within ten (10) Days thereafter the First OEPR Evaluator and Second OEPR Evaluator shall, by mutual agreement, select a third firm from the OEPR Consultants List to act as an independent OEPR Evaluator ("Third OEPR Evaluator"). The Third OEPR Evaluator shall not be a person from the same entity as the First OEPR Evaluator or the Second OEPR Evaluator. The Parties shall direct the Third OEPR Evaluator to review the First OEPR and Second OEPR and select one as the final and binding NEP OEPR Estimate and/or GPR Performance Metric, as applicable ("Third OEPR"). The Third OEPR Evaluator shall complete its review and selection of the NEP OEPR Estimate within thirty (30) Days following his or her retention. If the Third OEPR Evaluator selects the First OEPR, then the Party requesting the Second OEPR shall pay for the cost of the Third OEPR. If the Third OEPR Evaluator selects the Second OEPR, then the Parties shall each pay fifty percent (50%) of the fees and expenses charged by the Third OEPR Evaluator in connection with the Third OEPR.
- I. Final, Binding and Conclusive. The Parties acknowledge the inherent uncertainty in estimating the Net Energy Potential and GPR Performance Metric and hereby assume the risk of such uncertainty and waive any right to dispute any of the qualification of the person or entity appointed as the OEPR Evaluator pursuant to Section 2.A. (Selection of OEPR Evaluator) and Section 2.B. (Eligibility for Appointment as OEPR Evaluator) of this Attachment D (Calculation and Adjustment of Net Energy Potential), the appropriateness of the methodology used by OEPR Evaluator in preparing the OEPRs, the NEP OEPR Estimate and/or the GPR Performance Metric. Without limitation to the generality of the preceding sentence, the determination of the NEP OEPR Estimate and GPR Performance Metric in the First OEPR, Second OEPR (if applicable), or final decision of the Third OEPR Evaluator (if applicable) shall be final, conclusive and binding upon Company and Subscriber Organization and shall not be subject to further dispute under Section 17. (Dispute Resolution) of the Contract; provided that, nothing in this Section 2.I. (Final, Binding and Conclusive) of this Attachment D (Calculation and Adjustment of Net Energy Potential) shall preclude Subscriber Organization from engaging an OEPR Evaluator to issue a Subsequent OEPR as allowed pursuant to Section 1.F. (Subsequent OEPRs) of this Attachment D (Calculation and Adjustment of Net Energy Potential).

J. Acceptable Persons and Entities. The OEPR Evaluator and Second OEPR Evaluator shall be selected from the following engineering firms listed below, subject to such additions or deletions effectuated by the Parties as provided in Section 2.F (Eligibility for Appointment as Independent AF Evaluator) of Attachment E (Monthly Reporting and Dispute Resolution by Independent AF Evaluator) to the Contract and Section 2.B. (Eligibility for Appointment as OEPR Evaluator) of this Attachment D (Calculation and Adjustment of Net Energy Potential):

- DNV GL
- UL
- Black & Veatch
- Leidos Engineering

--END--

**ATTACHMENT E  
MONTHLY REPORTING AND DISPUTE  
RESOLUTION BY INDEPENDENT AF EVALUATOR**

1. **MONTHLY REPORT.** Commencing with the month during which the Commercial Operations Date is achieved, and for each calendar month thereafter during the Term, Subscriber Organization shall provide to Company a Monthly Report in Excel, Lotus or such other format as Company may require (“Monthly Report”), which Monthly Report shall include (i) the data for the calendar month in question populated into the form of the “PV System Monthly Report” below, (ii) the data for the BESS Measurement Period ending with the calendar month in question populated into the form of "BESS Measurement Period Report" below, and (iii) Subscriber Organization's calculations of the performance metrics and any liquidated damages assessments for the LD Period ending with such calendar month as set forth below. Subscriber Organization shall deliver such Monthly Report to Company by the tenth (10<sup>th</sup>) Business Day following the close of the calendar month in question. Subscriber Organization shall deliver the Monthly Report electronically to the address provided by the Company. Company shall have the right to verify all data set forth in the Monthly Report by inspecting measurement instruments and reviewing Facility operating records. Upon Company's request, Subscriber Organization shall promptly provide to Company any additional data and supporting documentation necessary for Company to audit and verify any matters in the Monthly Report.

**PV System Monthly Report**

**NAME OF IPP FACILITY:** [Facility Name]

**MONTHLY REPORT PERIOD:** [Month Day, Year] to [Month Day, Year]

Enter the information for each Force Majeure event effecting the PV System during the reporting period. Dates and times should be entered to the nearest minute. Duration and equivalent hours should be rounded to 2 decimal places. When using MWs for item (D) below, Contract Capacity is to be provided for (E); and when using number of devices for item (D), total number of devices is to be provided for (E).

Date/Time Start (A)	Date/Time End (B)	Duration (hrs) (C) = (B-A)	Size of effect in MW or Number of devices that are offline (D)	Contract Capacity or Total number of devices in the effected system (E)	Equivalent Hours (hrs) (C x D)/E
...					

Calendar hours in the reporting period: \_\_\_\_\_

Total equivalent hours for the reporting period (from above, with proper accounting for any simultaneous events): \_\_\_\_\_

Please provide the following availability information even in months containing Force Majeure even though it will not be applied in the PV System EAF Calculation.

Enter the information for each Outage during the reporting period. Dates and times should be entered to the nearest minute. Duration should be rounded to 2 decimal places.

Date/Time Start (A)	Date/Time End (B)	Duration (hrs) (B-A)
...		

Calendar hours in the reporting period: \_\_\_\_\_

Total Outage hours for the reporting period (from above): \_\_\_\_\_

Available Hours (AH) in the reporting period: \_\_\_\_\_

AH from the last eleven (11) reporting periods: \_\_\_\_\_

AH for the last twelve (12) reporting periods: \_\_\_\_\_

Enter the information for each Subscriber Organization Attributable Derating events during the reporting period. Dates and times should be entered to the nearest minute. Duration and equivalent hours should be rounded to 2 decimal places. When using MWs for item (D) below, Contract Capacity is to be provided for (E); and when using number of inverters for item (D), total number of inverters is to be provided for (E).

Date/Time Start (A)	Date/Time End (B)	Duration (hrs) (C) = (B-A)	Size of derating in MWs or Number of Inverters (D)	Contract Capacity or Total number of Inverters in the PV System (E)	Equivalent Hours (hrs) (C x D)/E
...					

Total Equivalent Subscriber Organization Attributable Derated hours (ESADH) for  
the reporting period: \_\_\_\_\_

ESADH from the last eleven (11) reporting periods: \_\_\_\_\_

ESADH for the last twelve (12) reporting periods: \_\_\_\_\_

Enter the information for each Planned Derating event during the reporting period. Dates and times should be entered to the nearest minute. Duration and equivalent hours should be rounded to 2 decimal places.

When using MWs for item (D) below, Contract Capacity is to be provided for (E); and when using number of inverters for item (D), total number of inverters is to be provided for (E).

Date/Time Start (A)	Date/Time End (B)	Duration (hrs) (C) = (B-A)	Size of derating in MWs or Number of Inverters (D)	Contract Capacity or Total number of Inverters in the PV System (E)	Equivalent Hours (hrs) (C x D)/E
...					

Total equivalent planned derated hours (EPDH) for the reporting period: \_\_\_\_\_

EPDH from the last eleven (11) reporting periods: \_\_\_\_\_

EPDH for the last twelve (12) reporting periods: \_\_\_\_\_

Enter the information for each Unplanned Derating event during the reporting period. Dates and times should be entered to the nearest minute. Duration and equivalent hours should be rounded to 2 decimal places. When using MWs for item (D) below, Contract Capacity is to be provided for (E); and when using number of inverters for item (D), total number of inverters is to be provided for (E).

Date/Time Start (A)	Date/Time End (B)	Duration (hrs) (C) = (B-A)	Size of derating in MWs or Number of Inverters (D)	Contract Capacity or Total number of Inverters in the PV System (E)	Equivalent Hours (hrs) (C x D)/E
...					

Total equivalent unplanned derated hours (EUDH) for the reporting period: \_\_\_\_\_

EUDH for the last eleven (11) reporting periods: \_\_\_\_\_

EUDH for the last twelve (12) reporting periods: \_\_\_\_\_

Period Hours (PH) is : (8760 hours if no 29<sup>th</sup> day in February in that last twelve months; otherwise 8784 hours; also can be adjusted appropriately depending on any month(s) containing Force Majeure in the last 12 reporting periods.)

Enter the Available Hours, ESADH, EPDH, and EUDH for the last twelve (12) reporting periods as calculated above.

AH (A)	ESADH (B)	EPDH (C)	EUDH (D)	PV System Annual Equivalent Availability Factor 100% x (A – B – C – D)/PH

If the month for which this monthly report has been prepared contains a Force Majeure event, please indicate the PV System Annual Equivalent Availability Factor calculated in the previous month’s monthly report.

Enter the following properties for the facility’s PV panels that are used in the calculation of the Measured Performance Ratio. Refer to Attachment C (Required Performance Metrics; Liquidated Damages) to the Contract for the definitions of terms.

DC rated capacity of the system at standard test conditions ( $P_{DCSTC}$ ): \_\_\_\_\_

Temperature coefficient of power in %/°C( $\delta$ ): \_\_\_\_\_

Temperature empirical constant ( $a$ ): \_\_\_\_\_

Wind speed empirical constant ( $b$ ): \_\_\_\_\_

Conduction temperature coefficient ( $dT_{cond}$ ): \_\_\_\_\_

Annual average irradiance-weighted cell temperature ( $T_{cell\_typ\_avg}$ ) \_\_\_\_\_

For the reporting period, provide the 15-minute interval averaged site data for the following measurements in .csv format (refer to Attachment C (Required Performance Metrics; Liquidated Damages) for the definitions of terms). The data set should include an indication of whether each interval is included or excluded in the calculation of the Measured Performance Ratio and the reason for exclusion (refer to Attachment C (Required Performance Metrics; Liquidated Damages) for data requirements).

Measured data:

- $P_{AC\_i}$  is the apparent power output of the PV System measured at the POI averaged over time period  $i$  (MW)
- $P_{DC\_i}$  is the measured DC power output of the PV System measured at the DC input to the BESS charging system averaged over time period  $i$  (MW)
- $G_{POA\_i}$  is the measured plane of array irradiance averaged over time period  $i$  ( $W/m^2$ );
- $T_{a\_i}$  is the measured ambient temperature averaged over time period  $i$  [°C]
- $WS_i$  is the measured wind speed corrected to a measurement height of 10 meters (using the anemometer height and proper Hellmann coefficient) averaged over time period  $i$  [m/s]

Calculated data:

- Computed cell temperature ( $T_{cell,i}$ )

Using the data provided above, enter the calculated values for Measured Performance Ratio rounded to the third decimal place (0.001).

Measured Performance Ratio for the reporting period: \_\_\_\_\_

Measured Performance Ratio for this reporting period and the previous eleven  
(11) reporting periods: \_\_\_\_\_

Enter the Applicable Contract Year and calculated Degradation Factor for the reporting period. Refer to Attachment C (Required Performance Metrics; Liquidated Damages) for how these should be calculated.

Applicable Contract Year: \_\_\_\_\_

Degradation Factor: \_\_\_\_\_

**BESS Measurement Period Report**

**NAME OF IPP FACILITY: [Facility Name]**

**BESS MEASUREMENT PERIOD: [Month Day, Year] to [Month Day, Year]**

Enter the applicable information operational data collected during the most recently completed BESS Capacity Test to demonstrate satisfaction of the BESS Capacity Performance Metric during the reporting period. This can either be from the most recent BESS Capacity Test performed during the period or taken from operating data reflecting the net output of the BESS.

Date/Time Start	Date/Time End	Total MWh delivered to the POI (A)	BESS Contract Capacity (MWh) (B)	BESS Capacity Ratio 100% x (A/B)

Enter the applicable information to demonstrate satisfaction of the BESS Round Trip Efficiency Performance Metric during the reporting period. This can either be from the most recent BESS RTE Test performed during the period or taken from operational data reflecting the charging/discharging of the BESS.

Date/Time Start	Date/Time End	Total MWh delivered to the POI (A)	Charging Energy (MWh) (B)	BESS RTE Ratio 100% x (A ÷ B)



Enter the information for each Force Majeure event effecting the BESS during the reporting period. Dates and times should be entered to the nearest minute. Duration, size of reduction, maximum rated output, and equivalent hours should be rounded to 1 decimal place.

Date/Time Start (A)	Date/Time End (B)	Duration (hrs) (C) = (B-A)	Size of Reduction (MW) (D)	Maximum Rated Output (MW) (E)	Equivalent Hours (hrs) (C x D)/E
...					

Calendar hours in the reporting period: \_\_\_\_\_

Total equivalent hours for the reporting period (from above, with proper accounting for any simultaneous events): \_\_\_\_\_

Please provide the following BESS availability information even in months containing Force Majeure even though it will not be applied in the PV System EAF Calculation.

Enter the information for each BESS Outage during the reporting period. Dates and times should be entered to the nearest minute. Duration should be rounded to 1 decimal place.

Date/Time Start (A)	Date/Time End (B)	Duration (hrs) (B-A)
...		

Calendar hours in the reporting period: \_\_\_\_\_

Total Outage hours for the reporting period (from above): \_\_\_\_\_

Available Hours (AH) in the reporting period: \_\_\_\_\_

AH from the last three (3) reporting periods: \_\_\_\_\_

AH for the last four (4) reporting periods: \_\_\_\_\_

Enter the information for each BESS Planned Derating event during the reporting period. Dates and times should be entered to the nearest minute. Duration, size of reduction, maximum rated output, and equivalent hours should be rounded to 1 decimal place.

Date/Time Start (A)	Date/Time End (B)	Duration (hrs) (C) = (B-A)	Size of Reduction (MW) (D)	Maximum Rated Output (MW) (E)	Equivalent Hours (hrs) (C x D)/E
...					

Total equivalent planned derated hours (EPDH) for the reporting period: \_\_\_\_\_

EPDH from the last three (3) reporting periods: \_\_\_\_\_

EPDH for the last four (4) reporting periods: \_\_\_\_\_

Enter the information for each BESS Unplanned Derating event during the reporting period. Dates and times should be entered to the nearest minute. Duration, size of reduction, maximum rated output, and equivalent hours should be rounded to 1 decimal place.

Date/Time Start (A)	Date/Time End (B)	Duration (hrs) (C) = (B-A)	Size of Reduction (MW) (D)	Maximum Rated Output (MW) (E)	Equivalent Hours (hrs) (C x D)/E
...					

Total equivalent unplanned derated hours (EUDH) for the reporting period: \_\_\_\_\_

EUDH for the last three (3) reporting periods: \_\_\_\_\_

EUDH for the last four (4) reporting periods: \_\_\_\_\_

Period Hours (PH) is : \_\_\_\_\_ (8760 hours if no 29th day in February in the last twelve months; otherwise 8784 hours; also can be adjusted appropriately depending on any month(s) containing Force Majeure in last 12 reporting periods.)

Enter the Available Hours, EPDH and EUDH for the last four (4) reporting periods as calculated above.

AH (A)	EPDH (B)	EUDH (C)	PH (D)	BESS Annual Equivalent Availability Factor 100% x (A - B - C)/PH

Enter the information for each Unplanned (Forced) Outage during the reporting period. Dates and times should be entered to the nearest minute. Duration should be rounded to 1 decimal place.

Date/Time Start (A)	Date/Time End (B)	Duration (hrs) (B-A)
...		

Total Forced Outage Hours (FOH) for the reporting period (from above): \_\_\_\_\_

FOH from the last three (3) reporting periods: \_\_\_\_\_

FOH for the last four (4) reporting periods: \_\_\_\_\_

Enter the FOH and EUDH for the last four (4) reporting periods as calculated above.

FOH (A)	EUDH (B)	BESS Annual Equivalent Forced Outage Factor $100\% \times (A + B)/8760$

If the BESS Measurement Period for which this report has been prepared contains a month with a BESS Force Majeure event, please indicate the proper 12-month period used to calculate the BESS Annual Equivalent Availability Factor for this report.

**2. MONTHLY REPORT DISAGREEMENTS.**

A. Notice of Disagreement with Monthly Report. Within ten (10) Business Days following the close of the calendar month in question, Subscriber Organization shall provide to Company the Monthly Report for such calendar month and the LD Period, the MPR Assessment Period and the BESS Measurement Period (if any) ending with such calendar month, as provided in Section 1. (Monthly Report) of this Attachment E (Monthly Reporting and Dispute Resolution by Independent AF Evaluator). Within ten (10) Business Days after Company's receipt of a Monthly Report, Company shall provide written notice to Subscriber Organization of any Monthly Report Disagreement, including with respect to the data for the calendar month covered by such Monthly Report and Subscriber Organization's calculation of, as applicable, (i) the PV System Equivalent Availability Factor for the LD Period ending with such calendar month, (ii) the MPR for the MPR Assessment Period ending with such calendar month, or (iii) any of the BESS Capacity Ratio, the RTE Ratio, the BESS Annual Equivalent Availability Factor or the BESS Equivalent Forced Outage Factor for the BESS Measurement Period (if any) ending with such calendar month ("Notice of Disagreement"). Together with any such Notice of Disagreement, the Company shall include its own calculations and other support for its position. If Company fails to provide a Notice of Disagreement within said 10-Business Day period, the Monthly Report provided by Subscriber Organization shall be deemed to be accepted by Company and shall no longer be subject to dispute by Company or Subscriber Organization.

B. [Reserved]

- C. Submission of Monthly Report Disagreement to Independent AF Evaluator. Upon issuance of a Notice of Disagreement, the Parties shall review the contents of the Monthly Report(s) together with such Notice of Disagreement and attempt to resolve such Monthly Report Disagreement. If the Parties are able to agree on a resolution of any Monthly Report Disagreement, the resulting corrected Monthly Report(s) in question shall be set forth in a writing executed by both Parties, following which (i) such corrected Monthly Reports shall no longer be subject to dispute by either Party and (ii) to the extent such resolution of such Monthly Report Disagreement affects future Monthly Reports, such future Monthly Reports shall be prepared, and the PV System Equivalent Availability Factor, the MPR, the BESS Annual Equivalent Factor and the BESS Annual Equivalent Forced Outage Factor in such future Monthly Reports shall be calculated, in a manner consistent with such resolution. If the Parties are unable to resolve such Monthly Report Disagreement within ten (10) Business Days after Company's issuance of such Notice of Monthly Report Disagreement, either Party may, within five (5) Business Days after the end of such 10-Business Day period, submit the unresolved Monthly Report Disagreement to an Independent AF Evaluator for resolution.
- D. [Reserved]
- E. Appointment of Independent AF Evaluator. If either Party decides to submit an unresolved Monthly Report Disagreement to an Independent AF Evaluator, it shall provide written notice to that effect (the "Submission Notice") to the other Party, which notice shall designate which of the engineering firms on the OEPR Consultants List is to act as the Independent AF Evaluator for purposes of resolving such dispute; provided, however, for purposes of facilitating consistency in the resolution of Monthly Report Disagreements, all Monthly Report Disagreements concerning the same Performance Metric arising out of any one or more of the twelve (12) Monthly Reports issued for a given Contract Year shall be submitted to the same Independent AF Evaluator unless such Independent AF Evaluator declines to accept any such submission(s). A Submission Notice must be provided within the 5-Business Day period provided in Section 2.C. (Submission of Monthly Report Disagreement to Independent AF Evaluator) of this Attachment E (Monthly Reporting and Dispute Resolution by Independent AF Evaluator). The Parties shall each pay fifty percent (50%) of the fees and expenses charged by the Independent AF Evaluator.
- F. Eligibility for Appointment as Independent AF Evaluator. Both Parties agree that the engineering firms listed in Section 2.J. (Acceptable Persons and Entities) of Attachment D. (Calculation and Adjustment of Net Energy Potential) are fully qualified to serve as Independent AF Evaluator. By mutual agreement between the Parties in writing, a name or names may be added to or removed from the OEPR Consultants List at any time. In no event shall there be less than three (3) names on the OEPR Consultants List.
- G. Participation of Parties. Promptly following the issuance of a Submission Notice as provided in Section 2.E. (Appointment of Independent AF Evaluator) of this Attachment E (Monthly Reporting and Dispute Resolution by Independent AF Evaluator), Subscriber Organization and Company shall provide the Independent AF Evaluator which such data as they consider to be material to the resolution of the disputed issue(s). Subscriber Organization and Company shall also provide such additional data and information as the Independent AF Evaluator may reasonably request. The Parties shall assist the Independent AF Evaluator throughout the process of resolving such dispute, including making key personnel and records available to the Independent AF Evaluator, but neither Party shall be entitled to participate in any meetings with personnel of the other Party or review of the other Party's records. However, the Independent AF Evaluator will have the right to conduct meetings, hearing or oral arguments in which both Parties are represented.
- H. Written Decision of Independent AF Evaluator. The terms of engagement with the Independent AF Evaluator shall require the Independent AF Evaluator to issue its written decision resolving the

disputed issues submitted to it within the applicable time period set forth below, which time periods are subject to any tolling that may be applicable pursuant to Section 2.I. (Sequence to Resolving Interrelated Disagreements) of this Attachment E (Monthly Reporting and Dispute Resolution by Independent AF Evaluator): (a) 30 Days as measured from the issuance of the Submission Notice; or (b) such other time period as the Parties may agree in writing. Unless otherwise agreed by the Parties in writing:

1. for a Monthly Report Disagreement concerning the PV System Equivalent Availability Factor, the written decision of the Independent AF Evaluator shall set forth (aa) for the calendar month in question, the correct values for AH, EPDH, EUDH and PH to be used in calculations under Section 1. (PV System Equivalent Availability Factor Performance Metric; Liquidated Damages; Termination Rights) of Attachment C (Required Performance Metrics; Liquidated Damages) to this Contract as determined by such Independent AF Evaluator if any such values were in dispute and (bb) for the LD Period ending with the calendar month in question, the PV System Equivalent Availability Factor for such LD Period as determined by such Independent AF Evaluator if such PV System Equivalent Availability Factor was in dispute;
2. for a Monthly Report Disagreement concerning the MPR, the written decision of the Independent AF Evaluator shall set forth (aa) the correct data points from the operational data set for the calendar month in question to be used in the calculation of MPR under Section 2.A. (Calculation of Measured Performance Ratio) of Attachment C (Required Performance Metrics; Liquidated Damages) to this Contract, for the MPR Assessment Periods that include such calendar month if any such data points were in dispute, (bb) if a MPR Test was conducted during the month in question, the correct data points from such MPR Test to be used in the calculation of MPR under Section 2.A. (Calculation of Measured Performance Ratio) of Attachment C (Required Performance Metrics; Liquidated Damages) to this Contract. for the MPR Assessment Periods that include the month preceding the month covered by the Monthly Report in question if any such data points were in dispute and (cc) for the MPR Assessment Period ending with the calendar month in question, the Measured Performance Ratio if such Measured Performance Ratio was in dispute;
3. for a Monthly Report Disagreement concerning the BESS Capacity Ratio or the RTE Ratio, the written decision of the Independent AF Evaluator shall set forth the BESS Capacity Ratio and/or the RTE Ratio for the BESS Measurement Period ending with the calendar month in question;
4. for a Monthly Report Disagreement concerning the BESS Annual Equivalent Availability Factor, the written decision of the Independent AF Evaluator shall set forth (aa) the correct values to be used for AH, EPDH, EUDH and PH under Attachment H (BESS Requirements) Section 2. (BESS Annual Equivalent Availability Factor) for the calendar month in question if any such values were in dispute and (bb) the BESS Annual Equivalent Availability Factor for the BESS Measurement Period ending with the calendar month in question if such BESS Annual Equivalent Availability Factor was in dispute; and
5. for a Monthly Report Disagreement concerning the BESS Annual Equivalent Forced Outage Factor, the written decision of the Independent AF Evaluator shall set forth (aa) the correct values for FOH and EUDH under Attachment H (BESS Requirements) Section 3 (BESS Annual Equivalent Forced Outage Factor) for the calendar month in question if any such values were in dispute and (bb) the BESS Annual Equivalent Forced Outage Factor for the BESS Measurement Period ending with the calendar month in question if such BESS Annual Equivalent Forced Outage Factor was in dispute.

- I. Sequence for Resolving Interrelated Disagreements. If at the time a Monthly Report Disagreement is submitted to an Independent AF Evaluator pursuant to Section 2.E. (Appointment of Independent AF Evaluator) of this Attachment E (Monthly Reporting and Dispute Resolution by Independent AF Evaluator) there are one or more other unresolved Monthly Report Disagreements concerning the same Monthly Report and the same LD Period that are pending before a different Independent AF Evaluator, and the resolution of such other Monthly Report Disagreement(s) is necessary to the resolution of the Monthly Report Disagreement that has been newly submitted to a new Independent AF Evaluator as aforesaid, the time period for such new Independent AF Evaluator to issue its written decision resolving such newly submitted Monthly Report Disagreement shall be tolled until such pending Monthly Report Disagreement(s) have been resolved. For avoidance of doubt, it is the intent of the Parties that disagreements over performance ratio data and calculations for a given calendar month or a given BESS Measurement Period shall (i) not be subject to resolution twice and (ii) once resolved, shall not be reopened.
  - J. Final, Conclusive and Binding. The Parties acknowledge the inherent uncertainty in calculating the Monthly Reports, and hereby assume the risk of such uncertainty and waive any right to dispute the qualification of the person or entity appointed as the Independent AF Evaluator pursuant to Section 2.E. (Appointment of Independent AF Evaluator) of this Attachment E (Monthly Reporting and Dispute Resolution by Independent AF Evaluator) and/or the appropriateness of the methodology used by Independent AF Evaluator in resolving such Monthly Report Disagreements. Without limitation to the generality of the preceding sentence, the decision of the Independent AF Evaluator as to each Monthly Report Disagreement submitted to an Independent AF Evaluator shall be final, conclusive and binding upon Company and Subscriber Organization and shall not be subject to further dispute under Section 17. (Dispute Resolution) of the Contract.
3. **PERIODIC REVIEW OF METHOD OF CALCULATING AND REPORTING MONTHLY REPORT.** At least once per Contract Year, Company shall review the method of calculating and reporting Monthly Report under this Contract to determine if other variables should be incorporated into such calculations. Any revisions to the Monthly Report calculations in this Contract shall be mutually agreed to by both Subscriber Organization and Company.
  4. **FUTURE CHANGES IN REPORTING REQUIREMENTS.** Subscriber Organization shall reasonably cooperate with any Company requested revisions to the Monthly Report to include additional data that may be necessary from time to time to enable Company to comply with any new reporting requirements directed by the PUC or otherwise imposed under applicable Laws.

**ATTACHMENT F**  
**FACILITY OWNED BY SUBSCRIBER ORGANIZATION**

**[See Project Specific Addendum for Attachment F and its Exhibits]**

**ATTACHMENT G**  
**COMPANY-OWNED INTERCONNECTION FACILITIES**

(To be filled out by Company)

**1. DESCRIPTION OF COMPANY-OWNED INTERCONNECTION FACILITIES.**

- A. General. Company will furnish or construct, own, operate and maintain all interconnection facilities required to interconnect the Company's system with the CBRE Facility at \_\_\_volts, up to the point of interconnection.
- B. Site. Where any Company-Owned Interconnection Facilities are to be located on the Site, Subscriber Organization shall provide, at no expense to Company, a location and access acceptable to Company for all such Company-Owned Interconnection Facilities, as well as an easement, license or right of entry to access such Company-Owned Interconnection Facilities. If power sources (120/240VAC) are required, Subscriber Organization shall provide such sources, at no expense to Company.
- C. IRS. If an IRS addressing Facility requirements was or will be completed for the Project in accordance with the IRS Letter Agreements, the results have been or will be incorporated in Attachment F (Facility Owned by Subscriber Organization) and this Attachment G (Company-Owned Interconnection Facilities) as appropriate
- D. The Company-Owned Interconnection Facilities, for which the Subscriber Organization agrees to pay, include: [**Need to specify the interconnection facilities. If no interconnection facilities, state "None".**]
- E. Responsibility of Subscriber Organization and Company. The general responsibilities of Subscriber Organization and Company for the design, procurement, installation, programming/testing, and maintenance/ownership of equipment at the Facility and the Company Owned Interconnection Facilities is specified in Matrix G-1 (Substation Responsibilities) and Matrix G-2 (Telecom Responsibilities). [**DRAFTING NOTE: MATRIXES WILL BE UPDATED FOLLOWING COMPLETION OF IRS.**]

**2. CONSTRUCTION AND SUPPORT SERVICES BY SUBSCRIBER ORGANIZATION.**

A. Construction and Support Services By Subscriber Organization.

Subscriber Organization (and/or its third party consultants or contractors (collectively, "Contractors")) will design, engineer, construct, test and place in service, at Subscriber Organization's expense, the items identified in Matrix G-1 (Substation Responsibilities) and Matrix G-2 (Telecom Responsibilities) as being the responsibility of Subscriber Organization to construct; and

All design, engineering and construction performed by Subscriber Organization (and/or its Contractors) shall, without limitation, satisfy the wind load and seismic load requirements of the International Building Code and any more stringent requirements imposed under applicable Laws.

- 1. Subscriber Organization shall provide the necessary support for the Company's [redacted] kV overhead line extension work, which may include, but not limited to:
  - a. Furnish surveyed topographical drawing including contour lines of project areas and beyond as needed in State Plane coordinates with overlay of the Facility and Company pole line route(s) indicating pole locations and anchors in CADD format acceptable to Company.



- b. Staking of Company proposed poles and anchors by surveyor.
  - c. Graded access roads including gravel if required by Company to provide sufficient vehicle access to Company poles and anchors by Company trucks and cranes.
  - d. Graded level pads to provide vehicle working areas around all Company poles and anchors.
  - e. Grading of the areas beneath the Company's overhead lines as needed to provide required ground clearance.
  - f. Grubbing and clearing of vegetation within Company's easement area or as required.
- B. Coordination of Construction. Prior to Subscriber Organization engaging the Contractors, Subscriber Organization shall obtain Company's written approval, which approval shall not be unreasonably withheld. Prior to Subscriber Organization and/or its Contractors first starting to work on the construction plans for Company-Owned Interconnection Facilities to be constructed by Subscriber Organization (and/or its Contractors), such as the civil, structural, and construction drawings, specifications to vendors, vendor approved final drawings and materials lists (collectively, the "Plans"), Subscriber Organization and/or its Contractors shall meet with Company to discuss the construction of such Company-Owned Interconnection Facilities, including but not limited to subjects concerning coordination of construction milestone dates, agreement on areas of interface design, and Company's design/drawing layout and symbols standards, equipment specifications and construction specifications and standards. Company will provide the equipment specifications and construction specifications and standards information so Subscriber Organization can incorporate such information in its bid documents.
- C. Plans. Subscriber Organization shall provide Company its complete Plans at 30%, 60% and 90% completion. No later than sixty (60) Days before Subscriber Organization and/or its Contractors first start to order materials and equipment for Company-Owned Interconnection Facilities to be constructed by Subscriber Organization and/or its Contractors, Subscriber Organization shall provide Company with the final Plans. The Plans for Company-Owned Interconnection Facilities to be constructed by Subscriber Organization (and/or its Contractors) shall comply with (i) all applicable Laws; (ii) Company's design/drawing layout and symbol standards, equipment specifications, and construction specifications and standards; and (iii) Good Engineering and Operating Practices (collectively, the "Standards"). Subscriber Organization shall submit design drawings in MicroStation format per Company standards.
- D. Company's Review of the Plans. Unless otherwise agreed to by the Parties, Company shall have thirty (30) Days following receipt of the complete Plans at each stage (30%, 60%, 90% and final) for it to review and comment on the Plans, and verify in writing to Subscriber Organization that the Plans comply with the Standards, which verification shall not be unreasonably withheld. If Company reasonably determines that the Plans are not in accordance with the Standards, then it may request in writing a response from Subscriber Organization to its comments and Subscriber Organization shall respond in writing within thirty (30) Days of such request by providing (i) its justification for why its Plans conform to the Standards or (ii) changes in the Plans responsive to Company's comments and in accordance with the Standards.
- E. Company Inspection. Construction work will be subject to Company inspections to ensure that construction is done in accordance with the Standards. Company inspectors will be allowed access to the construction sites for inspections and to monitor construction work. The inspector shall have the authority to work with the appropriate construction supervisor to stop any work that does not meet the Standards. All equipment and materials used in Company-Owned Interconnection Facilities to be constructed by Subscriber Organization and/or its Contractors shall meet the Standards.

F. Acceptance Test Procedures.

1. Subscriber Organization acknowledges that: (aa) Company has multiple on-going projects with other developers as well as its own capital improvement projects; (bb) Company has limited resources to provide engineering oversight (such as review of plans) to such projects and to participate in the testing of such projects; (cc) in order for Company to accommodate such oversight and testing, it is necessary for Company to sequentially allocate its resources for each project a year or more in advance; (dd) the result is a queue of such projects that reflects the scheduling commitments of Company's resources to conduct such oversight and to participate in such testing; (ee) if a project is behind the schedule on which Company's resources have been scheduled for the oversight of such project, or if a project is not ready for testing at the time Company's resources have been scheduled for the testing of such project, or if a project does not complete testing within the period for which Company's resources have been scheduled for such testing, the progress of projects later in the queue may be adversely affected; and (ff) the Project will lose its place in the queue and will be assigned a new Acceptance Testing date for commencement of the Acceptance Test that will be behind the other projects then in the queue if (i) the Subscriber Organization fails to satisfy any of the conditions precedent set forth in Section 2F.2. of this Attachment G (Company-Owned Interconnection Facilities) within the time period specified therein for the task in question, (ii) the Acceptance Test are not satisfactorily completed within the time allotted to complete such testing.
2. The Conduct of the Acceptance Test is subject to the satisfaction of the following conditions precedent within the time period required by Company for the task in question:
  - Final Single-Line Drawing, and notes, has received Company's written consent pursuant to Section 1.A.1 (Single-Line Drawing, Interface Block Diagram, Relay List, Relay Settings and Trip Scheme) of Attachment F (Facility Owned by Subscriber Organization) to this Contract.
  - Final Relay List and Trip Scheme have received Company's written consent pursuant to Section 1.A.1 (Single-Line Drawing, Interface Block Diagram, Relay List, Relay Settings and Trip Scheme) of Attachment F (Facility Owned by Subscriber Organization) to this Contract.
  - Final Interface Block Diagram has received Company consent pursuant to Section 1.A.1 (Single-Line Drawing, Interface Block Diagram, Relay List, Relay Settings and Trip Scheme) of Attachment F (Facility Owned by Subscriber Organization) to this Contract.
  - Final Control System Telemetry and Control List has received Company consent.
  - Final phasor measurement unit (PMU) devices, if applicable, have received Company consent.
  - Control system design and tunable parameters reviewed and mutually agreed upon as needed to meet the Company requirements in accordance with Attachment F (Facility Owned by Subscriber Organization) Performance Standards.
  - Agreement on Active Power Control Interface.
  - No later than 14 Days prior to commencement of the Acceptance Test:
    - Subscriber Organization shall have certified to Company that Subscriber Organization-Owned Interconnection Facilities have been installed and commissioned and such certification has not, prior to the commencement of the Acceptance Test, been subsequently challenged by Company on the basis of on-site observations made by the Company's representatives following the walk-through to be conducted

pursuant to Section 2.F.3. of this Attachment G (Company-Owned Interconnection Facilities).

- Subscriber Organization shall have certified to Company that any Company-Owned Interconnection Facilities built by Subscriber Organization (and/or its Contractors) have been installed and commissioned and such certification has not, prior to the commencement of the Acceptance Test, been subsequently challenged by Company on the basis of on-site observations made by the Company's representatives following the walk-through to be conducted pursuant to Section 2.F.3. of this Attachment G (Company-Owned Interconnection Facilities).
  - Any Company-Owned Interconnection Facilities not built by or on behalf of Subscriber Organization have been installed and commissioned.
  - No later than 7 Days prior to the commencement of the Acceptance Test, Subscriber Organization and Company shall have participated in walk-through of fully constructed Interconnection Facilities.
  - Redlined as-built drawings of the Subscriber Organization-Owned Interconnection Facilities and any of the Company-Owned Interconnection Facilities built by Subscriber Organization (and/or its Contractors) shall have been provided to Company.
  - Continuous power is being supplied to Company's protection and SCADA equipment.
  - Not less than four (4) weeks prior to the commencement of the Acceptance Test, the high speed communication lines required under this Contract have been commissioned and are ready for use.
  - Not less than two (2) weeks prior to the commencement of the Acceptance Test, Subscriber Organization and Company have participated in an on-Site Acceptance Test coordination meeting.
3. Subscriber Organization shall provide Company with at least fourteen (14) Days advance written notice of the commencement of the Acceptance Test. The Acceptance Test will be conducted on Business Days during normal business hours and may take a minimum of 30 Days to complete. No electric energy will be delivered from Subscriber Organization to Company during the Acceptance Test. No later than thirty (30) Days prior to conducting the Acceptance Test, Company and Subscriber Organization shall agree on a written protocol setting out the detailed procedure and criteria for passing the Acceptance Test. At the time that Subscriber Organization provides its 14-Day notice of the Acceptance Test to Company, Subscriber Organization shall concurrently schedule a site walk-through of the Facility with Company to occur no later than seven (7) Days prior to the Acceptance Test. Subscriber Organization's 14-Day notice to Company of the Acceptance Test shall constitute its certification that (i) the completion of the installation and commissioning of the Subscriber Organization-Owned Interconnection Facilities and the Company-Owned Interconnection Facilities built by Subscriber Organization (and/or its Contractors) and (ii) a walk-through by Company shall demonstrate, to Company's reasonable satisfaction, Subscriber Organization's readiness to commence with the Acceptance Test. If, after the site walk-through, Company representatives reasonably determine that Subscriber Organization is not ready to commence with the Acceptance Test, the Project will lose its place in the queue and will be assigned a new Acceptance Testing date that will be behind the other projects then in the queue. In the meantime, Subscriber Organization shall remediate the deficiencies identified by Company, and the process described in this Section 2.F. (Acceptance Test Procedures) of this Attachment G (Company-Owned Interconnection Facilities), shall commence again until Subscriber Organization's readiness for the Acceptance Test is demonstrated to Company's reasonable

satisfaction. Successful completion of the Acceptance Test requires successful completion of each of the individual tests that comprise the Acceptance Test. Retesting of any individual test constitutes as restart of the Acceptance Test if such retesting is required because of a prior failure of such individual test or because of a prior test could not be completed because of a problem with the Facility. Within fifteen (15) Business Days of completion of the Acceptance Test and Company's receipt of the final report setting forth the results of the Acceptance Test, Company shall notify Subscriber Organization in writing whether the Acceptance Test has been passed and, if so, the date upon which the Acceptance Test was passed.

4. Company will be present when the Acceptance Test is conducted, and Subscriber Organization shall promptly correct any deficiencies identified during the Acceptance Test. Subscriber Organization will be responsible for the cost of Company personnel (and/or Company contractors) performing the duties (such as reviewing the Plans and reviewing the construction) necessary for Company-Owned Interconnection Facilities to be constructed by Subscriber Organization (and/or its Contractors). If Company (i) does not make any inspection or test, (ii) does not discover defective workmanship, materials or equipment, or (iii) accepts Company-Owned Interconnection Facilities (that were constructed by Subscriber Organization and or its Contractors), such action or inaction shall not relieve Subscriber Organization from its obligation to do and complete the work in accordance with the Plans approved by Company.

- G. As-Built Drawings. Within thirty (30) Days of the successful completion of the Acceptance Test, Subscriber Organization shall provide for Company review a set of the proposed as-built drawings for the Company-Owned Interconnection Facilities constructed by Subscriber Organization (and/or its Contractors). Within thirty (30) Days of Company's receipt of the proposed as-built drawings, Company shall provide Subscriber Organization with either (i) its comments on the proposed as-built drawings or (ii) notice of acceptance of the proposed as-built drawings as final as-built drawings. If Company provides comments on the proposed as-built drawings, Subscriber Organization shall incorporate such comments into a final set of as-built drawings and provide such final as-built drawings to Company within twenty (20) Days of Subscriber Organization's receipt of Company's comments

**3. SUBSCRIBER ORGANIZATION PAYMENT TO COMPANY FOR COMPANY-OWNED INTERCONNECTION FACILITIES. REVIEW OF GENERATING FACILITY, AND REVIEW OF VERIFICATION TESTING.**

- A. Subscriber Organization shall pay to the Company the total estimated interconnection costs to be incurred by the Company (Total Estimated Interconnection Costs), which is comprised of (i) the estimated cost of the Company-Owned Interconnection Facilities, (ii) the estimated engineering costs associated with (a) developing the Company-Owned Interconnection Facilities and (b) reviewing and specifying those portions of the CBRE Facility which allow interconnected operation, and (iii) witnessing and reviewing the verification testing, which shall include testing of the telemetry and control interface which allows the Company to remotely measure, monitor, evaluate and verify technical compliance, CBRE Facility performance, and power quality and, if necessary, control the Generating Facility. The following summarizes the Total Estimated Interconnection Costs:

Description	Estimated Cost (\$) [If no cost, state "None".]

<b>Total Estimated Interconnection Costs (\$):</b>	

- B. The Total Estimated Interconnection Cost, which, except as otherwise provided herein, is non-refundable, shall be paid by the Subscriber Organization fourteen (14) days after receipt of an invoice from the Company, which shall be provided not less than thirty (30) days prior to start of procurement of the Company-Owned Interconnection Facilities.
- C. Within thirty (30) days of receipt of an invoice, which shall be provided within fourteen (14) days of the final accounting, which shall take place within sixty (60) days of completion of construction of the Company-Owned Interconnection Facilities, the Subscriber Organization shall remit to the Company the difference between the Total Estimated Interconnection Costs paid to date and the total actual interconnection cost (Total Actual Interconnection Costs). The latter is comprised of (i) the total costs of the Company-Owned Interconnection Facilities, and (ii) the total engineering costs associated with (a) developing the Company-Owned Interconnection Facilities and (b) reviewing and specifying those portions of the Generating Facility which allow interconnected operations as such are described in Exhibit F-1, and (iii) reviewing the verification testing. If in fact the Total Actual Interconnection Costs is less than the payments received by the Company as the Total Estimated Interconnection Costs, the Company shall repay the difference to the Subscriber Organization within thirty (30) days of the final accounting. If the Contract is terminated prior to the Subscriber Organization’s payment for the Total Actual Interconnection Costs (or the portion of this cost which has been incurred) or prior to the Company’s repayment of the over collected amount of the Total Estimated Interconnection Costs (or the portion of this cost which has been paid), such payments shall be made by the Subscriber Organization or Company, as appropriate. If payment is due to the Company, the Subscriber Organization shall pay within thirty (30) days of receipt of an invoice, which shall be provided within fourteen (14) days of the final accounting, which shall take place within sixty (60) days of the date the Contract is terminated. If payment is due to the Subscriber Organization, the Company shall pay within thirty (30) days of the final accounting.
- D. All Company-Owned Interconnection Facilities shall be the property of the Company.

**4. OPERATION, MAINTENANCE AND TESTING COSTS.**

The Company will bill the Subscriber Organization monthly and the Subscriber Organization will, within 30 days after the billing date, reimburse the Company for any costs incurred in operating, maintaining or testing the Company-Owned Interconnection Facilities. The Company’s costs will be determined on the basis of outside service costs, direct labor costs, material costs, transportation costs, applicable overheads at time incurred and applicable taxes. Applicable overheads will include such costs as vacation, payroll taxes, non-productive wages, supervision, tools expense, employee benefits, engineering administration, corporate administration, and materials handling. Applicable taxes will include the Public Service Company Tax, and Public Utility Fee and Hawai’i general excise tax.

**5. RELOCATION OF COMPANY-OWNED INTERCONNECTION FACILITIES.**

- A. In the event that the Land Rights include a relocation clause and such clause is exercised or if Company-Owned Interconnection Facilities must be relocated for any other reason not caused by Company, Subscriber Organization shall bear the cost of such relocation. Prior to the relocation of the Company-Owned Interconnection Facilities Company shall invoice Subscriber Organization for the total estimated cost of relocating the Company-Owned Interconnection Facilities (the “Total Estimated Relocation Cost”). Subscriber Organization shall, within thirty (30) Days after the invoice date, pay to Company the Total Estimated Relocation Cost.
- B. Once the relocation of the Company-Owned Interconnection Facilities is complete, Company shall conduct a final accounting of all costs related thereto. Within thirty (30) Days of the final accounting, which shall take place within one hundred and twenty (120) Days of completion of the relocation of Company-Owned Interconnection Facilities, Subscriber Organization shall remit to Company the difference between the Estimated Relocation Cost paid to date and the total actual relocation cost incurred by Company (the “Total Actual Relocation Cost”). If the Total Actual Relocation Cost is less than the payments received by Company as the Total Estimated Relocation Cost, Company shall repay the difference to Subscriber Organization within thirty (30) Days of the final accounting.

**6. LAND RESTORATION.**

- A. Definition of “Land”. For the purposes of this Attachment G (Company-Owned Interconnection Facilities), “Land” means any portion of the Site and any other real property where any Company-Owned Interconnection Facilities are located.
- B. Removal of Interconnection Facilities. After termination of this Contract, if requested by Company, Subscriber Organization shall, at its sole cost and expense, remove (i) the Company-Owned Interconnection Facilities from the Land and (ii) the Subscriber Organization-Owned Interconnection Facilities from the Land, and, in conjunction with such removal, shall develop and implement a program to recycle, to the fullest extent possible, or to otherwise properly dispose of, all such removed infrastructure; provided, however, that, Company may elect to remove all or part of the Company-Owned Interconnection Facilities and/or Subscriber Organization-Owned Interconnection Facilities from the Land because of operational concerns over the removal of such Interconnection Facilities, in which case Subscriber Organization shall reimburse Company for its costs to remove such Company-Owned Interconnection Facilities and/or Subscriber Organization-Owned Interconnection Facilities. To the extent Subscriber Organization is obligated to remove Company-Owned Interconnection Facilities and/or Subscriber Organization-Owned Interconnection Facilities, Subscriber Organization shall complete such removal within ninety (90) Days of termination of this Contract, or as otherwise agreed to by both Parties in writing.
- C. Restoration of the Land. After the termination of this Contract and removal of the Company-Owned Interconnection Facilities and/or Subscriber Organization-Owned Interconnection Facilities, as the case may be, Subscriber Organization shall, at its sole cost and expense, restore the Land to its condition prior to construction of such Company-Owned Interconnection Facilities and/or Subscriber Organization-Owned Interconnection Facilities, as applicable. Land restoration shall be completed within ninety (90) Days of termination of this Contract, or as otherwise agreed to by both Parties in writing.

**7. TRANSFER OF OWNERSHIP/TITLE.**

- A. Transfer of Ownership and Title. On the Transfer Date, Subscriber Organization shall transfer to Company all right, title and interest in and to Company-Owned Interconnection Facilities to the extent such facilities were designed and constructed by Subscriber Organization and/or its

Contractors together with (i) all applicable manufacturers' or Contractors' warranties which are assignable and (ii) all Land Rights necessary to own, operate and maintain Company-Owned Interconnection Facilities on and after the Transfer Date. Subscriber Organization shall provide a written list of the manufacturers' and Contractors' warranties which will be assigned to Company and the expiration dates of such warranties no later than thirty (30) Days before the Transfer Date.

- B. No Liens or Encumbrances. Company's title to and ownership of Company-Owned Interconnection Facilities that were designed and constructed by Subscriber Organization and/or its Contractors shall be free and clear of liens and encumbrances.
- C. Form of Documents. The transfers to be made to Company shall not require any further payment by Company. The form of the document to be used to convey title to the Company-Owned Interconnection Facilities that were designed and constructed by or on behalf of Subscriber Organization shall be in the form set forth by Company. The form of the document(s) to be used to assign leases shall be substantially in the form set forth by Company.

**8. GOVERNMENTAL APPROVALS FOR ANY COMPANY-OWNED INTERCONNECTION FACILITIES.**

For all other Governmental Approvals for Company-Owned Interconnection Facilities, Subscriber Organization shall provide these prior to the Transfer Date. On or before the Transfer Date, Subscriber Organization shall provide Company with (i) copies of all such Governmental Approvals obtained by Subscriber Organization regarding the construction, ownership, operation and maintenance of Company-Owned Interconnection Facilities that Subscriber Organization and/or its Contractors constructed and (ii) documentation regarding the satisfaction of any condition or requirement set forth in any Governmental Approvals for Company-Owned Interconnection Facilities (excluding on-going reporting or monitoring requirements that may continue beyond the Transfer Date in accordance with such Governmental Approval) or that such Governmental Approvals have otherwise been closed with the issuing Governmental Authority.

**9. LAND RIGHTS.**

Subscriber Organization shall, prior to the commencement of construction of the Company-Owned Interconnection Facilities (whether to be built by Subscriber Organization or by Company) obtain at its sole cost and expense all Land Rights that are required to construct, own, operate and maintain the Company-Owned Interconnection Facilities. At least one (1) month prior to commencement of construction, Subscriber Organization shall provide Company with Land Rights documents, which may be redacted to the limited extent as set forth below. Without limitation to the preceding sentences, Subscriber Organization shall pay all surveying and mapping costs, appraisal fees, document preparation fees, recording fees or other costs. Subscriber Organization shall use commercially reasonable efforts to obtain on behalf of the Company perpetual Land Rights for the Company-Owned Interconnection Facilities. Such Land Rights shall contain terms and conditions which are acceptable to Company and the documents setting forth the Land Rights shall be provided in advance of execution to Company for its review and approval and shall be recorded if required by Company. Following the Execution Date, Subscriber Organization shall provide as part of the Monthly Progress Report the status of negotiations with landowner(s) regarding the Land Rights. Notwithstanding the foregoing, Company shall have the right in its sole discretion, at any time upon notice to Subscriber Organization, to communicate directly with the landowner(s) and/or participate in the negotiations with landowner(s) for the Land Rights. For so long as Subscriber Organization has the right under this Contract to sell the availability of the Facility to Company, Subscriber Organization shall pay for any rents and other payments due under such Land Rights that are associated with Company-Owned Interconnection Facilities.

**10. CONTRACTS FOR COMPANY-OWNED INTERCONNECTION FACILITIES.**

For all contracts entered into by or on behalf of Subscriber Organization for Company-Owned Interconnection Facilities to be designed, engineered and constructed, in whole or in part, by or on behalf of Subscriber Organization, the following shall apply: (i) Company shall be made an intended third-party beneficiary of such contracts; and (ii) Company shall be provided with copies of such executed contracts, which may be redacted but only to the extent required to prevent disclosure of confidential or proprietary information of Subscriber Organization or the counterparty to such agreement; provided, however, that such redactions may not conceal information that is necessary for the Company to determine and exercise Company's rights under such contracts as a third-party beneficiary.



[MATRIX TO BE INSERTED]

**EXHIBIT G-1**  
**FORM OF LETTER OF CREDIT**

Page 1 of 2

**[Bank Letterhead]**

**[Date]**

**Beneficiary:** [designate appropriate entity according to where Facility is located] **Hawaiian Electric Company, Inc. [or] Maui Electric Company, Limited [or] Hawai'i Electric Light Company, Inc.**

**[Address]**

**[Bank's Name]**

**[Bank's Address]**

Re: **[Irrevocable Standby Letter of Credit Number]**

Ladies and Gentlemen:

We hereby establish, in your favor, our irrevocable standby Letter of Credit Number \_\_\_\_\_ (this "Letter of Credit") for the account of **[Applicant's Name]** and **[Applicant's Address]** in the initial amount of \$ \_\_\_\_\_ **[dollar value]** and authorize you, Hawaiian Electric Company, Inc. **[or]** Maui Electric Company, Limited **[or]** Hawai'i Electric Light Company, Inc. ("Beneficiary"), to draw at sight on **[Bank's Name]**.

Subject to the terms and conditions hereof, this Letter of Credit secures **[Project Entity Name]**'s certain obligations to Beneficiary under the Mid-Tier Standard Form Contract for Renewable Dispatchable Generation dated as of \_\_\_\_\_ between **[Project Entity Name]** and Beneficiary.

This Letter of Credit is issued with respect to the following obligations: \_\_\_\_\_.

This Letter of Credit may be drawn upon under the terms and conditions set forth herein, including any documentation that must be delivered with any drawing request.

Partial draws of this Letter of Credit are permitted. This Letter of Credit is not transferable. Drafts on us at sight shall be accompanied by a Beneficiary's signed statement signed by a representative of Beneficiary as follows:

The undersigned hereby certifies that (i) I am duly authorized to execute this document on behalf of Hawaiian Electric Company, Inc. **[or]** Maui Electric Company, Limited **[or]** Hawai'i Electric Light Company, Inc. and [(ii) the amount of the draft accompanying this certification is due and owing to Hawaiian Electric Company, Inc. **[or]** Maui Electric Company, Limited **[or]** Hawai'i Electric Light Company, Inc. under the terms of the Mid-Tier Standard Form Contract for Renewable Dispatchable Generation dated as of \_\_\_\_\_, between \_\_\_\_\_, and Hawaiian Electric Company, Inc. **[or]** Maui Electric Company, Limited **[or]** Hawai'i Electric Light Company, Inc.][(ii) the Letter of Credit will expire in less than thirty (30) days, it has not been

replaced or extended and collateral is still required under Section 11.F of the Mid-Tier Standard Form Contract for Renewable Dispatchable Generation \*].

Such drafts must bear the clause "Drawn under **[Bank's Name and Letter of Credit Number and date of Letter of Credit.]**"

All demands for payment shall be made by presentation of originals or copies of documents, by facsimile transmission of documents to **[Bank Fax Number]** or other such number as specified from time to time by the bank, or by email transmission of documents to **[Bank Email Address]** or other such email address as specified from time to time by the bank. If presentation is made by facsimile transmission or an email transmission, you may contact us at **[Bank Phone Number]** to confirm our receipt of the transmission. Your failure to seek such a telephone confirmation does not affect our obligation to honor such a presentation. If presented by facsimile or email, original documents are not required.

This letter of credit shall expire one year from the date hereof. Notwithstanding the foregoing, however, this letter of credit shall be automatically extended (without amendment of any other term and without the need for any action on the part of the undersigned or Beneficiary) for one year from the initial expiration date and each future expiration date unless we notify you and Applicant in writing at least thirty (30) days prior to any such expiration date that this letter of credit will not be so extended. Any such notice shall be delivered by registered or certified mail, or by FedEx, both to:

Beneficiary at:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

and to

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

And copy to Applicant at:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_

\* For draw relating to lapse of Letter of Credit while credit support is still required pursuant to the Mid-Tier Standard Form Contract for Renewable Dispatchable Generation.

We hereby agree with drawers that drafts and documents as specified above will be duly honored upon presentation to **[Bank's Name]** and **[Bank's Address]** if presented on or before the then-current expiration date hereof.

Payment of any amount under this Letter of Credit by **[Bank]** shall be made as the Beneficiary shall instruct on the next Business Day after the date the **[Bank]** receives all documentation required hereunder, in immediately available funds on such date. As used in this Letter of Credit, the term "Business Day" shall mean any day other than a Saturday or Sunday or any other day on which banks in the State of **[Note – insert State of bank's location]** are authorized or required by law to be closed.

Unless otherwise expressly stated herein, this irrevocable standby letter of credit is issued subject to the rules of the International Standby Practices, International Chamber of Commerce publication no. 590 ("ISP98")

**[Bank's Name]:**

**[Authorized Signature]**

**ATTACHMENT H**  
**BESS REQUIREMENTS**

**1. BESS TESTS**

Prior to achieving Commercial Operations, and in each BESS Measurement Period, unless waived by Company, Subscriber Organization shall demonstrate that the BESS satisfies the (1) BESS Capacity Performance Metric, and (2) the RTE Performance Metric, each as defined and further described below.

A. BESS Capacity Performance Metric.

- The BESS Capacity Performance Metric reflecting the net output of the BESS from the Point of Interconnection can be demonstrated either through (i) operational data or (ii) a scheduled formal BESS Capacity Test.
- The "BESS Capacity Performance Metric" shall be deemed to be satisfied where the BESS Capacity Ratio is not less than 100% for an applicable BESS Measurement Period. The "BESS Capacity Ratio" shall be the number, expressed as a percentage, equal to the total "Discharge Energy" (MWh discharge) delivered to the Point of Interconnection to bring the BESS from (i) its maximum State of Charge or (ii) 100% State of Charge to a 0% State of Charge, divided by the BESS Contract Capacity.
- A "BESS Capacity Test" is when the Company coordinates Company Dispatch to demonstrate the BESS maintains the power output required to follow the dispatch signal provided by the Company through a control set point, as measured at the Point of Interconnection, and is able to continuously discharge energy to the Point of Interconnection according to Company Dispatch to bring the BESS from (i) its maximum State of Charge or (ii) 100% State of Charge to a 0% State of Charge.
- The BESS Capacity Test can only be performed when the BESS is at the lower of: (i) its maximum State of Charge or (ii) 100% State of Charge prior to the start of the BESS Capacity Test and during the BESS Capacity Test the Company Dispatch allows for continuous discharge of the BESS to 0% State of Charge with energy delivered to the Point of Interconnection.

B. RTE Performance Metric.

- The "RTE Performance Metric" is set forth in Section 6.A (RTE Test and Liquidated Damages) of Attachment C (Required Performance Metrics; Liquidated Damages) to this Contract. The RTE Performance Metric reflecting the charging/discharging of the BESS can be demonstrated either through (i) operational data or (ii) a scheduled formal RTE Test.
- Demonstration of the RTE Performance Metric requires measurement of "Charging Energy" (MWh charge) at the BESS inverters' AC input to bring the BESS from a 0% State of Charge to a 100% State of Charge from the PV System (or grid, if grid charging is permitted) according to Company Dispatch, followed by measurement at the Point of Interconnection of the "Discharge Energy" (MWh discharge) delivered to the grid to bring the BESS to a 0% State of Charge according to Company Dispatch. The exact equipment and point used for measurement of Charging Energy will be mutually agreed to by the Parties on the Facility's single-line diagram attached as Exhibit F-5 (Single-Line Drawing and Interface Block Diagram) to Attachment F (Facility Owned by Subscriber Organization) to this Contract. For the purposes of evaluating satisfaction of the RTE Performance Metric, the "RTE Ratio" shall be the number, expressed as a percentage, equal to the total Discharge Energy delivered to the Point of Interconnection during the BESS Capacity Test, divided by the Charging Energy measured at the BESS inverters' AC input.

- The formula for the RTE Ratio is as follows:  $\text{RTE Ratio} = 100\% \times (\text{MWh discharge})/(\text{MWh charge})$
- The RTE Performance Metric will be deemed to have been "passed" or "satisfied" to the extent the RTE Ratio is not less than the RTE Performance Metric set forth in Section 6.A (RTE Test and Liquidated Damages) of Attachment C (Required Performance Metrics; Liquidated Damages) to this Contract.
- An "RTE Test" is when the Company coordinates Company Dispatch to demonstrate the charging/discharging requisite to satisfy the RTE Performance Metric.
- The RTE Test may be conducted concurrently with a BESS Capacity Test.
- For purposes of the RTE Test, the charging cycle shall begin when the BESS is at a 0% State of Charge prior to a (i) 100% discharge cycle or (ii) BESS Capacity Test if being conducted concurrently and the Charging Energy is the amount of energy, as measured at the BESS inverters' AC input, that brings the BESS to a 100% State of Charge.

C. BESS Test Procedures.

- After Commercial Operations, Subscriber Organization shall demonstrate satisfaction of the BESS Capacity Performance Metric by reference to the operational data reflecting the net output of the BESS from the Point of Interconnection, or by conducting a scheduled formal BESS Capacity Test during such BESS Measurement Period. Once Subscriber Organization demonstrates satisfaction of the BESS Capacity Performance Metric through either operational data or a scheduled formal BESS Capacity Test (100% discharge cycle), the BESS shall be deemed to have met the BESS Capacity Performance Metric and satisfied ("passed") the BESS Capacity Test for the applicable BESS Measurement Period.
- After Commercial Operations, Subscriber Organization shall demonstrate satisfaction of the RTE Performance Metric by reference to the operational data reflecting the charging/discharging of the BESS, or by conducting a scheduled formal RTE Test during such BESS Measurement Period. Once Subscriber Organization demonstrates satisfaction of the RTE Performance Metric through either operational data or a scheduled formal RTE Test (100% charge/discharge cycle), the BESS shall be deemed to have met the RTE Performance Metric and satisfied ("passed") the RTE Test for the applicable BESS Measurement Period.
- Any BESS Capacity Test or RTE Test (each a "BESS Test" and collectively, the "BESS Tests") scheduled in lieu of being demonstrated by reference to operational data shall be performed at a time scheduled by the Company in its sole discretion.
- Subscriber Organization shall be permitted up to a total of three (3) BESS Tests (100% discharge cycles) within a BESS Measurement Period to demonstrate satisfaction of the BESS Capacity Performance Metric and RTE Performance Metric for such BESS Measurement Period, unless additional such tests are authorized by Company. If upon completion of the first BESS Test, Subscriber Organization does not "pass" either the BESS Capacity Test or the RTE Test, Company shall attempt to notice up to two (2) additional BESS Tests within a BESS Measurement Period, for Subscriber Organization to further demonstrate its performance. If a scheduled formal BESS Test is requested by Subscriber Organization, Company shall attempt to schedule a formal BESS Test and Company shall provide notice to Subscriber Organization no less than three (3) Business Days prior to conducting such scheduled formal BESS Test.
- If, during a BESS Measurement Period, Subscriber Organization fails to pass a BESS Capacity Test, the BESS shall nevertheless be deemed to have satisfied the BESS Capacity Performance

Metric for the applicable BESS Measurement Period if (i) Company failed to notice up to three BESS Capacity Tests in order for Subscriber Organization to further demonstrate the BESS' performance during such BESS Measurement Period, or (ii) Subscriber Organization was unable to perform at least two (2) such noticed BESS Capacity Tests during such BESS Measurement Period due to (a) conditions on the Company System other than Subscriber Organization-Attributable Non-Generation or (b) an act or omission by Company. If Subscriber Organization-Attributable Non-Generation is cause for the inability to demonstrate the BESS Capacity Performance Metric, the BESS Capacity Ratio used to assess LDs shall be the highest demonstrated in operational data or the most recently completed test during the applicable BESS Measurement Period.

- If, during a BESS Measurement Period, Subscriber Organization does not demonstrate satisfaction of the BESS Capacity Performance Metric through operational data or a BESS Capacity Test, assessment of Liquidated Damages will be based on the last of the BESS Capacity Tests performed.
- If, during a BESS Measurement Period, Subscriber Organization both fails to pass a RTE Test noticed by Company and fails to demonstrate satisfaction of the RTE Performance Metric by reference to operational data for such BESS Measurement Period, the BESS shall nevertheless be deemed to have satisfied the RTE Performance Metric for the applicable BESS Measurement Period if (i) Company failed to notice up to three RTE Tests in order for Subscriber Organization to further demonstrate the BESS' performance during such BESS Measurement Period, or (ii) Subscriber Organization was unable to perform at least two (2) such noticed RTE Tests during such BESS Measurement Period due to (a) conditions on the Company System other than Subscriber Organization-Attributable Non-Generation or (b) an act or omission by Company. If Subscriber Organization-Attributable Non-Generation is cause for not adequately demonstrating the RTE Performance Metric, the RTE Ratio used to assess LDs shall be the highest demonstrated in operational data or the most recently completed test during the applicable BESS Measurement Period.
- If, during a BESS Measurement Period, Subscriber Organization does not demonstrate satisfaction of the RTE Performance Metric through operational data or RTE Tests, assessment of Liquidated Damages will be based on the last of the RTE Tests performed.
- Company will conduct any necessary BESS Test(s) through Company Dispatch. Company shall have the right to attend, observe and receive the results of all BESS Tests. Subscriber Organization shall provide to Company the results of each BESS Test (including time stamped graphs of system performance based in operational data or test data) no later than ten (10) Business Days after any BESS Test.

## **2. BESS ANNUAL EQUIVALENT AVAILABILITY FACTOR**

- A. To the extent the Commercial Operations Date occurs on a date other than the first day of a BESS Measurement Period, the period between the Commercial Operations Date and the first day of the next BESS Measurement Period if any, shall be ignored for purposes of this BESS Availability Factor.
- B. For the purposes of calculating the BESS Annual Equivalent Availability Factor for the first three (3) full BESS Measurement Periods in the first Contract Year, the calculation will assume that the BESS is one hundred percent (100%) available for the remaining hours of the Contract Year.

C. “BESS Annual Equivalent Availability Factor” shall be calculated as follows:

$$\text{BESS Annual Equivalent Availability Factor} = 100\% \times \frac{AH - EDH}{PH}$$

Where:

PH is period hours (8760 hours; except leap year is 8784)

Available Hours (AH) is the number of hours that the BESS is not on Outage. It is sum of all Service Hours (SH) + Reserve Shutdown Hours (RSH).

A “BESS Outage” exists whenever the entire BESS is offline and unable to charge or discharge electric energy and is not in Reserve Shutdown state.

Service Hours (SH) is the number of hours during the applicable BESS Measurement Period and the immediately preceding three (3) full BESS Measurement Period that the BESS is online and (i) charging from the PV System or the Company System, or (ii) discharging electric energy to the Company System.

Reserve Shutdown Hours (RSH) is the number of hours the BESS is available but not charging or discharging electric energy or is offline at the Company's request for reasons other than Subscriber Organization-Attributable Non-Generation.

A "BESS Derating" exists when the BESS is available but at less than Maximum Rated Output, including deratings due to Subscriber Organization-Attributable Non-Generation or those by Company pursuant to Section 5.C (Company Rights of Dispatch) of the Contract. For the avoidance of doubt, if there is a BESS Outage occurring, there cannot also be a BESS Derating.

Equivalent Derated Hours (EDH) is the sum of ESADH, EPDH, and EUDH. For deratings due to BESS inverter unavailability, the equivalent full outage hour(s) are calculated by multiplying the actual duration of the derating (hours) by the number of inverters in the BESS unavailable and dividing by the total number of inverters in the BESS. For deratings that do not impact the availability of an entire BESS inverter or set of entire BESS inverters, the equivalent full outage hour(s) are calculated by multiplying the actual duration of the derating (hours) by the size of the derating (in MW) and dividing by the Maximum Rated Output.

Equivalent Subscriber Organization-Attributable Derated Hours (ESADH): A Subscriber Organization-Attributable Derating occurs when a derating exists due to Subscriber Organization-Attributable Non-Generation or deratings by Company pursuant to Section 5.C (Company Rights of Dispatch). Each individual derating is transformed into equivalent full outage hour(s). These equivalent hour(s) are then summed for the applicable BESS Measurement Period and the immediately preceding three (3) full BESS Measurement Periods.

EPDH is the equivalent planned derated hours, including Planned Derations (PD) and Maintenance Derations. A Planned Deration is when the BESS experiences a Deration scheduled well in advance and for a predetermined duration. A Maintenance Deration is a Deration that can be deferred beyond the end of the next weekend (Sunday at midnight or before Sunday turns into Monday) but requires a reduction in capacity before the next



Planned Deration (PD). Each individual Deration is transformed into equivalent full outage hour(s). These equivalent hour(s) are then summed for the applicable BESS Measurement Period and the immediately preceding three (3) full BESS Measurement Periods.

EUDH is the equivalent unplanned derated hours. An Unplanned Deration (Forced Derating) occurs when the BESS experiences a derating that requires a reduction in availability before the end of the nearest following weekend. Each individual Unplanned Deration is transformed into equivalent full outage hour(s). These equivalent hour(s) are then summed for the applicable BESS Measurement Period and the immediately preceding three (3) full BESS Measurement Periods.

The effect of Force Majeure is taken into account in calculating the BESS Annual Equivalent Availability Factor over a 12 calendar month period as follows: When such 12 month period contains any hours in a month during which the BESS or a portion of the BESS is unavailable due to Force Majeure, then such month shall be excluded from the 12 month period and the calculation period shall be extended back in time to include the next previous month during which there was no such unavailability of the BESS or a portion thereof due to Force Majeure. This means the BESS Equivalent Availability Factor would not change from that determined in the month directly preceding a month containing Force Majeure.

The following examples are provided as illustrative examples only:

*Example A:* The BESS was continuously available, with no BESS Outages or BESS Deratings during the applicable BESS Measurement Period and in the immediately preceding three (3) full BESS Measurement Periods. In this case AH = 8760 hours, EDH = 0 hours as ESADH, EPDH, and EUDH each = 0 hours

$$\text{BESS EAF} = 100\% \times \frac{8,760-0}{8,760} = 100\%$$

*Example B:* During the applicable BESS Measurement Period and the immediately preceding three (3) full BESS Measurement Periods: (a) The BESS was online and charging from the PV system or discharging electric energy to the Company System for 8,400 hours and was available but not discharging electric energy due to lack of stored energy (i.e., not Subscriber Organization-Attributable Non-Generation) for 226 hours; (b) The BESS experienced a Planned Derating of 7.2 MWs for 100 hours for maintenance that was scheduled a month in advance; (c) The BESS also experienced an Unplanned Derating of 62 BESS inverters for 100 hours as the derating could not be deferred to beyond the nearest following weekend. (d) The BESS did not experience any outage or derating due to Subscriber Organization-Attributable Non-Generation during this period.

The BESS Maximum Rated Output is 10 MW and the BESS contains 100 total inverters.

$$PH = 8,760 \text{ hours in 12 calendar months}$$

$$SH = 8,400 \text{ hours}$$

$$RSH = 226 \text{ hours}$$

$$AH = SH + RSH = 8,400 + 226 = 8,626 \text{ hours}$$

$$ESADH = 0$$

$$EPDH = 100 \text{ hours} \times 7.2 \text{ MW}/10 \text{ MW} = 72 \text{ hours (Planned Maintenance)}$$

$$EUDH = 100 \text{ hours} \times 62 \text{ inverters}/ 100 \text{ inverters} = 62 \text{ hours (Unplanned Deration (Forced Derating))}$$

$$EDH = 72 \text{ hours} + 62 \text{ hours} = 134 \text{ hours}$$

$$\text{BESS EAF} = 100\% \times \frac{8,626-134}{8,760} = 96.9\%$$

**3. SECTION 3 - BESS ANNUAL EQUIVALENT FORCED OUTAGE FACTOR**

$$EFOF = 100\% \times \frac{(FOH + EUDH)}{8760}$$

Where:

Equivalent Unplanned (Forced) Derated Hours (EUDH) is calculated in accordance with Attachment X (BESS Annual Equivalent Availability Factor) of this Contract.

Forced Outage Hours (FOH) = Sum of all hours the BESS experienced an Unplanned (Forced Outages) during the applicable BESS Measurement Period and the sum of all hours experienced during Unplanned (Forced) Outages during the immediately preceding three (3) full BESS Measurement Periods, in each case caused by Subscriber Organization-Attributable Non-Generation.

Unplanned (Forced) Derating: A Deration that requires a reduction in capacity of the BESS before the end of the nearest following weekend.

Unplanned (Forced) Outage: An outage that requires removal of the entire BESS from service before the end of the nearest following weekend that is not planned, including those caused by Subscriber Organization-Attributable Non-Generation or those imposed by Company pursuant to Section 5.C (Company Rights of Dispatch) to the Contract .

EXAMPLE CALCULATION:

Assume a 50 MW BESS that for the BESS Measurement Period in question was completely out of service for 50 hours. For the BESS Measurement Period in question, it also had the following deratings:

Duration of Derating	MW Size Reduction
100 Hours	25 MW
20 Hours	20 MW
50 Hours	5 MW

During the three preceding BESS Measurement Periods, the BESS had a total of 150 Forced Outage Hours and a total of 100 Equivalent Forced Derated Hours.

$$\text{FOH} = 50 \text{ hours} + 150 \text{ hours} = 200 \text{ hours}$$

$$\text{EUDH} = ((100 \times 25) / 50) + ((20 \times 20) / 50) + ((50 \times 5) / 50) + 100 = 163 \text{ hours}$$

$$EFOF = 100\% \times \frac{(200 + 163)}{8760} = 4.1\%$$

**ATTACHMENT I**  
**FACILITY'S CBRE PROGRAM**

1. **CBRE Program**. The purpose of the CBRE Program is to facilitate the continued expansion of renewable energy by allowing developers of renewable energy projects to provide Company's retail customers with the opportunity to avail themselves of the benefits of the CBRE Tariff by utilizing CBRE Credits to offset all or a portion of their on-going electricity usage. To this end, Subscriber Organization has established Facility's CBRE Project. Subscriber Organization acknowledges that it has been informed that Facility's CBRE Project must at all times comply with the requirements of the CBRE Program, the CBRE Tariff, the CBRE Framework, guidance from the PUC, guidance from the CBRE IO, and applicable Laws, including (i) the federal securities laws, including the registration requirements under the Securities Act of 1933 and the Securities and Exchange Act of 1934 and all rules and regulations promulgated thereunder (collectively, "Federal Securities Laws"); (ii) the State securities laws, including the registration requirements under the Hawai'i Uniform Securities Act and all rules and regulations promulgated thereunder (collectively, "State Securities Laws"); (iii) Laws concerning the dissemination of personally identifiable information; and (iv) Laws concerning consumer protection. The purpose of this Attachment I (Facility's CBRE Program) is to set forth certain requirements of the CBRE Program as of the Execution Date. Company reserves the right to modify the requirements of the CBRE Program upon PUC order and/or guidance from the CBRE IO where such modifications are necessary to comply with the CBRE Tariff, the CBRE Framework or applicable Laws, and Subscriber Organization shall comply with all such modifications. Without limitation to the generality of the foregoing, in the event of any conflict between the requirements of the CBRE Program, on the one hand, and any one or more of the CBRE Tariff, the CBRE Framework, guidance from the PUC, guidance from the CBRE IO, and/or applicable Laws, on the other hand, the CBRE Tariff, the CBRE Framework, guidance from the PUC, guidance from the CBRE IO, and applicable Laws, shall control and Subscriber Organization shall comply with the CBRE Tariff, the CBRE Framework, guidance from the PUC, guidance from the CBRE IO, and applicable Laws.
2. **Termination, Transfer and Buy-back of Subscriber Allocations**. Termination, transfer and buy-back of Subscriber Allocations shall be governed by the provisions of the CBRE Tariff contingent on whether the Facility's CBRE Program uses the Pay-As -You -Go or Pay-Up-Front model for Subscriber Allocations.
3. **Additional Representations of Subscriber Organization**. Subscriber Organization represents, warrants and covenants that:
  - A. Subscriber Organization shall disclose to each Account Holder before enrolling such Account Holder as a Subscriber:
    1. Subscriber Organization's experience in developing and operating renewable energy projects similar to the Facility.
    2. The circumstances under which the Lump Sum Payment can be reduced through the OEPR process and the impact of such reduction on Bill Credits.
    3. The circumstances under which the Bill Credits can be reduced if Performance Metrics LDs are unpaid by Subscriber Organization.
  - B. Subscriber Organization shall not knowingly allow the transfer of any Subscriber Allocations at a price other than that set forth in the repurchase/resale price schedule attached to the Subscriber Agreement.
  - C. Facility's CBRE Program:

1. As of the Execution Date, complies with all applicable Federal Securities Laws, and shall continue to be in compliance for the duration of Facility's CBRE Program.
  2. As of the Execution Date, complies with all applicable State Securities Laws, and shall continue to be in compliance for the duration of Facility's CBRE Program.
  3. As of the Execution Date, complies with all applicable Laws concerning the dissemination of personally identifiable information, and shall continue to be in compliance for the longer of (i) the duration of Facility's CBRE Program and (ii) for as long as Subscriber Organization continues to hold or otherwise have access to any personally identifiable information of Account Holders or former customers of Company.
  4. As of the Execution Date, complies with all applicable Laws concerning consumer protection, and shall continue to be in compliance for the duration of Facility's CBRE Program.
  5. Shall achieve the various CBRE Subscriber thresholds applicable to the Facility's CBRE Program.
  6. As of the Execution Date, Subscriber Organization is and "approved Subscriber Organization" under the CBRE Tariff and committed to operating, maintaining and administering its CBRE Project in accordance with this Contract and the CBRE Framework for the Term.
4. **Marketing and Sales of the Subscriber Allocations.** Subscriber Organization represents, warrants, and covenants that Subscriber Organization's marketing and sale of the Subscriber Allocations, including but not limited to Subscriber Organization's marketing and sales materials, shall comply with all applicable Federal Securities Laws and State Securities Laws.
5. **CBRE Online Portal and CBRE Program Data.** Subscriber Organization shall utilize the CBRE Online Portal and provide Company with CBRE Program data as required under the CBRE Tariff and/or the CBRE Framework.
6. **Additional Responsibilities.** Subscriber Organization shall perform the responsibilities of "Subscriber Organizations" under the CBRE Framework and the CBRE Tariff, including but not limited to complying with the Subscriber Agreement requirements, complying with the consumer protection measures, unlocking the market for LMI Subscribers and data collection requirements. Subscriber Organization shall cooperate with the CBRE IO as and when requested by the CBRE IO to facilitate the performance of the CBRE IO's responsibilities under the CBRE Framework.
7. **LMI Subscribers.**
- A. If Subscriber Organization's Facility has been awarded a project from one of Company's CBRE LMI RFP's, then Subscriber Organization has proposed, and hereby agrees, that all Subscribers enrolled for subscriptions in the Facility CBRE Program for this Facility shall be LMI Subscribers.
  - B. If Subscriber Organization, in its bid in response to any other Company CBRE RFP, has pledged to recruit a certain percentage of LMI Subscribers for its Facility CBRE Program, then Subscriber Organization hereby agrees to recruit LMI Subscribers to meet this pledged commitment for LMI Subscribers into Subscriber Organization's Facility CBRE Program.
  - C. If Subscriber Organization has an LMI Subscriber commitment under either Section 7.A or Section 7.B of this Attachment I (Facility's CBRE Program), then Subscriber Organization shall comply with the requirements of Part III of the CBRE Tariff to (1) qualify LMI Subscribers, (2) provide to Company upon request confirmation that Subscriber Organization has obtained the LMI certification obtained from each of its LMI Subscribers, and (3) comply with the minimum applicable requirements for LMI Subscribers and report monthly Subscriber Organization's LMI

Subscriber percentage status for Company's review. Subscriber Organization understands and agrees that failure to maintain the required percentages of LMI Subscribers in Subscriber Organization's Facility CBRE Program may subject Subscriber Organization to payment reductions and/or liquidated damages as specified in the CBRE Tariff.

--END--

**ATTACHMENT J**  
**[RESERVED]**

*Project Specific Addendum*  
*For*  
*Renewable Dispatchable Generation*  
*Projects Located on Moloka‘i*

*Project Type: PV + BESS Community Based Renewable Energy*

*Contract Capacity: \_\_\_\_\_MW of Generation*

*BESS Contract Capacity: \_\_\_\_\_MW/MWh of Storage*

*Are the PV System and the BESS DC-Coupled? No  Yes*

*CBRE Facility Location: \_\_\_\_\_*

*Execution Date: \_\_\_\_\_*



### PROJECT SPECIFIC ADDENDUM

This **PROJECT SPECIFIC ADDENDUM** is incorporated by reference into the **MID-TIER STANDARD FORM CONTRACT FOR RENEWABLE DISPATCHABLE GENERATION** for this CBRE Facility and entered into coterminous with such Mid-Tier Standard Form Contract as of \_\_\_\_\_, 20\_\_ (the “Execution Date”), by Maui Electric Company, Ltd., a Hawai‘i corporation (“Company”) and \_\_\_\_\_ (“Subscriber Organization”). Together, the Company and Subscriber Organization are the “Parties” and may singularly each be referred to as a “Party”.

**WHEREAS**, the Company has certain technical and contractual requirements are specific to the individual islands;

**WHEREAS**, the CBRE Facility will be located at \_\_\_\_\_ on the island of Moloka‘i;

**WHEREAS**, this Project Specific Addendum (“PSA”) contains all of the Island Specific provisions for the island of Moloka‘i that apply to this CBRE Facility;

**WHEREAS**, the Parties agree to abide by the provisions of this PSA, as hereinafter set-forth.

#### **NOW, THEREFORE THE PARTIES AGREE AS FOLLOWS:**

1. The text of Section 26.J (Hawai‘i General Excise Tax) of the Mid-Tier Standard Form Contract for this CBRE Facility shall read as follows:

Hawai‘i General Excise Tax. Subscriber Organization shall, when making payments to Company under this Contract, pay such additional amount as may be necessary to reimburse Company for the Hawai‘i general excise tax on gross income and all other similar taxes imposed on Company by any Governmental Authority with respect to payments in the nature of gross receipts tax, sales tax, privilege tax or the like, but excluding federal or state net income taxes. By way of example and not limitation, as of the Execution Date, all payments subject to the Hawai‘i general excise tax, (i) on the islands of on Maui, Moloka‘i and Lana‘i (totaling 4.0% as of the Execution Date) would include an additional 4.166% so that the underlying payment will be net of such tax liability; and (ii) all payments subject to general excise tax plus surcharge on Hawai‘i island (totaling 4.5% as of the Execution Date) would include an additional 4.7120% so the underlying payment will be net of such tax liability.

2. If the CBRE Facility is located on the Company-owned Site then Attachment COS – COMPANY-OWNED SITE shall be attached to this Project Specific Amendment and be a part hereof. Such Attachment COS provides additional requirements for use of the Company-owned Site.

3. Attachment F (Facility Owned Subscriber Organization) to the Mid-Tier Standard Form Contract for this CBRE Facility shall consist of the following Attachment F and Exhibits F-1 to F-8 that are attached to this Project Specific Addendum. In the event this CBRE Facility is DC-coupled, Attachment DCC - DC-COUPLED STORAGE shall be attached to this Project Specific Amendment and be a part hereof. Such Attachment DCC replaces certain terms and conditions found in the Mid-Tier Standard Form Contract and the attached Attachment F.

<b>Moloka'i</b>	
<b>ATTACHMENT F</b>	Facility Owned by Subscriber Organization
<b>Exhibit F-1</b>	Description of Generation and Battery Storage Facilities
<b>Exhibit F-2</b>	Consultants List
<b>Exhibit F-3</b>	Modeling Requirements
<b>Exhibit F-4</b>	Generator and Energy Storage Capability Curve(s)
<b>Exhibit F-5</b>	Single-Line Drawing and Interface Block Diagram
<b>Exhibit F-6</b>	Relay List and Trip Scheme
<b>Exhibit F-7</b>	Control System Acceptance Test Criteria
<b>Exhibit F-8</b>	Acceptance Test General Criteria

**IN WITNESS WHEREOF**, the Parties hereto have caused this Project Specific Addendum to be executed by their duly authorized representatives. This Project Specific Addendum is effective as of the Effective Date set forth above.

[Subscriber Organization]		Maui Electric Company, Limited, a Hawai'i corporation
By: _____		By: _____
Name: _____		Name: _____
Date: _____		Date: _____

MAILING ADDRESS:

Maui Electric Company, Ltd.  
 Attn: Renewable Energy Projects Division  
 P.O. Box 398  
 Kahului, HI 96733-6898

**ATTACHMENT F**  
**FACILITY OWNED BY SUBSCRIBER ORGANIZATION**

**1. THE FACILITY.**

A. Drawings, Diagrams, Lists, Settings and As-Built.

1. Single-Line Drawing, Interface Block Diagram, Relay List, Relay Settings and Trip Scheme.  
A preliminary single-line drawing (including notes), Interface Block Diagram, relay list, relay settings, and trip scheme of the Facility shall, after Subscriber Organization has obtained prior written consent from Company, be attached to this Contract on the Execution Date as Exhibit F-5 (Single-Line Drawing and Interface Block Diagram) and Exhibit F-6 (Relay List and Trip Scheme). A final single-line drawing (including notes), Interface Block Diagram, relay list and trip scheme of the Facility shall, after having obtained prior written consent from Company, be labeled the "Final" Single-Line Drawing, the "Final" Interface Block Diagram and the "Final" Relay List and Trip Scheme and shall supersede Exhibit F-5 (Single-Line Drawing and Interface Block Diagram) and Exhibit F-6 (Relay List and Trip Scheme) to this Contract and shall be made a part hereof on the Commercial Operations Date. After the Commercial Operations Date, no changes shall be made to the "Final" Single-Line Drawing, the "Final" Interface Block Diagram and the "Final" Relay List and Trip Scheme without the prior written consent of Subscriber Organization and Company. The single-line drawing shall expressly identify the Point of Interconnection of Facility to Company System.
2. As-Built. Subscriber Organization shall provide final as-built drawings of the Subscriber Organization-Owned Interconnection Facilities within 30 Days of the successful completion of the Acceptance Test.
3. Modeling. Subscriber Organization shall provide the models as set forth in Exhibit F-4.
4. No Material Changes. Subscriber Organization agrees that no material changes or additions to the Facility as reflected in the "Final" Single-Line Drawing (including notes), the "Final" Interface Block Diagram and the "Final" Relay List and Trip Scheme, shall be made without Subscriber Organization first having obtained prior written consent from Company. The foregoing are subject to changes and additions as part of any Performance Standards Modifications. If Company directs any changes in or additions to the Facility, records and operating procedures that are not part of any Performance Standards Modifications, Company shall specify such changes or additions to Subscriber Organization in writing, and, except in the case of an emergency, Subscriber Organization shall have the opportunity to review and comment upon any such changes or additions in advance.

B. Certain Specifications for the Facility.

1. Subscriber Organization shall furnish, install, operate and maintain the Facility including breakers, relays, switches, synchronizing equipment, monitoring equipment and control and protective devices approved by Company as suitable for parallel operation of the Facility with Company System. The Facility shall be accessible at all times to authorized Company personnel.
2. The Facility shall include:

**[LIST OF THE FACILITY]**

**Examples may include, but are not limited to:**

- **Subscriber Organization-Owned Interconnection Facilities**
  - **Substation**
  - **Control and monitoring facilities**
  - **Transformers**
  - **Generating and/or Battery Energy Storage System (“BESS”) equipment (as described in Exhibit F-1)**
  - **"Lockable" cabinets or housings suitable for the installation of the Company-Owned Interconnection Facilities located on the Site**
  - **Relays and other protective devices**
  - **Leased telephone line and/or equipment to facilitate microwave communication]**
3. The Facility shall comply with the following [**some requirements may be removed by Company following completion of technical review or IRS**]:
- a. Subscriber Organization shall install a \_\_\_\_ kV gang operated, load breaking, lockable disconnect switch and all other items for its switching station (relaying, control power transformers, high voltage circuit breaker). Bus connection shall be made to a manually and automatically (via protective relays) operated high-voltage circuit breaker. The high-voltage circuit breaker shall be fitted with bushing style current transformers for metering and relaying. Downstream of the high-voltage circuit breaker, a structure shall be provided for metering transformers. From the high-voltage circuit breaker, another bus connection shall be made to another pole mounted disconnect switch, with surge protection.
  - b. Subscriber Organization shall provide within the Subscriber Organization-Owned Interconnection Facilities a separate, fenced area with separate access for Company. Subscriber Organization shall provide all conduits, structures and accessories necessary for Company to install the Revenue Metering Package. Subscriber Organization shall also provide within such area, space for Company to install its communications, supervisory control and data acquisition ("SCADA") equipment (remote terminal unit or equivalent) and certain relaying if necessary for the interconnection. Subscriber Organization shall also provide AC and DC source lines as specified by Company. Subscriber Organization shall provide a telephone line for Company-owned meters. Subscriber Organization shall work with Company to determine an acceptable location and size of the fenced-in area. Subscriber Organization shall provide an acceptable demarcation cabinet on its side of the fence where Subscriber Organization and Company wiring will connect/interface.
  - c. Subscriber Organization shall ensure that the Subscriber Organization-Owned Interconnection Facilities have a lockable cabinet for switching station relaying equipment. Subscriber Organization shall select and install relaying equipment acceptable to Company. At a minimum, the relaying equipment will provide over and under frequency (81) negative phase sequence (46), under voltage (27), over voltage (59), ground over voltage (59G), over current functions (50/51) and direct transfer trip (if required). The settings shall be consistent with the requirements for over/under frequency and voltage ride-through. Subscriber Organization shall install protective relays that operate a lockout

relay (86), which in turn will trip the main circuit breaker and not allow it to be reclosed without reset.

- d. [Reserved]
- e. Subscriber Organization's equipment also shall provide at a minimum:
  - 1) Interface with Company's Telemetry and Control, or designated communications and control interface, to provide telemetry of electrical quantities such as total Facility net MW, MVar, power factor, voltages, currents, and other quantities as identified by the Company;
  - 2) Interface with Company's Telemetry and Control, or designated communications and control interface, to provide status for circuit breakers, reactive devices, switches, and other equipment as identified by the Company;
  - 3) Interface with Company's Telemetry and Control, or designated communications and control interface, to provide control to incrementally raise and lower the voltage target at the point of regulation operating in automatic voltage regulation control;
  - 4) Interface with Company's Telemetry and Control, or designated communications and control interface, to provide the active power control requirements of this Contract
  - 5) Interface with Company's Telemetry and Control, or designated communications and control interface, for the Company to specify control system modes of operation and parameters, for remotely configurable parameters and operating states required under this Contract;
  - 6) For Variable Energy Facilities: Interface with Company's Telemetry and Control, or designated communications and control interface, to provide telemetry of equipment availability and meteorological and production data required under Section 8 (Data and Forecasting) of this Attachment F (Facility Owned by Subscriber Organization) and the Facility's Power Possible; and
  - 7) Provision for Loss of Telemetry and Control: If Company's Telemetry and Control, or designated communications and control interface, is unavailable, due to loss of communication link, Telemetry and Control failure, or other event resulting in loss of the remote control by Company, provision must be made for Subscriber Organization to be able to institute via local controls, within 5 minutes (or such other period as Company accepts in writing) of the verbal directive by the Company System Operator, such change in voltage regulation target and real power export or import as directed by the Company System Operator. If all local and remote active power controls become unavailable or fail, the Facility may be required disconnect from the Company's System **[to be based upon the size of the system]**
  - 8) If the direct transfer trip is required and is unavailable due to loss of communication link, Telemetry and Control failure, or other event resulting in the loss of the remote control by the Company, provision must be made for the Subscriber Organization to shutdown Facility and open and lockout the main circuit breaker.
- f. If Subscriber Organization adds, deletes and/or changes any of its equipment, or changes its design in a manner that would change the characteristics of the equipment and specifications used in the IRS, Subscriber Organization shall be required to obtain Company's prior written approval. If an analysis to revise parts of the IRS is required, Subscriber Organization shall be responsible for the cost of revising those parts of the IRS,

and modifying and paying for the cost of the modifications to the Facility and/or the Company-Owned Interconnection Facilities based on the revisions to the IRS.

g. Cybersecurity and Critical Infrastructure Protection.

**[DRAFTING NOTE: COMPANY RETAINS SOLE DISCRETION TO CONSIDER THE LESS STRINGENT REQUIREMENTS (WHICH ARE INCLUDED IN THE FIRST SET OF ALTERNATIVE CYBER-SECURITY PROVISIONS UNDER G. (i) THROUGH (iv)) FOR PROJECTS THAT DO NOT EXCEED 1 MW.]**

- 1) Safety and Security Procedures. The Subscriber Organization shall maintain and enforce safety and security procedures to safeguard: all data provided by Company to Subscriber Organization pursuant to this Contract or in any way connected with the CBRE Program and the administration of the CBRE Program including but not limited to Subscriber names, Subscriber account numbers and information on such accounts, Subscriber addresses, Subscriber rate schedules and Subscriber CBRE bill credit information (“Company CBRE Data”); and all information regarding Company’s customers, customer lists, any of the data and testing results produced under this Contract and any information identified by Company as confidential (“Company Customer Data” and together with Company CBRE Data, collectively referred to as “Company Confidential Information”); all generation and telemetry data provided by the Subscriber Organization to the Company (“SO Data”); in Subscriber Organization’s possession, including Company Confidential Information that Subscriber Organization provides to any contractors, consultants, and other third parties retained by Subscriber Organization to assist Subscriber Organization to perform under this Contract in the course of Subscriber Organization’s performance pursuant to this Contract. Subscriber Organization warrants that it shall (A) use the National Institute of Standards and Technology (“NIST”) industry best practices for physical and systems security measures to prevent destruction, loss, alteration or unauthorized access to, use of, or tampering with, the CBRE Facility, Subscriber Organization software, and Company Confidential Information, including to protect the confidentiality and integrity of any of Company Confidential Information, operation of Company’s systems, and to prevent viruses and similar destructive code from being placed in any software or data provided to Company, on Subscriber Organization’s or Company’s website, or in Subscriber Organization’s or Company’s programming; and (B) use NIST industry best practices physical security and precautionary measures to prevent unauthorized access or damage to the CBRE Facility, including to protect the confidentiality and integrity of any of Company’s Confidential Information as well as the operation of Company’s systems. Subscriber Organization shall, at a minimum, protect Company’s Confidential Information and provide the standard of care required by NIST cybersecurity requirements, and the same measures it uses to protect its own confidential information.
- 2) Exception to Certain NIST Requirements. Company, at its sole and absolute discretion, may waive the requirements concerning NIST industry best practices as set forth in subsection 1(A) and (B) above provided that Subscriber Organization implements alternate measures that Company deems acceptable and not inconsistent with Company’s standards with respect to (A) physical and systems security measures to prevent destruction, loss, alteration or unauthorized access to, use of, or tampering with, the CBRE Facility, software and Company’s Confidential Information, including to protect the confidentiality and integrity of any of Company’s Confidential Information, operation of Company’s systems, and to prevent viruses and similar

destructive code from being placed in any software provided to Company, on Subscriber Organization's or Company's website, or in Subscriber Organization's or Company's programming; and (B) physical security and precautionary measures to prevent unauthorized access or damage to the CBRE Facility, including to protect the confidentiality and integrity of any of Company's Confidential Information as well as the operation of Company's systems.

- 3) Security Breach. In the event that Subscriber Organization discovers or is notified of a breach, potential breach of security, or security incident at the CBRE Facility or of Subscriber Organization's systems (a "Security Breach"), Subscriber Organization shall immediately (i) notify Company of such Security Breach, whether or not such breach has compromised any of Company Confidential information, (ii) investigate and remediate the effects of the Security Breach, (iii) cooperate with Company with respect to any such Security Breach and provide necessary information on the Security Breach as requested by Company; and (iv) comply with all applicable privacy and data protection laws, including any notification obligations. Any remediation of any Security Breach will be at Subscriber Organization's sole expense.
- 4) "Subscriber" means a retail customer of the Company who owns a subscription of Subscriber Organization's CBRE project interconnected with the Company.

**[ALTERNATIVE ENHANCED CYBER-SECURITY PROVISIONS-WAIVED SOLELY AT DISCRETION OF COMPANY.]**

- (i) Security Policies and Documentation. Subscriber Organization shall implement and document security policies and standards in accordance with industry best practices (e.g., aligned with the intent of NERC CIP-003-8 R1) and consistent with Company's security policies and standards. Subscriber Organization shall submit documentation describing the approach, methodology, and design to provide physical and cyber security (i.e., aligned with the intent of NERC CIP-003-8 R2) with its submittal of the design drawings pursuant to Section 1.C (Design Drawings, Bill of Materials, Relay Settings and Fuse Selection) of Attachment F (Facility Owned by Subscriber Organization) which shall be at least sixty (60) Days prior to the Acceptance Test.
  - (a) The design shall meet industry standards and best practices, consistent with the National Institute of Standards and Technology ("NIST") guidelines as indicated in Special Publication 800-53 Rev. 4 "Security and Privacy Controls for Federal Information Systems and Organizations" and Special Publication 800-82 Rev. 2 "Guide to Industrial Control Systems (ICS) Security". The system shall be designed with the criteria to meet applicable compliance requirements and identify areas that are not consistent with NIST guidelines and recommendations.
  - (b) The cybersecurity documentation shall include a block diagram of the control system with all external connections clearly described.
  - (c) Subscriber Organization shall provide such additional information as Company may reasonably request as part of a security posture assessment.



- (d) Subscriber Organization shall, at the request of Company or, in the absence of any request from Company, at least annually during the term of this Contract, provide Company with updated documentation and diagrams including a record of changes.
- (ii) Network and Application Security. Subscriber Organization shall implement appropriate network and application security processes and practices commensurate with the level of risk as determined by periodic risk assessments (i.e., aligned with the intent of NERC CIP-005-5):
- (a) Segment and segregate networks and functions, including physical and logical separation between business networks and control system networks (i.e., aligned with the intent of NERC CIP-005-5 R1).
  - (b) Limit unnecessary lateral communications (i.e., aligned with the intent of NERC CIP-005-5 R1).
  - (c) Harden network devices (i.e., aligned with the intent of NERC CIP-007-6 R1).
  - (d) Secure access to infrastructure devices (i.e., aligned with the intent of NERC CIP-004-6 R4).
  - (e) Perform out-of-band (OoB) network management (i.e., aligned with the intent of NERC CIP-005-5 R2).
  - (f) Validate integrity of hardware and software (i.e., aligned with the intent of NERC CIP-010-3 R1 and NERC CIP-006-6 R1 Part 10).
- (iii) Endpoint and Server Security. Subscriber Organization shall implement appropriate endpoint and server security processes and practices commensurate with the level of risk as determined by periodic risk assessments:
- (a) Mechanisms to identify vulnerabilities and apply security patches in a timely manner (i.e., aligned with the intent of NERC CIP-007-6 R2).
  - (b) Malware defense and anti-phishing capabilities (i.e., aligned with the intent of NERC CIP-007-6 R3).
  - (c) Access Controls to enforce the least privilege principle and provide access to resources only for authorized users (i.e., aligned with the intent of NERC CIP-004-6 R4).
  - (d) Secure authentication mechanisms including multi-factor authentication for systems with higher risk exposure (i.e., aligned with the intent of NERC CIP-007-6 R5 and NERC CIP-005-5 R2).
  - (e) Data confidentiality, protection, and encryption technologies for endpoints, servers, and mobile devices (i.e., aligned with the intent of NERC CIP-011-2 R1 and NERC CIP-005-5 R2).

Subscriber Organization shall (consistent with the following sentence) ensure that no malicious software ("Malware") or unauthorized code is introduced into any aspect of the Facility, Interconnection Facilities, the Company Systems interfacing with the Facility and Interconnection Facilities, and any of Subscriber Organization's critical control systems or processes used by Subscriber

Organization to provide energy, including the information, data and other materials delivered by or on behalf of Subscriber Organization to Company, (collectively, the "Environment"). Subscriber Organization shall periodically review, analyze and implement improvements to and upgrades of its Malware prevention and detection programs and processes that are commercially reasonable and consistent with the then current technology industry's standards and, in any case, not less robust than the programs and processes implemented by Subscriber Organization with respect to its own information systems.

- (iv) Cybersecurity Program. Subscriber Organization shall establish and maintain a continuous cybersecurity program (i.e., aligned with the intent of NERC CIP-003-8) that enables the Subscriber Organization (or its designated third party) to:
- (a) Define the scope and boundaries, policies, and organizational structure of the cybersecurity program.
  - (b) Conduct periodic risk assessments to identify the specific threats to and vulnerabilities of the Subscriber Organization's Organization consistent with guidance provided in NIST Special Publication 800-30 Rev. 1 "Guide for Conducting Risk Assessments".
  - (c) Implement appropriate mitigating controls and training programs and manage resources.
  - (d) Monitor and periodically test the cybersecurity program to ensure its effectiveness. Subscriber Organization shall review and adjust their cybersecurity program as appropriate for any assessed risks.
  - (e) Applicability is extended to Cloud Service providers and other third-party services the Subscriber Organization may use.
- (v) Security Monitoring and Incident Response. Company and Subscriber Organization shall collaborate on security monitoring and incident response, define points of contact on both sides, establish monitoring and response procedures, set escalation thresholds, and conduct training (i.e., aligned with the intent of NERC CIP-008-6). Subscriber Organization shall, at the request of Company or, in the absence of any request from Company, at least quarterly, provide Company with a report of the incidents that it has identified and describe measures taken to resolve or mitigate.

In the event that Subscriber Organization discovers or is notified of a breach, potential breach of security, or security incident at Subscriber Organization's Facility or of Subscriber Organization's systems, Subscriber Organization shall immediately (aa) notify Company of such potential, suspected or actual security breach, whether or not such breach has compromised any of Company's confidential information; (bb) investigate and promptly remediate the effects of the breach, whether or not the breach was caused by Subscriber Organization; (cc) cooperate with Company with respect to any such breach or unauthorized access or use; (dd) comply with all applicable privacy and data protection laws governing Company's or any other individual's or entity's data; and (ee) to the extent such breach was caused by Subscriber Organization, provide Company with reasonable assurances satisfactory to Company that such breach, potential breach, or security incident shall not recur. Subscriber Organization shall provide documentation to

Company evidencing the length and impact of the breach. Any remediation of any such breach will be at Subscriber Organization's sole expense.

If malicious software or unauthorized code is found to have been introduced into the Environment, Subscriber Organization will promptly notify Company. Subscriber Organization shall take immediate action to eliminate and remediate the effects of the Malware, at Subscriber Organization's expense. Subscriber Organization shall not modify or otherwise take corrective action with respect to the Company Systems except at Company's request. Subscriber Organization shall promptly report to Company the nature and status of all efforts to isolate and eliminate malicious software or unauthorized code.

(vi) Monitoring and Audit. Subscriber Organization shall provide information on available audit logs and reports relating to cyber and physical and security (i.e., aligned with the intent of NERC CIP-007-6 R4). Company may audit Subscriber Organization's records to ensure Subscriber Organization's compliance with the terms of this Section 1.B.3.G (Cybersecurity and Critical Infrastructure Protection) of this Attachment F (Facility Owned by Subscriber Organization), provided that Company has provided reasonable notice to Subscriber Organization and any such records of Subscriber Organization's will be treated by Company as confidential.

(vii) Contingency Plans. Subscriber Organization shall implement and maintain a business continuity plan, a disaster recovery plan, and an incident response plan ("Contingency Plans" – i.e., aligned with the intent of NERC CIP-009-6) appropriate for the level of risk based on the impact of Subscriber Organization's associated facilities, systems and equipment, which, if destroyed, degraded, misused, or otherwise rendered unavailable, would affect the reliable operation of the Company System. The Contingency Plans shall be provided to Company upon request. Such Contingency Plans shall be updated to reflect lessons learned from real recovery events.

h. Available Power Production.

1) Variable Energy Systems. Subscriber Organization's available power production considering equipment and resource availability (Power Possible) will be determined at any given time using the best-available data and methods for an accurate representation of the amount of available active power at the Point of Interconnection.

2) Variable Energy Systems Paired with Storage Operated through a Single Active Power Control Interface. For variable energy systems paired with storage operated through a single active power control interface (i.e., charging indirectly controlled through dispatch), Subscriber Organization's available power production considering equipment and resource availability and BESS state of charge ("Power Possible") will be determined at any given time using the best-available data and methods for an accurate representation of the amount of available active power at the Point of Interconnection. Telemetry will be provided to indicate state of charge, including available estimated duration at the current dispatch given state of charge and forecast production.

i. For variable resources where Power Possible is derived, in part or in whole, from a measured available variable energy source such as solar or wind: To the extent available, the Parties shall use Subscriber Organization's real time Power Possible communicated to Company through the SCADA system except to the extent that the potential energy does

not accurately reflect the actual available active power at the Point of Interconnection (plus or minus 0.1 MW). During those periods of time when the SCADA derived Power Possible is unavailable or does not accurately represent the available power production considering equipment and resource availability and BESS State of Charge, the Parties shall use the best available data obtained through commercially reasonable methods to determine the Power Possible. Follow up actions to resolve the discrepancy will be as provided in Section 1.J (Demonstration of Facility) of this Attachment F (Facility Owned by Subscriber Organization).

- 1) If, at any time during the Term, there is a material discrepancy or pattern of discrepancies in the accuracy of Power Possible, the Parties shall review the method for determining Power Possible and develop modifications with the objective of avoiding future discrepancies. If the Parties are unable to resolve the issue, then (aa) the Parties shall promptly commission a study to be performed by one of the engineering firms then included on the Qualified Independent Third-Party Consultants List attached to the Agreement as Attachment D (Consultants List) to evaluate the cause of the Power Possible discrepancy and to make recommendations with the objective of avoiding future Power Possible discrepancies ("Study"); and (bb) if the Company decides that its ability to effectively optimize the benefits of its right of Company Dispatch to dispatch the Facility's Net Energy Potential is materially impaired by the lack of an accurate method to determine Power Possible, the Company shall have the right to derate the Facility and the Facility shall be deemed to be in Subscriber Organization-Attributable Non-Generation status until the Study has been completed and the Study's recommendations have been implemented by Subscriber Organization to Company's reasonable satisfaction. Subscriber Organization shall pay for the cost of the Study. The Study shall be completed within ninety (90) days from the date the Study is commissioned, unless otherwise reasonably agreed to in writing by Subscriber Organization and Company. The Consultant shall send the Study to Company and Subscriber Organization. Subscriber Organization (and/or its Third-Party consultants and contractors), at Subscriber Organization's expense, shall take such action as the Study shall recommend (e.g., modifications to the model, modifications and/or additions to the data inputs used in the model, modifications to the procedures for maintaining and/or recalibrating the Monitoring and Communication Equipment used to provide data inputs, replacement of such Monitoring and Communication Equipment, modifications of procedures for Facility operations) with the objective of avoiding future Power Possible discrepancies. Such recommendations shall be implemented by Subscriber Organization to Company's reasonable satisfaction no later than forty-five (45) Days from the Day the completed Study is issued by the consultant, or such other longer commercially reasonable timeframe otherwise agreed to in writing by Company.
- j. Subscriber Organization shall reserve space within the Site for possible future installation of Company-owned meteorological equipment (such as wind speed, direction and relative humidity monitors, SODAR and irradiance monitors) and AC and DC source lines for such equipment as may be required depending on the Facility resource type and location. In the event Company decides to install such meteorological equipment: (i) Subscriber Organization shall work with Company to determine an acceptable location for such equipment and any associated wiring, interface or other components; and (ii) Company shall pay for the needed equipment, and installation of such equipment, unless otherwise agreed to by the Parties. Company and Subscriber Organization shall use commercially

reasonable efforts to facilitate installation and minimize interference with the operation of the Facility.

- k. The Facility shall, at a minimum, satisfy the wind load and seismic load requirements of the International Building Code and any more stringent requirements imposed under applicable Laws.
- C. Design Drawings, Bill of Material, Relay Settings and Fuse Selection. Subscriber Organization shall provide to Company for its review the design drawings, Bill of Material, relay settings and fuse selection for the Facility, and Company shall have the right, but not the obligation, to specify the type of electrical equipment, the interconnection wiring, the type of protective relaying equipment, including, but not limited to, the control circuits connected to it and the disconnecting devices, and the settings that affect the reliability and safety of operation of Company's and Subscriber Organization's interconnected system. Subscriber Organization shall provide the relay settings and protection coordination study, including fuse selection and AC/DC Schematic Trip Scheme (part of design drawings), for the Facility to Company during the 60% design. Company, at its option, may, with reasonable frequency, witness Subscriber Organization's operation of control, synchronizing, and protection schemes and shall have the right to periodically re-specify the settings. Subscriber Organization shall utilize relay settings prescribed by Company, which may be changed over time as Company System requirements change.
- D. Disconnect Device. Subscriber Organization shall provide a manually operated disconnect device which provides a visible break to separate Facility from Company System. Such disconnect device shall be lockable in the OPEN position and be readily accessible to Company personnel at all times.
- E. Other Equipment. Subscriber Organization shall install, own and maintain the infrastructure associated with the Revenue Metering Package, including but not limited to all enclosures (meter cabinets, meter pedestals, meter sockets, pull boxes, and junction boxes, along with their grounding/bonding connections), CT/PT mounting structures, conduits and duct lines, enclosure support structures, ground buses, pads, test switches, terminal blocks, isolation relays, telephone surge suppressors, and analog phone lines (one per meter), subject to Company's review and approval.
- F. Maintenance Plan. Subscriber Organization shall maintain Subscriber Organization-Owned Interconnection Facilities in accordance with Good Engineering and Operating Practices.
- G. Active Power Control Interface. **[COMPANY MAY REVISE THIS SECTION BASED ON SPECIFICS OF THE PROJECT.]**
  1. Subscriber Organization shall provide and maintain in good working order all equipment, computers and software associated with the control system (the "Active Power Control Interface") necessary to interface the Facility active power controls with the Company System Operations Control Center for real power control of the Facility by the Company System Operator.

The detailed design will be tailored to the specific resource type and configuration to achieve the functional requirements of the Facility.

The Active Power Control Interface will be used to control the net real power export (or import, as applicable) from the Facility for load following, system balancing, energy arbitrage, and/or supplemental frequency control as required under this Attachment F (Facility Owned by Subscriber Organization).

For variable resources paired with storage: The implementation of the Active Power Control Interface will allow the Company System Operator to control the net real power export or import, as applicable from the entire Facility, up to Power Possible, remotely from the Company System Operations Control Center through control signals from the Company System Operations Control Center. The Facility will maintain the power level specified by the Company through the variable resource and BESS available energy, subject to the availability of resource and BESS State of Charge.

The Active Power Control interface may also direct the charging/discharging of energy from the BESS.

The Facility real power output (or import, if grid storage charging is enabled) will automatically adjust to a change in frequency in accordance with the frequency response requirements provided in this Attachment F (Facility Owned by Subscriber Organization).

2. Company shall review and provide prior written approval of the design for the Active Power Control Interface to ensure compatibility with Company's centralized control systems and use of Facility available energy and storage capabilities. To ensure such continued compatibility, Subscriber Organization shall not materially change the approved design without Company's prior review and written approval. This will include design description and parameters for the Subscriber Organization's control system(s), which determine provision of net real power from the variable resource System (PV) and/or the BESS storage, and charging of the BESS storage, in response to the Active Power Control signal or signals.
3. The Active Power Control Interface shall include, but not be limited to, a demarcation cabinet, ancillary equipment and software necessary for Subscriber Organization to connect to Company's Telemetry and Control, located in Company's portion of the Facility switching station which shall provide the control signals to the Facility and send feedback status to the Company System Operations Control Center. The control type shall be analog output (set point) or raise/lower controls and will be established by the Company prior to final design approval.
4. The Active Power Control Interface shall also include provision for feedback points from the Facility indicating when active power target in MW for the Active Power Control signal(s). The Facility shall provide the MW target feedback to the Company SCADA system immediately upon receiving the respective control signal from the Company.
5. Subscriber Organization shall provide to the telemetry interface analogs for the gross production of the energy resource(s) at the Facility (for example, DC or AC MW production of the variable resource generator(s), depending on design; gross DC MW of the BESS, etc.). Subscriber Organization shall also provide the total net AC MW production at the Point of Interconnection.
6. The Active Power Control Interface shall provide for remote control of the real power output of the Facility by the Company at all times. If the Active Power Control Interface is unavailable or disabled, the Facility may not export electric energy to Company and the Facility shall be deemed to be in Subscriber Organization-Attributable Non-Generation status, unless the Company, in its sole discretion, agrees on an alternate means of dispatch. The alternate means of dispatch, including but not limited to local controls, is to be the temporary dispatch mechanism until the Active Power Interface is returned to service and must be capable of changing the real power export or import as directed by the Company System Operator within a mutually agreed response time by the Subscriber Organization receiving the directive from the Company System Operator, verbal or otherwise available by such alternate means. The

mutually agreed upon response time will be established in writing after the completion of the IRS. If Subscriber Organization fails to provide such remote control capability (whether temporarily or throughout the Term), then, notwithstanding any other provision of this Attachment F (Facility Owned by Subscriber Organization), Company shall have the right to derate or disconnect the entire Facility during those periods that such control capability is not provided and the Facility shall be deemed to be in Subscriber Organization-Attributable Non-Generation status for such periods.

- If all local and remote active power controls become unavailable or fail, the Company shall have the right to immediately disconnect the Facility from the Company System.
  - If the direct transfer trip or other communications assisted protection scheme is unavailable due to loss of communication link, Telemetry and Control failure, or other event resulting in the loss of the remote control by the Company, provision must be made for the Subscriber Organization to ramp down and shutdown Facility and open and lockout the main circuit breaker.
7. The rate at which the Facility changes net real power in response to the active power control shall not be less than the greater of 4 MW per minute, and shall make available through agreed parameters, such faster ramp as the installed equipment can support. The Facility's Active Power Control Interface will be used by Company to control the rate at which electric energy is changed to achieve the active power limit for load-following and regulation. The Facility will respond to the active power control request immediately with an echo of the set point and measurable change within the specified control cycle (0.5 to 4 seconds).
8. The Facility shall accept the following controls related to active power and frequency response to or from the Company centralized control system:
- **[NOTE – APPLICABILITY TO BE DETERMINED BY IRS]:** Maximum Power Import and Export Limits: The Facility is not allowed to exceed these settings under any circumstances. The primary frequency response control specified in Section 3.M. (Primary Frequency Response) of Attachment F (Facility Owned by Subscriber Organization) is not allowed to increase the Facility's net real power import or export above the Import and Export limits, respectively.
  - Power Reference Setpoint from Company (based on the input to the Facility, from the Active Power Control Interface): The Facility output shall match this setting from the Variable Resource and/or BESS so long as it can be supported by the variable resource and/or BESS State of Charge (Power Possible does not change). This net output should be accurate within +/- 0.05 MW under normal frequency conditions. This setpoint will be modified as appropriate in the controls by the appropriate frequency response consistent with Section 1.G.11 (Active Power – Frequency Response (DROOP)) and Section 1.G.12 (Dynamic Active Power – Frequency Performance) of this Attachment F (Facility Owned by Subscriber Organization).
  - From Subscriber Organization:
    - Power Possible (Available maximum capacity; Maximum Load Frequency Control (Regulation) Limit (lfmx, ecomx)): See above, instantaneous limit for available energy, represents max level the Facility can produce under present resource, BESS State of Charge (if applicable) and equipment conditions. This is used as upper limit for Company Dispatch.

- For variable energy resources, maximum level the variable generation resources can produce under present variable resource and equipment conditions.
  - Minimum Sustained Limit: Minimum output level the Facility can be reduced to continuously without delay (ecomn). For projects with BESS: If BESS charging from the grid is permitted, and charging capacity is available, this will be a negative value.
  - Minimum Load Frequency Control (Regulation) Limit (lfcmn). This is the Company dispatch low limit for frequency regulation. For projects with BESS: If BESS charging from the grid is permitted, and charging capacity is available, this may be a negative value.
  - Maximum Dispatchable Ramp Rate: Controlled ramp rate available under Company dispatch for controlled changes in output.
  - For projects with a BESS, Subscriber Organization shall also provide the following:
    - BESS potential (BESS State of Charge and projected number of hours at present dispatch, minimum dispatch, and maximum dispatch).
9. Subscriber Organization shall not override Company's active power controls without first obtaining specific approval to do so from the Company System Operator unless there is a system emergency. Disabling of the remote Active Power Control shall initiate telemetry notification to the Company.
10. The requirements of the Active Power Control Interface may be modified as mutually agreed upon in writing by the Parties.

**Active Power Communications between Company and Subscriber Organization**

Company will receive and send telemetry and control data through the communications interface in accordance with Company standards. The data points covered under this Contract, as described below, may overlap with data requirements described elsewhere.

**Data Points to be sent from Subscriber Organization to Company via SCADA**

. In addition to the items listed above, The following data points will be transmitted via SCADA or similar control system from Subscriber Organization to Company and represent Facility level data [Note: Data is representative and may be modified based on resource type and Facility requirements]:

<u>Description</u>	<u>Units</u>
Power Reference Set-Point (echo)	KW
Auxiliary Power demand	KW
Actual power output at POI	KW
Power Possible	KW
Actual reactive power at POI	Kvars
Average 3 phase Voltage at the POI	Kv



Variable Generation potential	KW
BESS State of Charge	Pct
Inverters online	Integer
Facility duration at current output	HRS
Active Power Control Status	Remote/Local
Indication of Frequency Response Mode	Integer Droop, ISOCH

**Response times and limitations of Facility in regard to Active Power Control**

The following protocols outline the expectations for responding to the Power Reference Set-Point.

Frequency of Changes. Company may send a new Power Reference Set Point to the Facility at up to the control cycle (between 0.5 and 4 seconds).

Range of Power Reference Set-Point. The range of set point values can be between 0% and 100% of Power Possible. For projects offering grid-charging storage, negative set-point values may be required.

The response time of the CBRE Facility to commanded active and reactive power setpoints provided by the Company System Operator shall be within the specified control cycle. Reaction time is defined as the time interval between the moment of receiving external control setpoints for active power and voltage control/reactive power from the Company System Operator and the moment when the CBRE Facility’s active and reactive power reach the designated setpoint (as measured at the POI).

**Backup Communications**

In the event of an Active Power Control Interface failure, Company and Subscriber Organization shall communicate via telephone, or other method mutually agreeable between the Parties, in order to correct the failure.

11. Active Power - Frequency Response (DROOP).

The Facility shall provide a primary frequency response with a frequency droop characteristic reacting to system frequency at the Point of Interconnection in both the overfrequency and underfrequency directions except as limited by the minimum and maximum available capacity and energy potential at the time of the event including BESS state of charge. This response must be timely and sustained rather than injected for a short period and then withdrawn. For over-frequency events, response may include absorption through charging (as applicable under the terms of this Contract). Subscriber Organization shall provide minimum operational limits for each online resource and the Facility for primary frequency response.

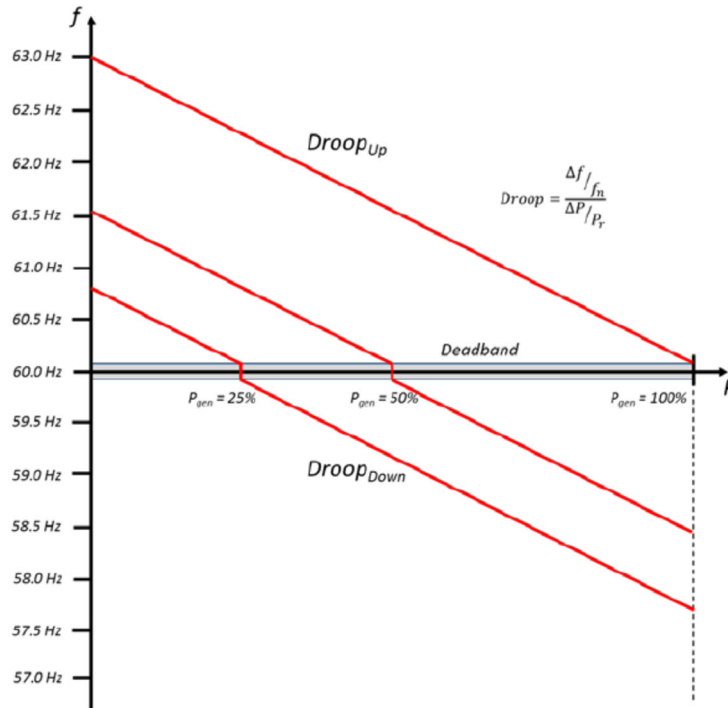
Frequency will be calculated over a period of time (e.g., three to six cycles, or other period as specified by Company), and filtered to take control action on the fundamental frequency component of the calculated signal. Calculated frequency may not be susceptible to spikes caused by phase jumps on the Company system.

The active power-frequency control system, and overall response of the inverter-based resource (plant), must meet the following performance aspects (see figure below):

The active power-frequency control system shall have an adjustable proportional droop characteristic with a default value of [4%] percent. The droop setting shall permit a setting from 0.1% to 10%. This setting shall be changed upon Company's written request as necessary for grid droop response coordination. The droop setting shall be tunable and may be specified during commissioning. The droop shall be a permanent value based on Pmax (Net Nameplate Capacity) and Pmin (typically 0 for an inverter-based resource, even with a grid charging capable BESS). This keeps the proportional droop constant across the full range of operation and shares the burden fairly across all frequency responsive resources. The curve for an inverter-based BESS may include the negative active power quadrant of this curve, but the droop slope is to be based on the minimum output of 0 MW (Pmin) . The droop response must include the capability to respond in both the upward (underfrequency) and downward (overfrequency) directions. Frequency droop will be based on the difference between Net Nameplate Capacity (Pmax) and zero output (Pmin) such that the [4%] percent droop line is always constant for a resource.

Subscriber Organization shall make commercially reasonable efforts to provide frequency response without a deadband, but in any case, not to exceed +/- 0.0166 Hz. If the active power-frequency control system has a deadband, it shall be a nonstep deadband that is adjustable between 0 Hz and the full frequency range of the droop characteristic with a default value of 0.0332 Hz and centered at nominal frequency of 60 Hz (i.e. 59.9834 Hz to 60.0166 Hz). Nonstep deadband is where the change in active power output starts from zero deviation on either side of the deadband. Frequency deadband is the range of frequencies in which the unit does not change active power output.

Inverter-based resources may consider a small hysteresis characteristic where linear droop meets any deadband to reduce dithering of inverter output when operating near the edges of the deadband. The hysteresis range may not exceed  $\pm 0.005$  Hz on either side of the deadband. If measurement resolution is not sufficient to measure this frequency, hysteresis may not be used.



### Active Power - Frequency Control Characteristic

Nominal System Frequency is 60.00 Hz.

The closed-loop dynamic response of the active power-frequency control system of the overall inverter-based resources, as measured at the POI must have the capability to meet or exceed the performance specified in below. Subscriber Organization shall ensure that the models and parameters for the resources and control equipment are consistent with those provided during the IRS process and that any updates have been provided to the Company reflecting currently implemented settings and configuration.

#### 12. Dynamic Active Power-Frequency Performance.

For a step change in frequency at the point of measure of the inverter-based resource [NOTE - MAY BE ADJUSTED AS THE RESULT OF IRS]:

Reaction time: The time between a step change in frequency and the time when the resource active power output begins responding to the change shall be less than 500 milliseconds or as otherwise specified by Company.<sup>1</sup>

Rise time: The time when the resource has reached 90% of the new steady-state (target) active power output shall be less than 4 seconds, or as otherwise specified by Company.<sup>2</sup>

<sup>1</sup> Time between step change in frequency and the time to be within 10 percent of new steady-state value can be used as a proxy for determining this time.

<sup>2</sup> Percentage based on final (expected) settling value.

Settling Time: Time in which the resource has entered into, and remains within, the settling band of the new steady-state active power (target) output shall be less than 10 seconds, or as otherwise specified by Company.

Overshoot: Percentage of the rated active power output that the resource can exceed while reaching the settling band shall be less than 5% or as otherwise specified by Company.<sup>3</sup>

Settling Band: Percentage of rated active power output that the resource should settle to within the settling time shall be less than 2.5%.

When operating in parallel with the Company System, the Facility shall operate with its primary frequency response control in automatic operation and in accordance with Company directions. Notification of changes in the status of the frequency response controls and, where applicable, mode of operation must be provided to the Company System Operator immediately through SCADA telemetry indication.

The Facility frequency response control shall adjust, without intentional delay and without regard to the ramp rate limits in Section 3.D of this Attachment F (Facility Owned by Subscriber Organization), the Facility's net real power export based on frequency deadband and frequency droop settings specified by the Company.

The Facility frequency response control shall increase the net real power export above the Power Reference Setpoint set under Section 1.G.8. of this Attachment F (Facility Owned by Subscriber Organization) or further decrease the net real power export from the Power Reference Setpoint in its operations in accordance with the frequency response settings.

The Facility frequency response control shall be in continuous operation unless directed otherwise by the Company.

13. [Reserved]

#### H. Control System Acceptance Test Procedures.

1. Conditions Precedent. The following conditions precedent must be satisfied prior to conducting the Control System Acceptance Test:
  - Successful completion of the Acceptance Test.
  - Facility has been successfully energized.
  - All of the Facility's generating and storage equipment (as applicable) have been fully commissioned.
  - The control system computer has been programmed for normal operations.
  - All equipment that is relied upon for normal operations (including ancillary devices such as capacitors/inductors, energy storage device, statcom, etc.) shall have been commissioned and be operating within normal parameters.
2. Facility Energy Equipment. In the event that all or any portion of the Facility's energy equipment is not available for the duration of the Control System Acceptance Test, the Control System Acceptance Test will have to be re-run from the beginning unless Subscriber Organization demonstrates to the satisfaction of the Company that the test results attained are

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<sup>3</sup> Percentage based on final (expected) settling value.

consistent with the results that would have been attained if all of the equipment had been available for the duration of the test.

3. Procedures. The Control System Acceptance Test will be conducted on Business Days during normal working hours on a mutually agreed upon schedule. No Control System Acceptance Test will be scheduled during the final 21 Days of a calendar year. No later than thirty (30) Days prior to conducting the Control System Acceptance Test, Company and Subscriber Organization shall agree on a written protocol setting out the detailed procedure and criteria for passing the Control System Acceptance Test. Exhibit F-7 (Control System Acceptance Test Criteria) provides general criteria to be included in the written protocol for the Control System Acceptance Test. Within fifteen (15) Business Days of completion of the Control System Acceptance Test, Company shall notify Subscriber Organization in writing whether the Control System Acceptance Test(s) has been passed and, if so, the date upon which such Control System Acceptance Test(s) was passed. If any changes have been made to the technical specifications of the Facility or the design of the Facility in accordance with Section 5(f) of Exhibit F-1 (Description of Generation and Battery Storage Facility), such changes shall be reflected in an amendment to this Contract, and the written protocol for the Control Systems Acceptance Test shall be based on the Facility as modified. Such amendment shall be executed prior to conducting the Control System Acceptance Test and Company shall have no obligation for any delay in performing the Control Systems Acceptance Test due to the need to complete and execute such amendment.
- I. Facility Security and Maintenance. Subscriber Organization is responsible for securing the Facility. Subscriber Organization shall have personnel available to respond to all calls related to security incidents and shall take commercially reasonable efforts to prevent any security incidents. Subscriber Organization is also responsible for maintaining the Facility, including vegetation management, to prevent security breaches. Subscriber Organization shall comply with all commercially reasonable requests of Company to update security and/or maintenance if required to prevent security breaches.
- J. Demonstration of Facility. Company shall have the right at any time, other than during maintenance or other special conditions, including Force Majeure, communicated by Subscriber Organization, to notify Subscriber Organization in writing of Subscriber Organization's failure, as observed by Company and set forth in such written notice, to meet the operational and performance requirements specified in Section 1.B.3.i, Section 1.G. (Active Power Control Interface) and Section 3 (Performance Standards) of this Attachment F (Facility Owned by Subscriber Organization), and to require documentation or testing to verify compliance with such requirements. Upon receipt of such notice, Subscriber Organization shall promptly investigate the matter, implement corrective action and provide to Company, within thirty (30) Days of such notice or such longer time period agreed to in writing by Company, a written report of both the results of such investigation and the corrective action taken by Subscriber Organization. If the Subscriber Organization's report does not resolve the issue to Company's reasonable satisfaction, the Parties shall promptly commission a study to be performed by one of the engineering firms then included on the Qualified Independent Third-Party Consultants List attached to the Contract as Exhibit F-2 (Consultants List) to evaluate the cause of the non-compliance and to make recommendations to remedy such non-compliance. Subscriber Organization shall pay for the cost of the study. The study shall be completed within ninety (90) Days, unless the selected consultant determines that such study cannot reasonably be completed within ninety (90) Days, in which case, such longer commercially reasonable period of time as it takes the consultant to complete the study. The consultant shall send the study to Company and Subscriber Organization. Subscriber Organization (and/or its Third-Party consultants and contractors), at Subscriber Organization's expense, shall take such action as the study shall recommend with the objective of resolving the non-compliance.

Such recommendations shall be implemented by Subscriber Organization to Company's reasonable satisfaction no later than forty-five (45) Days from the Day the completed study is issued by the consultant, unless the consultant determines that such recommendation cannot reasonably be implemented within forty-five (45) Days, in which case, such longer commercially reasonable period of time agreed to by the Parties in writing to implement such recommendation as determined by the consultant. Failure to implement such recommendations within this period shall constitute a material breach of this Contract. Unless the aforementioned written report and study are being completed, and any recommendations are being implemented, solely to address Seller's failure to satisfy the storage Round Trip Efficiency Performance Metric of this Agreement, the Company shall have the right to declare the Facility derated and in Subscriber Organization-Attributable Non-Generation status until the Subscriber Organization's aforementioned written report has been completed, any subsequent study commissioned by the Parties has been completed and any recommendations to resolve the non-compliance have been implemented to Company's reasonable satisfaction.

2. **OPERATING PROCEDURES.** [NOTE: NUMERICAL SPECIFICATIONS IN THIS SECTION 2 MAY VARY DEPENDING ON THE SPECIFIC PROJECT AND THE RESULTS OF THE PROJECT-SPECIFIC INTERCONNECTION REQUIREMENT STUDY.]

- A. Reviews of the Facility. Company may require periodic reviews of the Facility, maintenance records, available operating procedures and policies, and relay settings, and Subscriber Organization shall implement changes Company deems necessary for parallel operation or to protect the Company System from damages resulting from the parallel operation of the Facility with the Company System.
- B. Separation. Subscriber Organization must separate from Company System whenever requested to do so by the Company System Operator pursuant to Section 5. (Company Dispatch) and Section 12. (Personnel and System Safety) of the Contract.
- C. Subscriber Organization Logs. Logs shall be kept by Subscriber Organization for information on unit availability including reasons for planned and forced outages, circuit breaker trip operations, relay operations, including target initiation, and other unusual events. Company shall have the right to review these logs, especially in analyzing system disturbances. Subscriber Organization shall maintain such records for a period of not less than six (6) years.
- D. Reclosing and Return to Service. Under no circumstances shall Subscriber Organization, when separated from the Company System for any reason, including tripping during disturbances or due to equipment failure, reclose into the Company System without first obtaining specific approval to do so from the Company System Operator. Ramp rates, behavior and mode of operation upon return to service shall conform to verbal instructions from the System Operator or Active Power control from Company. Following local or system wide outage conditions, the Facility shall not attempt to automatically reconnect to the grid (unless directed by the Company System Operator) so as to not interfere with Company System Operator system restoration procedures.
- E. [Reserved]
- F. [Reserved]
- G. Critical Infrastructure Protection. Subscriber Organization shall comply with the critical infrastructure protection requirements set forth in Section 1.B.3.g (Cybersecurity and Critical Infrastructure Protection) of this Attachment F (Facility Owned by Subscriber Organization).
- H. Allowed Operations. Facility shall be allowed to export energy to the Company System only when the [ ] circuit is in normal operating configuration served by breaker [ ] at [ ]

Substation. **[TO BE DETERMINED BY COMPANY BASED ON THE RESULTS AND REQUIREMENTS OF THE IRS]**

**3. PERFORMANCE STANDARDS.**

**A. PROVISIONS FOR DISTRIBUTION CONNECTION**

Rule 14H. The Facility shall follow the performance standards of Rule 14H Appendix I and the additional provisions set forth below in Section 3.B. (Reactive Power Control) through Section 3.V. (Unintentional Islanding). To the extent any of those additional provisions conflict with Rule 14H, the provisions of this Contract shall control.

**B. Reactive Power Control.** **[THESE REQUIREMENTS MAY BE CHANGED BY COMPANY UPON COMPLETION OF THE IRS.]** Subscriber Organization shall control its reactive power by automatic voltage regulation control. Subscriber Organization shall automatically regulate voltage at a point, the point of regulation, between the Subscriber Organization's generator terminal and the Point of Interconnection to be specified by Company, to within 0.5% of a voltage or power factor specified by the Company System Operator to the extent allowed by the Facility reactive power capabilities as defined in Section 3.C (Reactive Power Characteristics) of this Attachment F (Facility Owned by Subscriber Organization).

**C. Reactive Power Characteristics.** **[THESE REQUIREMENTS MAY BE CHANGED BY COMPANY UPON COMPLETION OF THE IRS.]**

1. The Facility shall install sufficient equipment so that the Facility will have the ability to deliver or receive, at the point of interconnection, reactive power as illustrated in the **[generator capability]** curve(s) attached as Exhibit F-4, which represents the Facility Composite (Generator and Energy Storage Capability Curve(s)). Facilities with a BESS with grid charging can operate with negative active power. These facilities shall provide automatic voltage control within their reactive capability while acting as a load (charging, negative active power generation). The automatic voltage control aspects of a BESS shall be seamless across the transition from acting as a generating resource to acting as a load. The Facility must be capable of automatically adjusting reactive control to maintain the bus voltage at the Point of Interconnection to meet the scheduled voltage set point target specified by the Company System Operator and be capable of supplying reactive power in accordance with the **[generator capability]** curve(s) attached to this Agreement as Exhibit B-2 including capability to continue to provide reactive compensation at all active power outputs down to zero active power. The voltage target will be specified remotely by the Company System Operator through SCADA. The Facility's voltage set point target must reflect the Company voltage set point target controlled from SCADA, without delay. The Facility should not normally operate on a fixed var or fixed power factor unless agreed by Company. The voltage setpoint target and present Facility minimum and maximum reactive power limits based on the Facility Composite capability curve shall be provided to the Company SCADA through Company's Telemetry and Control.
2. The Facility shall contain equipment able to continuously and actively control the output of reactive power under automatic voltage regulation control reacting to system voltage changes. The response requirements are differentiated for large and small signal disturbance performance characteristics. Small signal disturbances are those that reflect normal variations under non-disturbance conditions, the continuous operation range for voltage ride through:  $0.80 \text{ pu} \leq V \leq 1.10 \text{ pu}$  at the point of interconnection. Large disturbance is where the voltage at the point of interconnection falls outside the continuous operating range.

3. For small signal disturbances, reaction time between the step change in voltage and the reactive power change shall be less than 500 msec (no intentional time delay). The automatic voltage regulation response speed at the point of regulation shall be such that at least 90% of the initial voltage correction needed to reach the voltage control target will be achieved within 1 second following a step change. The percentage of rated reactive power output that the resource can exceed while reaching the settling band shall be less than five percent (5%).
4. Large disturbances: Large disturbances are characterized by voltage falling outside of the continuous operating range. The Facility shall adhere to the following characteristics for large disturbances:

The response of each generating resource over its full operating range and for all expected grid conditions should be stable. The dynamic performance of each resource should be tuned to provide this stable response. Company will work with Subscriber Organization to ensure during the interconnection process that each resource supports Company System reliability and provides a stable transient response to grid events. **[Note - The performance specifications described here may need to be modified based on studies performed for specific interconnections to provide a stable response.]**

Inverter-based resources shall operate in closed loop automatic voltage control at all times to support voltage regulation and voltage stability. Either the individual inverters or the plant-level closed loop automatic voltage controller must operate with a relatively fast response characteristic to mitigate steady-state voltage issues from causing dynamic voltage collapse. The plant-level controller may send voltage or reactive power set point changes to the individual inverters relatively fast, or the inverters will respond locally (depending on control architecture).

For a large disturbance step in voltage, measured at the inverter terminals, where voltage falls outside the continuous operating range, the positive sequence component of the inverter reactive current response must meet the performance specifications set forth below. These parameters may be adjusted following additional study and/or operational testing and performance.

Reaction time: Time between the step change in voltage and when the resource reactive power output begins responding to the change. The reaction time shall be less than 16 msec.

Rise time: Time between a step change in control signal input and when the reactive power output changes by 90 percent of its final value. The rise time shall be less than 100 msec.

Overshoot: Percentage of rated reactive current output that the resource can exceed when reaching the settling band. Overshoot will be determined following the IRS such that any overshoot in reactive power response does not cause Company System voltages to exceed acceptable voltage limits. The magnitude of the dynamic response may be requested to be reduced based on stability studies or actual operational data review.

If the Facility does not operate in accordance with Section 3.C of this Attachment F (Facility Owned by Subscriber Organization), Company may disconnect all or a part of Facility from Company System until Subscriber Organization corrects its operation (such as by installing supplemental reactive power equipment or additional control modifications, at Subscriber Organization's expense).

D. Ramp Rates.



Subscriber Organization shall ensure that the ramp rate of the Facility is less than 100 KW a minute for all conditions other than those under control of the Company System Operator and/or those due to desired frequency response, including start up, depletion of storage charge and resource, locally controlled startup and shut down.

E. Ride Through.

Ride-Through requires that the resource continues to inject current within the "No Trip" zone of the voltage and frequency ride-through requirements. Unless approved during the Interconnection Requirements Study analysis, resources should not use "momentary cessation" within the ride-through regions for any of the ride-through requirements in this Attachment F (Facility Owned by Subscriber Organization). In the "may trip" regions, the Facility shall initiate trip for over/under voltage and frequency conditions only as required for Facility equipment operating limits to avoid damage. Any such limits of operation should be conveyed to the Company and represented in the provided models.

F. Undervoltage Ride-Through.

The Facility, as a whole, will meet the following undervoltage ride-through requirements during low voltage affecting one or more of the three voltage phases ("V" is the voltage of any three voltage phases at the Point of Interconnection). For alarm conditions the Facility shall not disconnect from the Company System unless the Facility's equipment is at risk of damage. This is necessary in order to coordinate with the existing Company System. **[THESE VALUES MAY BE CHANGED BY COMPANY UPON COMPLETION OF THE IRS. WITHOUT LIMITATION, FOR A DISTRIBUTION-CONNECTED FACILITY, UPON COMPLETION OF THE IRS THE COMPANY MAY SPECIFY REQUIREMENTS FOR A MANDATORY DISCONNECTION FROM THE COMPANY SYSTEM.]**

0.80 pu $\leq$ V $\leq$ 1.10 pu	The Facility remains connected to the Company System and in continuous operation.
0.70 pu $\leq$ V < 0.80 pu	The Facility remains connected to the Company's System and in continuous operation for a minimum of twenty (20) seconds (while "V" remains in this range);
0.50 pu $\leq$ V < 0.70 pu	The Facility remains connected to the Company's System and in continuous operation for a minimum of ten (10) seconds (while "V" remains in this range);
0.15 pu $\leq$ V < 0.50 pu	The Facility remains connected to the Company's System and in continuous operation for a minimum of two (2) seconds (while "V" remains in this range);
0.00 pu $\leq$ V < 0.15 pu	The Facility may initiate disconnection from the Company System if the voltage remains in this range for more than 0.16 seconds.

Protective Undervoltage Relaying (27) shall be set to alarm only to meet the above ride-through requirements, and shall not initiate a disconnect from the Company System unless Subscriber Organization reasonably determines based upon Good Engineering and Operating Practices that the Facility's equipment is at risk of damage. This is necessary in order to coordinate with the existing Company System.

Subscriber Organization shall have sufficient capacity to fulfill the above mentioned requirements to ride-through subsequent events 300 cycles or more apart, between which the voltage at the Point of Interconnection recovers above 0.80 pu. **[THE ACTUAL RIDE-THROUGH TIMES WILL BE DETERMINED BY COMPANY IN CONNECTION WITH THE IRS]**

G. Over Voltage Ride-Through.

The overvoltage protection equipment at the Facility shall be set so that the Facility will meet the following overvoltage ride-through requirements during high voltage affecting one or more of the three voltage phases (as described below) ("V" is the voltage of any of the three voltage phases at the Point of Interconnection). For alarm conditions the Facility should not disconnect from the Company System unless the Facility's equipment is at risk of damage. This is necessary in order to coordinate with the existing Company System. **[THESE VALUES MAY BE CHANGED BY THE COMPANY UPON COMPLETION OF THE IRS. WITHOUT LIMITATION, FOR A DISTRIBUTION-CONNECTED FACILITY, UPON COMPLETION OF THE IRS THE COMPANY MAY SPECIFY REQUIREMENTS FOR A MANDATORY DISCONNECTION FROM THE COMPANY SYSTEM.]**:

$$0.80 \text{ pu} \leq V \leq 1.10 \text{ pu}$$

The Facility remains connected to the Company System and in continuous operation.

$$1.10 \text{ pu} < V \leq 1.20 \text{ pu}$$

The Facility remains connected to the Company System and in continuous operation no less than 30 seconds; the duration of the event is measured from the point at which the voltage increases at or above 1.10 pu and ends when voltage is at or below 1.10 pu.

$$V > 1.20 \text{ pu}$$

The Facility remains connected to the Company System and in continuous operation for as long as possible as allowed by the equipment operational limitations.

Protective Overvoltage Relaying (59) shall be set to alarm only to meet the above ride-through requirements, and shall not initiate a disconnect from the Company System unless Subscriber Organization reasonably determines based upon Good Engineering and Operating Practices that the Facility's equipment is at risk of damage. This is necessary in order to coordinate with the existing Company System.

H. Transient Stability Ride-Through.

In all modes, the Facility shall be designed such that the transient stability of Company System is maintained for normally cleared and secondarily cleared faults. The Facility will be required to remain connected through anticipated rates of change of frequency **[TO BE PROVIDED UPON COMPLETION OF IRS]**

I. [RESERVED]

J. Underfrequency Ride-Through.

The Facility shall meet the following underfrequency ride-through requirements during an underfrequency disturbance, and export of power shall continue with output adjusted as appropriate for Facility droop response consistent with Section 1.G.11 (Active Power – Frequency Response (DROOP)) and Section 1.G.12 (Dynamic Active Power – Frequency Performance) of this Attachment F (Facility Owned by Subscriber Organization) ("f" is the Company System frequency at the Point of Interconnection):

$$57.0\text{Hz} \leq f < 63.0\text{Hz}$$

The Facility remains connected to the Company System and in continuous operation.

$$50.0\text{Hz} \leq f < 57.0\text{Hz}$$

The Facility remains connected to the Company System and in continuous operation for at least twenty (20) seconds per event. The duration of the event is from the point at which the frequency is below 57 Hz and ends when the frequency is at or above 57 Hz. The Facility may initiate an alarm if frequency remains in this range for more than twenty (20) seconds.

$$f < 50.0\text{Hz}$$

The Facility remains connected to the Company System and in continuous operation for the duration allowed by the equipment operational limitations. The Facility may initiate an alarm immediately.

Protective Underfrequency Relaying (81U) shall be set to alarm only to meet the above ride-through requirements, and shall not initiate a disconnect from the Company System unless Subscriber Organization reasonably determines based upon Good Engineering and Operating Practices that the Facility's equipment is at risk of damage. This is necessary in order to coordinate with the existing Company System.

Any tripping on calculated frequency should be based on accurately calculated and filtered frequency measurement over a time frame of minimum six cycles, or other period as specified by the Company, and should not use an instantaneously calculated value.

K. Overfrequency Ride-Through.

The Facility will behave as specified below for overfrequency conditions, and export of power shall continue with output adjusted as appropriate for Facility droop response consistent with Section 1(g)(xi) (Active Power – Frequency Response (DROOP)), Section 1(g)(xii) (Dynamic Active Power – Frequency Performance), and **[FOR FACILITIES WITH STORAGE]** Section 1(g)(xiii) (Alternate Active Power / Frequency Response Modes) ("f" is the Company System frequency at the Point of Interconnection):

$$57.0\text{Hz} \leq f \leq 63.0\text{Hz}$$

The Facility remains connected to the Company System and in continuous operation.

$63.0\text{Hz} < f \leq 65.0\text{Hz}$

The Facility remains connected to the Company System for at least twenty (20) seconds. After twenty seconds, the Facility may initiate an alarm and the Facility remains connected and producing power for the duration allowed by the equipment operational limitations. The duration of condition is from the point at which the frequency is above 63.0 Hz and ends when the frequency is at or below 63.0 Hz.

$f > 65.0\text{Hz}$

The Facility remains connected to the Company System for the duration allowed by the equipment operational limitations. The Facility may initiate an alarm immediately.

Protective Overfrequency Relaying (81O) shall be set to alarm only to meet the above ride-through requirements, and shall not initiate a disconnect from the Company System unless Subscriber Organization reasonably determines based upon Good Engineering and Operating Practices that the Facility's equipment is at risk of damage. This is necessary in order to coordinate with the existing Company System.

Any tripping on calculated frequency should be based on accurately calculated and filtered frequency measurement over a time frame of minimum six cycles, or other period as specified by the Company, and should not use an instantaneously calculated value.

L. Successive Faults.

If the resource necessitates tripping to protect from the cumulative effects of those successive faults, in a period of time to ensure safety and equipment integrity, the constraint and time periods should be provided for inclusion in the interconnection study. For all cases, at a minimum, the ride-through requirements shall be met for two ride-through events within two seconds to allow for the Company's transmission automatic reclosing attempt. **[Note - this requirement may be modified based on the results of the IRS.]**

M. Rate of Change of Frequency ("ROCOF").

The inverter-based resources in the Facility shall not use rate-of-change-of-frequency protection unless an equipment limitation exists that requires the inverter to trip on high ROCOF. Any ROCOF tripping must be approved by Company.

N. Phase Angle Shift Ride-Through.

The Facility equipment shall ride through phase angle shift of up to ( [ ] ) **[Note – requirements will depend on Facility]**. Inverter phase lock loop (PLL) loss of synchronism shall not cause the inverter to trip or enter momentary cessation within the voltage and frequency ride-through region. Inverters must be capable of riding through temporary loss of synchronism, and regain synchronism, without causing a trip or momentary cessation of the resource.

O. DC Protection.

If the Facility requires DC reverse current protection, such protection must be coordinated with the inverter equipment module ratings and set to operate for short circuits on the DC side. DC reverse current protection shall not operate for transient overvoltage or for AC-side faults.

P. Voltage Flicker.

Any voltage flicker on the Company System caused by the Facility shall not exceed the limits stated in IEEE Standard 1453-2011, or latest version "Recommended Practice – Adoption of IEC 61000-4-15:2010, Electromagnetic compatibility (EMC) – Testing and measurement techniques – Flickermeter – Functional and design specifications".

Q. Harmonics.

Harmonic distortion at the Point of Interconnection caused by the Facility shall not exceed the limits stated in IEEE Standard 519-1992, or latest version "Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems". Subscriber Organization shall be responsible for the installation of any necessary controls or hardware to limit the voltage and current harmonics generated from the Facility to defined levels.

R. Grid Forming Capabilities.

**[NOTE APPLICABILITY BASED ON RESOURCE TYPE AND DESIGN, AND ONLY REQUIRED FOR 1 MW OR LARGER INTERCONNECTION, FOR PV INVERTER BASED RESOURCES PAIRED WITH STORAGE]**

GFM control set an internal voltage waveform reference such that an inverter with the GFM control shall be able to synchronize with the grid and regulate active and reactive power generation appropriately, regardless of the grid's strength, or operate independently of other generation. An inverter with GFM control shall immediately respond to grid disturbances to support stability of grid and maintain its own control stability during the system disturbance.

Subscriber Organization Facility inverters shall be designed with GFM control and be capable of operating in GFM mode supporting system operation under normal and emergency conditions without relying on the characteristics of synchronous machines. While in GFM mode, the inverters shall support grid operation, consistent with tariff requirements, as a continuous ac voltage source during normal and transient conditions (as long as no limits are reached within the inverter) and be capable to synchronize to other voltage sources and operate autonomously if a grid reference is unavailable, and shall be able to share active and reactive power burden with other voltage sources without impacts on system stability.

Subscriber Organization shall provide information to the Company regarding control design, capabilities, characteristics, etc. of the GFM control of the Facility for Company review and approval. Additional specifics of the GFM control may be defined during the IRS.

Specifically, the GFM controls shall have the following functions and characteristics:

- (i) Allow Subscriber Organization Facility to operate in stable manner on low system strength grids (e.g. low short circuit ratio, low inertia, inertia-less system, etc.)
- (ii) Sets an internal voltage waveform reference and is able to synchronize with the grid or operate independently of other generation.
- (iii) Responds to system condition changes (i.e. frequency change and voltage change) beyond the control deadband in a timely manner by contributing towards the subsequent recovery of system frequency and voltage to the pre-disturbance value, assuming energy and power margins are available.
- (iv) Provide damping control function which damps oscillation within the interconnection and other adverse interactions among GFM and Grid following ("GFL") Inverter Based Resources (IBRs) and other power electronic devices on the grid.

- (v) Upon the loss of the last synchronous machine in the power system, GFM will have the ability to operate autonomously if a grid reference is unavailable and be able to share active and reactive power burden with other voltage sources without impacts on system stability.
- (vi) Ability to transition from an electrical island to a grid-connect configuration without an impact to system stability.
- (vii) Provide active low-order harmonics cancellation (as applicable).
- (viii) Provide black-start capability (as applicable).

Subscriber Organization shall operate the Facility in grid forming mode only as directed by the Company System Operator, in its sole discretion. The Facility shall be required to communicate to the Company its parameters and settings pertaining to grid forming mode.

The grid forming control block diagram shall be submitted to the Company for review. The design shall be approved in writing by the Company and implemented by the Subscriber Organization prior to control system testing. This shall include initial settings for tunable controls parameters based on modeling. The initial control parameters may be modified by Subscriber Organization on Company request, based on field data and performance, subsequent system resource changes, etc. to achieve acceptable system stability.

S. Black Start Capability.

**[NOTE - APPLICABILITY BASED ON RESOURCE TYPE AND DESIGN, FOR INVERTER BASED RESOURCES PAIRED WITH STORAGE, TO BE DELETED IF SUBSCRIBER ORGANIZATION DOES NOT PROPOSE BLACK START]** The BESS shall be capable of grid forming inverter capability so it can generate its own AC waveform rather than relying on a grid voltage to synchronize and maintain frequency.

T. Control Systems and Auxiliary Equipment.

The power source for control systems and auxiliary equipment required for normal operation of the Facility shall be designed to be immune from system transients in accordance with the Public Utilities Commission of the State of Hawai'i tariff for Maui Electric Company, Ltd. Rule No. 2, Character of Service (Revised Sheet No. 5, effective Oct. 20, 1991) and Section 3.2(A)(6) (Facility Protection and Control Equipment) to meet the performance during under/over voltage and under/over frequency conditions pursuant to Section 3(e) (Undervoltage Ride-Through), Section 3(f) (Over Voltage Ride-Through), Section 3(i) (Underfrequency Ride-Through) and Section 3(j) (Overfrequency Ride-Through) of this Attachment F (Facility Owned by Subscriber Organization).

U. Frequency Response.

Subscriber Organization shall comply with the requirements of Section 1.G.11. (Active Power - Frequency Response (DROOP)) and Section 1.G.12. (Dynamic Active Power – Frequency Performance), of this Attachment F (Facility Owned by Subscriber Organization).

V. Unintentional Islanding.

A Facility's inverters shall be certified to meet the unintentional islanding requirement stated in IEEE 1547-2018 (or latest version), "IEEE Standard for Interconnection and Interoperability of Distributed Energy Resources with Associated Electric Power System Interfaces." Ride through requirements specified herein shall not inhibit the islanding detection performance where a valid unintentional islanding condition exists.

**4. MAINTENANCE OF SUBSCRIBER ORGANIZATION-OWNED INTERCONNECTION FACILITIES.**

- A. Subscriber Organization must address any Disconnection Event (as defined below) according to the requirements of this Section 4 (Maintenance of Subscriber Organization-Owned Interconnection Facilities) of Attachment F (Facility Owned by Subscriber Organization). For the purposes of this Section 4 (Maintenance of Subscriber Organization-Owned Interconnection Facilities), a "Disconnection Event" is the removal of 80% of capacity or more from Company System and/or disconnection of the Facility from the Company's System (i) that is not the result of Company dispatch, frequency droop response, or isolation of the Facility resulting from designed protection fault clearing, and (ii) for which Company does not issue the written notice for failure to meet operational and performance requirements as set forth in Section 1.J. (Demonstration of Facility) of this Attachment F (Facility Owned by Subscriber Organization). Company's election to exercise its rights under Section 1.J. (Demonstration of Facility) shall not relieve Subscriber Organization of its obligation to comply with the requirements of this Section 4 (Maintenance of Subscriber Organization-Owned Interconnection Facilities) for any future Disconnection Event during the pendency of such election or thereafter.
- B. For every Disconnection Event, Subscriber Organization shall investigate the cause. Within three (3) Business Days of the Disconnection Event, Subscriber Organization shall provide, in writing to Company, an incident report that summarizes the sequence of events and probable cause.
- C. Within forty-five (45) Days of a Disconnection Event, Subscriber Organization shall provide, in writing to Company, Subscriber Organization's findings, data relied upon for such findings, and proposed actions to prevent reoccurrence of a Disconnection Event ("Proposed Actions"). Company may assist Subscriber Organization in determining the causes of and recommendations to remedy or prevent a Disconnection Event ("Company's Recommendations"). Subscriber Organization shall implement such Proposed Actions (as modified to incorporate the Company's Recommendations, if any) and Company's Recommendations (if any) in accordance with the time period agreed to by the Parties.
- D. In the event Subscriber Organization and Company disagree as to (i) whether a Disconnection Event occurred, (ii) the sequence of events and/or probable cause of the Disconnection Event, (iii) the Proposed Actions, (iv) Company's Recommendations, and/or (v) the time period to implement the Proposed Actions and/or Company's Recommendations, then the Parties shall follow the procedure set forth in Section 5 (Expedited Dispute Resolution) of this Attachment F (Facility Owned by Subscriber Organization).
- E. Upon the fourth (4th) Disconnection Event (and each subsequent Disconnection Event) within any Contract Year, the Parties shall follow the procedures set forth in Section 4.A. and Section 4.D. of Attachment F (Facility Owned by Subscriber Organization), to the extent applicable. If after following the procedures set forth in this Section 4 (Maintenance of Subscriber Organization-Owned Interconnection Facilities) of Attachment F (Facility Owned by Subscriber Organization), Subscriber Organization and Company continue to have a disagreement as to (1) the probable cause of the Disconnection Event, (2) the Proposed Actions, (3) the Company's Recommendations, and/or (4) the time period to implement the Proposed Actions and/or the Company's Recommendations, then the Parties shall commission a study to be performed by a qualified independent Third-Party consultant ("Qualified Consultant") chosen from the Qualified Independent Third-Party Consultants List ("Consultants List") attached to the Contract as Exhibit F-2 (Consultants List). Such study shall review the design of, review the operating and maintenance procedures dealing with, recommend modifications to, and determine the type of maintenance that should be performed on Subscriber Organization-Owned Interconnection Facilities ("Study"). Subscriber Organization

and Company shall each pay for one-half of the total cost of the Study. The Study shall be completed within ninety (90) Days from such fourth Disconnection Event (and each subsequent Disconnection Event) within any Contract Year, unless otherwise reasonably agreed to in writing by the Subscriber Organization and Company. The Qualified Consultant shall send the Study to Company and Subscriber Organization. Subscriber Organization (and/or its Third-Party consultants and contractors), at Subscriber Organization's expense, shall change the design of, change the operating and maintenance procedures dealing with, implement modifications to, and/or perform the maintenance on Subscriber Organization-Owned Interconnection Facilities recommended by the Study. Such design changes, operating and maintenance procedure changes, modifications, and/or maintenance shall be completed no later than forty-five (45) Days from the Day the completed Study is issued by the Qualified Consultant, unless such design changes, operating and maintenance procedure changes, modifications, and/or maintenance cannot reasonably be completed within forty-five (45) Days, in which case, Subscriber Organization shall complete the foregoing within such longer commercially reasonable period of time agreed to by the Parties in writing. Company shall have the right to derate the Facility to a level that maintains reliable operations in accordance with Good Engineering and Operating Practices, and the Facility shall be deemed to be in Subscriber Organization-Attributable Non-Generation status, until the study has been completed and the study's recommendations have been implemented by Subscriber Organization to Company's reasonable satisfaction. Nothing in this provision shall affect Company's right to dispatch the Facility as provided for in this Contract.

- F. The Consultants List attached hereto as Exhibit F-2 (Consultants List) contains the names of engineering firms which both Parties agree are fully qualified to perform the Study. At any time, except when a Study is being conducted, either Party may remove a particular consultant from the Consultants List by giving written notice of such removal to the other Party. However, neither Party may remove a name or names from the Consultants List without approval of the other Party if such removal would leave the list without any names. Intended deletions shall be effective upon receipt of notice by the other Party, provided that such deletions do not leave the Consultants List without any names. Proposed additions to the Consultants List shall automatically become effective thirty (30) Days after notice is received by the other Party unless written objection is made by such other Party within said thirty (30) Day period. By mutual agreement between the Parties, a new name or names may be added to the Consultants List at any time.

**5. EXPEDITED DISPUTE RESOLUTION.**

If there is a disagreement between Company and Subscriber Organization regarding (i) whether a Disconnection Event occurred, (ii) the sequence of events and/or probable cause of the Disconnection Event, (iii) the Proposed Actions, (iv) the Company's Recommendations, and (v) the time period to implement the Proposed Actions and/or the Company's Recommendations, then authorized representatives from Company and Subscriber Organization, having full authority to settle the disagreement, shall meet in Hawai'i (or by telephone conference) and attempt in good faith to settle the disagreement. Unless otherwise agreed in writing by the Parties, the Parties shall devote no more than five (5) Business Days to settle the disagreement in good faith. In the event the Parties are unable to settle the disagreement after the expiration of the time period, then such disagreement shall constitute a Dispute for which either Party may pursue the dispute resolution procedure set forth in Section 17. (Dispute Resolution) of this Contract.

**6. MODELING.**

- A. Subscriber Organization's Obligation to Provide Models. Within 30 Days of Company's written request, but no later than the Commercial Operations Date, Subscriber Organization shall provide detailed data regarding the design and location of the Facility, in a form reasonably satisfactory to



Company, to allow the modeling of the inverters and any other equipment within the Facility identified in the IRS which utilizes Source Code (such as energy storage system, STATCOM or DVAR equipment), including, but not limited to, integrated and validated power flow and transient stability models (such as PSS/E models), a short circuit model (such as an ASPEN model), and an electro-magnetic transient model (such as a PSCAD model) of the inverters and any additional equipment identified in the IRS as set forth above, applied assumptions, and pertinent data sets (each a "Required Model" and collectively, the "Required Models"). Thereafter, during the Term, Subscriber Organization shall provide working updates of any Required Model within 30 Days of (i) Company's written request, or (ii) Subscriber Organization obtaining knowledge or notice that any Required Model has been modified, updated or superseded by the Source Code Owner.

B. Escrow Establishment. If, pursuant to Section 6.A. (Subscriber Organization's Obligation to Provide Models) of this Attachment F (Facility Owned by Subscriber Organization), the Required Models are provided to the Company in a form other than Source Code, Subscriber Organization shall arrange for and ensure that the Source Code for the relevant Required Model is deposited into the Source Code Escrow as set forth below in Section 6.B.1. (Source Code Escrow) of this Attachment F (Facility Owned by Subscriber Organization) no later than the time periods set forth in Section 6.A. (Subscriber Organization's Obligation to Provide Models) of this Attachment F (Facility Owned by Subscriber Organization) for delivery of the Required Models. Subscriber Organization shall be responsible for all costs associated with establishing and maintaining the Source Code Escrow. If, however, Subscriber Organization is unable to deposit the required Source Code into the Source Code Escrow within the time periods set forth in Section 6.A. (Subscriber Organization's Obligation to Provide Models), Subscriber Organization shall, no later than such time periods, instead establish a monetary escrow as set forth below in Section 6.B.2. (Source Code Security) of this Attachment F (Facility Owned by Subscriber Organization).

1. Source Code Escrow.

- a. Establishment of Source Code Escrow. If the Required Models are not provided to the Company in the form of Source Code pursuant to Section 6.A. (Subscriber Organization's Obligation to Provide Models) of this Attachment F (Facility Owned by Subscriber Organization), Subscriber Organization shall: (a) arrange for and ensure the deposit of a copy of the current version of the Source Code and relevant documentation for all Required Models with the Source Code Escrow Agent under the terms and conditions of the Source Code Escrow Agreement, and (b) arrange for and ensure the update of the deposited Source Code and relevant documentation for Major Releases and Minor Releases of the Required Models as soon as reasonably possible after they are made generally available.
- b. Release Conditions. Company shall have the right to obtain from the Source Code Escrow Agent one copy of the escrowed Source Code for the Required Models, under the following conditions upon Company's request:
  - 1) A receiver, trustee, or similar officer is appointed, pursuant to federal, state or applicable foreign law, for the Source Code Owner;
  - 2) Any voluntary or involuntary petition or proceeding is instituted, under (x) U.S. bankruptcy laws or (y) any other bankruptcy, insolvency or similar proceeding outside of the United States, by or against the Source Code Owner; or
  - 3) Failure of the Source Code Owner to function as a going concern or operate in the ordinary course; or

- 4) Subscriber Organization and the Source Code Owner fail to provide to Company the Required Models or updated Required Models, or, alternatively, fail to issue a Source Code LC, within the time periods set forth in Section 6.A. (Subscriber Organization's Obligation to Provide Models) of this Attachment F (Facility Owned by Subscriber Organization), Company gives written notice of such failure to Subscriber Organization and the Source Code Owner, and Subscriber Organization and Source Code Owner fail to remedy such breach within five (5) Days following receipt of such notice.
- c. Remedies. If Company has the right to obtain from the Source Code Escrow Agent one copy of the escrowed Source Code for the Required Models pursuant to Section 6.B.1.b. (Release Conditions) of Attachment F (Facility Owned by Subscriber Organization), and Company finds that Subscriber Organization failed to arrange for and ensure the update the Source Code Escrow with the modified and/or updated Source Code and relevant documentation for Major Releases and Minor Releases of the Required Models as provided in Section 6.B.1.a (Establishment of Source Code Escrow) of Attachment F (Facility Owned by Subscriber Organization) or that the Source Code for the Required Models is incomplete or otherwise unusable, Subscriber Organization shall be liable to Company for liquidated damages in the amount of \$500 per Day for each Day Subscriber Organization fails to provide such Source Code to Company or such update to the Source Code to Company from the date such Major Release or Minor Release was first made available by the Source Code Owner to customers of the Source Code Owner. Failure to provide the updated Source Code of the Required Models within 30 Days' notice from Company of a breach of Section 6.B.1.a. (Establishment of Source Code Escrow) of Attachment F (Facility Owned by Subscriber Organization); provided, that Subscriber Organization has also failed to provide a satisfactory Source Code LC as set forth in Section 6.B.2. (Source Code Security) of this Attachment F (Facility Owned by Subscriber Organization) shall constitute an Event of Default pursuant to Section 13. under the Contract.
- d. Certification. The Source Code Escrow Agent shall release the Source Code of the Required Models to Company upon receipt of a signed statement by a representative of Company that reads substantially as follows:
- The undersigned hereby certifies that (i) I am duly authorized to execute this document on behalf of Maui Electric Company, Limited ("Maui Electric"), and (ii) Maui Electric is entitled to a copy of the Source Code of the Required Models Pursuant to Section 6.B.1.b. (Release Conditions) of Attachment F (Facility Owned by Subscriber Organization) of the Mid-Tier Standard Form Contract for Renewable Dispatchable Generation dated as of \_\_\_\_\_, between \_\_\_\_\_, and Maui Electric.
- e. Authorized Use. If Company becomes entitled to a release of the Source Code of the Required Models from escrow, Company may thereafter correct, modify, update and enhance the Required Models for the sole purpose of providing itself the support and maintenance it otherwise would have been entitled to if it had been provided the Required Models by Subscriber Organization under Section 6.A. (Subscriber Organization's Obligation to Provide Models) of this Attachment F (Facility Owned By Subscriber Organization) (the "Source Code Authorized Use").
- f. Confidentiality Obligations. Company shall keep the Source Code of the Required Models confidential pursuant to the confidentiality obligations of the Source Code Escrow Agreement. Company shall restrict access to the Source Code of the Required Models to

those employees, independent contractors and consultants of Company who have agreed in writing to be bound by confidentiality and use obligations consistent with those specified in the Escrow Agreement, and who have a need to access the Source Code of the Required Models on behalf of Company to carry out their duties for the Source Code Authorized Use. Promptly upon Subscriber Organization's request, Company shall provide Subscriber Organization with the names and contact information of all individuals who have accessed the Source Code of the Required Models, and shall take all reasonable actions required to recover any such Source Code in the event of loss or misappropriation, or to otherwise prevent their unauthorized disclosure or use.

2. Source Code Security.

- a. Establishment of Source Code Security. If the Required Models and their relevant Source Code are not provided to the Company in the form of Source Code pursuant to Section 6.A. (Subscriber Organization's Obligation to Provide Models) of this Attachment F (Facility Owned by Subscriber Organization) and if the Subscriber Organization is unable to arrange for and ensure the deposit of the Source Code into the Source Code Escrow established for the benefit of the Company pursuant to Section 6.B.1 (Source Code Escrow) of this Attachment F (Facility Owned by Subscriber Organization) then, no later than the time periods set forth in Section 6.A. (Subscriber Organization's Obligation to Provide Models) of this Attachment F (Facility Owned by Subscriber Organization) for delivery of the Required Models and Source Code, Subscriber Organization shall provide an irrevocable standby letter of credit (the "Source Code LC") with no documentation requirement in the amount of Two Hundred Fifty Thousand Dollars (\$250,000) per Required Model (and its relevant Source Code) substantially in the form attached to this Contract as Exhibit G-1 (Form of Letter of Credit) from a bank chartered in the United States with a credit rating (as measured by Standard & Poor's) of "A-" or better or A3 or better from Moody's. Such letter of credit shall be issued for a minimum term of one (1) year. Furthermore, at the end of each year the security shall be renewed for an additional one (1) year term so that at the time of such renewal, the remaining term of any such security shall not be less than one (1) year. The letter of credit shall include a provision for at least thirty (30) Days' advance notice to Company of any expiration or earlier termination of the letter of credit so as to allow Company sufficient time to exercise its rights under said security if Subscriber Organization fails to extend or replace the security. In all cases, the reasonable costs and expenses of establishing, renewing, substituting, canceling, increasing, reducing, or otherwise administering the letter of credit shall be borne by Subscriber Organization.
- b. Release Conditions. Company shall have the right to draw on the letter of credit the funds necessary to develop and recreate the Required Model or Required Models upon Company's request if Subscriber Organization fails to provide the Company the Required Models or updated Required Models within the time periods set forth in Section 6.A. (Subscriber Organization's Obligation to Provide Models) or Section 6.B.1.c. (Remedies) of this Attachment F (Facility Owned by Subscriber Organization), Company gives written notice of such failure to Subscriber Organization, and Subscriber Organization fails to remedy such breach within five (5) Days following receipt of such notice for a breach under Section 6.A. (Subscriber Organization's Obligation to Provide Models, or within thirty (30) Days following receipt of such notice for a breach under Section 6.B.1.c. (Remedies).
- c. Extend Letter of Credit. If the letter of credit is not renewed or extended no later than thirty (30) Days prior to its expiration or earlier termination, Company shall have the right to draw immediately upon the full amount of the letter of credit and to place the proceeds of such draw (the "Proceeds"), at Subscriber Organization's cost, in an escrow account in

accordance with Section 6.B.2.d (Proceeds Escrow), until and unless Subscriber Organization provides a substitute form of letter of credit meeting the requirements of this Section 6.B.2. (Source Code Security) of this Attachment F (Facility Owned by Subscriber Organization).

- d. Proceeds Escrow. If Company draws on the letter of credit pursuant to Section 6.B.2.c (Extend Letter of Credit) of this Attachment F (Facility Owned by Subscriber Organization), Company shall, in order to avoid comingling the Proceeds, have the right but not the obligation to place the Proceeds in an escrow account as provided in this Section 6.B.2.d (Proceeds Escrow) of this Attachment F (Facility Owned by Subscriber Organization) with a reputable escrow agent acceptable to Company (“Proceeds Escrow Agent”) subject to an escrow agreement acceptable to Company (“Proceeds Escrow Agreement”). Without limitation to the generality of the foregoing, a federally insured bank shall be deemed to be a “reputable escrow agent.” Company shall have the right to apply the Proceeds as necessary to recover amounts Company is owed pursuant to this Section 6 (Modeling) of this Attachment F (Facility Owned by Subscriber Organization). To that end, the Proceeds Escrow Agreement governing such escrow account shall give Company the sole authority to draw from the account. Subscriber Organization shall not be a party to such Proceeds Escrow Agreement and shall have no rights to the Proceeds. Upon full satisfaction of Subscriber Organization’s obligations under Section 6 (Modeling) of this Attachment F (Facility Owned by Subscriber Organization), Company shall instruct the Proceeds Escrow Agent to remit to the bank that issued the letter of credit that was the source of the Proceeds the remaining balance (if any) of the Proceeds. If there is more than one escrow account with Proceeds, Company may, in its sole discretion, draw on such accounts in any sequence Company may select. Any failure to draw upon the Proceeds for any damages or other amounts due Company shall not prejudice Company’s rights to recover such damages or amounts in any other manner.
- e. Subscriber Organization’s Obligation. If the letter of credit is not sufficient to cover Company’s associated consultant fees, costs and expenses to develop and recreate the Required Models, Subscriber Organization shall pay to Company the difference within ten (10) Days of Company’s written notice to Subscriber Organization.
- f. Model Verification. Subscriber Organization shall work with the Company to validate the new Required Models developed by or on behalf of Company within sixty (60) Days of receiving such new Required Models. Subscriber Organization shall also arrange for and ensure that Company may obtain new Required Models directly from the Source Code Owner in the event that Subscriber Organization ceases to operate as a going concern or is subject to voluntary or involuntary bankruptcy and is unable or unwilling to obtain the new Required Models from the Source Code Owner.
- g. Certification. The terms of the letter of credit shall provide for a release of the funds, or in the event the funds have been placed into a Proceeds Escrow, the Proceeds Escrow Agent shall release the necessary funds to Company upon receipt of a signed statement by a representative of Company that reads substantially as follows:

The undersigned hereby certifies that (i) I am duly authorized to execute this document on behalf of Maui Electric Company, Limited (“Maui Electric”), and (ii) Maui Electric is entitled to \$ \_\_\_\_\_, pursuant to Section 6.B.2.b (Release Conditions) of Attachment F (Facility Owned by Subscriber Organization) of the Mid-Tier Standard Form Contract for Renewable Dispatchable Generation dated as of \_\_\_\_\_, between \_\_\_\_\_, and Maui Electric.

- h. Authorized Use. If Company becomes entitled to a draw of funds from the Source Code Security or a release of funds from the Proceeds Escrow, Company may thereafter use such funds to develop, recreate, correct, modify, update and enhance the Required Models for the sole purpose of providing itself the support and maintenance it otherwise would have been entitled to if it had been provided the Required Models by Subscriber Organization under Section 6.A. (Subscriber Organization's Obligation to Provide Models) of this Attachment F (Facility Owned by Subscriber Organization).
- 3. Supplementary Agreement. The parties stipulate and agree that the escrow provisions in this Section 6.B. (Escrow Establishment) of Attachment F (Facility Owned by Subscriber Organization) and the Source Code Escrow Agreement and Proceeds Escrow Agreement are "supplementary agreements" as contemplated in Section 365(n)(1)(B) of the Code. In any voluntary or involuntary bankruptcy proceeding involving Subscriber Organization, failure by Company to assert its rights to "retain its rights" to the intellectual property encompassed by the Source Code or the funds in the Proceeds Escrow, pursuant to Section 365(n)(1)(B) of the Code, under an executory contract rejected in a bankruptcy proceeding, shall not be construed as an election to terminate the Contract by Company under Section 365(n)(1)(A) of the Code.

## 7. TESTING REQUIREMENTS.

- A. Testing Requirements. Once the Control System Acceptance Test has been successfully passed, Subscriber Organization shall not replace and/or change the configuration of the Facility Control, inverter control settings and/or ancillary device controls, without prior written notice to Company. In the event of any such replacement and/or change, the relevant test(s) of the Control System Acceptance Test shall be redone and must be successfully passed before the replacement or altered equipment is allowed to be placed in normal operations. In the event that Company reasonably determines that such replacement and/or change of controls makes it inadvisable for the Facility to continue in normal operations without a further Control Systems Acceptance Test, the Facility shall be deemed to be in Subscriber Organization-Attributable Non-Generation status until the new relevant tests of the Control System Acceptance Test have been successfully passed.
- B. Periodic Testing. Subscriber Organization shall coordinate periodic testing of the Facility with Company to ensure that the Facility is meeting the performance standards specified under this Contract.

## 8. DATA AND FORECASTING.

Subscriber Organization shall provide Site, meteorological and production data in accordance with the following requirements:

- A. Physical Site Data: Subscriber Organization shall provide Company with an accurate description of the physical Site, including but not limited to the following, **[as appropriate to Facility resource type(s) and use of storage]** which may not be changed during the Term without Company's prior written consent:

Location Facility Map showing the layout of the Facility (coverage area or footprint) and the coordinates (latitude and longitude) of generating equipment:

Solar PV: elevation (above ground), orientation angle and direction (north-east-south-west plane) of arrays/concentrators.

Location (latitude and longitude) and elevation (above ground) of each MMS and elevation (above ground) of each field measurement device for, e.g., air density, ambient air pressure and

ambient air temperature, located at each MMS or each field measurement device located on such MMS.

For solar resource inverters: Inverter type, power rating, array configuration to inverters and DC rating of the Facility at the following standard test conditions: irradiance of 1000 W/m<sup>2</sup>, air mass 1.5, and cell temperature 25° C.

Solar generation technology employed at the Facility with temperature dependence, mounting and module type.

BESS technology and related auxiliary equipment, location and type.

**B. Meteorological and Production Data:**

Subscriber Organization shall install and maintain a minimum of one MMS for facilities with a Contract Capacity of less than 5 MW and a coverage area of not more than one square kilometer.

Subscriber Organization shall install and maintain a minimum of two MMS for facilities that have either (i) a DC rating of the Facility of 5 MW or greater or (ii) a coverage area greater than one square kilometer.

Placement of each MMS should account for the microclimate of the area and Facility coverage area and shall be oriented with respect to the primary wind direction.

Subscriber Organization shall provide to Company, via SCADA communication and protocol acceptable to Company to support operations and forecasting needs at a continuous scan, all meteorological and production data required under this Contract updated every 2 seconds.

Subscriber Organization shall arrange for a dedicated distribution voltage line to provide separate service from Company, or for such other independent, backup power source as approved by Company in writing, to temporarily store and record the meteorological data from the field measuring devices at the MMSs. Any such backup power source must be capable of providing power for the field measurement devices for a reasonable period of time until primary power is restored. The same backup power source can serve multiple MMSs as needed by the Facility.

**C. Units and Accuracy:**

The Table below shows minimum required solar irradiance measurements for various types of solar generation technology. This value may not be derived.

<b>Solar Technology</b>	<b>Direct Normal Irradiance</b>	<b>Global Irradiance (GHI)</b>	<b>Plane of Array Irradiance (POA)</b>
<b>Flat Plate</b> (fixed horizontal, fixed angle, tracking, roof mounted)		X	X
<b>Flat Panel Solar Thermal</b>	X		X

(fixed angle, roof mounted, tracking)			
<b>Concentrated PV</b> (flat, trough, tracking)	X	X	X

Units and accuracy of required measured parameters to be provided to Company in real time shall be as shown in the Table below. These represent the minimum required accuracies.

**Table of Units and Accuracy of  
Meteorological and Production Data (PV)**

Parameter	Measurement Device (typical)	Unit	Range	Accuracy
Global Horizontal Irradiance at MMS	Pyranometer or equivalent	W/m <sup>2</sup>	0 to 1500 W/m <sup>2</sup>	Secondary standard per ISO 9060 or <= 3% from 100 W/m <sup>2</sup> to 1500 W/m <sup>2</sup> if using a PV Reference Cell
Plane of Array Irradiance on same axis as array	Pyranometer or equivalent	W/m <sup>2</sup>	0 to 1500 W/m <sup>2</sup>	Secondary standard per ISO 9060 or <= 3% from 100 W/m <sup>2</sup> to 1500 W/m <sup>2</sup> if using a PV Reference Cell
Back of Panel temperature at array height	Temperature probe	°C	-20 to +50 °C	+/-1 °C
Ambient air temperature at MMS	Temperature probe	°C	-20 to +50 °C	+/-1 °C
Ambient air pressure at MMS	Piezoresistive transducer or equivalent	Mbar	150 to 1150 mbar	+/-60 mbar (0 to +50°C)
Wind speed at MMS	Anemometer, sonic device or equivalent	Mph	0 to 134 mph	+/-1 mph
Wind direction at MMS	Vane, sonic device or equivalent	Degrees (from True North)	360°	+/-5°

Parameter	Measurement Device (typical)	Unit	Range	Accuracy
Set point for each inverter	Reported by Subscriber Organization	MW	0 to inverter name plate	Not applicable
Power production of Facility	Measured at POI	MW	Up to Net Nameplate Capacity	+/-0.05 MW
BESS Charging Power	Measured at BESS Charging Interface	MW	Up to Net Nameplate Capacity	+/-0.05 MW
Facility power production ratio	Ratio of Facility's power production (MW)/Allowed Capacity (MW)	%	0 to 100%	+/-0.1 %
Inverters Available	NA	NA	Up to the number installed inverters	
Facility Inverter Availability	Ratio of inverters online/number of inverters	%	0 to 100%	
Power Possible	Subscriber Organization's Model	MW	0 to Net Nameplate Capacity	+/-4%

D. Status of Generating Equipment: For each inverter, Subscriber Organization shall provide to Company, via SCADA communication and protocol acceptable to Company at a continuous scan updated not less frequently than every 2 seconds, a signal as to whether such inverter is available or unavailable, and on or offline.

E. Data Collection. [NOTE COMPANY TO UPDATE REQUIREMENTS; WILL BE SPECIFIC TO FACILITY EQUIPMENT AND RESOURCE TYPE] High Resolution Data: Subscriber Organization shall install and make available to the Company time stamped and sequential data recordings for all inverter-based resources (and all generating resources) to perform event analysis and verify Facility performance during steady state and transient disturbance events. This will include a time-synchronized phasor measurement unit at the Facility, and access to multiple sources to provide sufficient clarity as to any abnormal response or behavior within the Facility, including Facility control settings and static values, SCADA data, sequence of events recording (SER) data, dynamic disturbance recorder (DDR) data, and inverter fault codes and inverter-level dynamic recordings. This data will be used to review the Facility response to system dynamics, such as the frequency response (normal droop), reactive response, etc.



1. Plant Data: [Note: specific requirements below are representative of variable energy resources and will be tailored to the Facility resource type(s) and geographic arrangement]

At least two months prior to the Commercial Operation Date, Subscriber Organization shall deliver to Company a report showing (i) manufacturer, model and year of all energy equipment (panels, inverters, energy storage devices), and meteorological instrumentation, and (ii) the latitude and longitude of the center of the energy equipment (i.e., solar panels for every inverter) and every meteorological tower. Beginning upon COD, Subscriber Organization shall transmit and provide to Company the real-time data set forth below, refreshed as frequently as allowed by the SCADA system, not to exceed sixty (60) second intervals:

- Three (3) data points from each inverter:
  - Inverter/turbine generation (MW)
  - Inverter/turbine availability
  - Inverter/turbine on/offline status
- Two (2) data points from each meteorological tower (solar resources):
  - Global horizontal solar irradiance (instantaneous solar intensity, full sky)
  - Plane of array solar irradiance (instantaneous solar intensity at the current angle of the PV array) or as required in the first table of this section

Subscriber Organization shall provide a map and key for each inverter sufficient to allow Company to correlate the data received through Company's data historian system to each individual resource.

## 9. TECHNOLOGY SPECIFIC REQUIREMENTS.

A. [Reserved]

B. [Reserved]

C. Inverter Systems.

1. Direct current generators and non-power (i.e., other than 60 Hertz) alternating current generators can only be installed in parallel with the Company System using a non-islanding synchronous inverter unless alternate designs are approved by the Company. The design shall comply with the requirements of IEEE Std 1547-2018 (or latest version), except as described in Section 3 (Performance Standards) of this Attachment F (Facility Owned by Subscriber Organization).
2. Self-commutated inverters of the Company-interactive type shall synchronize to the Company System. Line-commutated, thyristor-based inverters are not recommended and will require additional technical study to determine harmonic and reactive power requirements. All interconnected inverter systems shall comply with the harmonic current limits of IEEE Std 519-1992 (or latest version).

D. Battery Energy Storage System. The operating parameters of the BESS for facilities with paired storage shall be as follows:

1. For facilities with variable energy and paired storage: The BESS shall directly charge storage from the variable resource when the Company Active Power Dispatch is for less than the available resource energy.

No more than [ ] % of the BESS energy capacity can be charged from the grid prior to the fifth (5th) anniversary of the Commercial Operations Date. Thereafter, 100% of the BESS energy capacity can be charged from the grid. **[DRAFTING NOTE ONE: 5-YEAR LIMITATION ON GRID CHARGING WILL BE DELETED IF ITC RECAPTURE IS NOT APPLICABLE TO THE BESS.] [DRAFTING NOTE TWO: IF THE BESS WILL NEVER CHARGE FROM THE GRID, REPLACE THIS ENTIRE SUBSECTION WITH THE FOLLOWING: “None of the BESS energy capacity may be charged from the grid during the Term of this Agreement.”]**

The BESS will not be required to discharge more energy than available relative to the available state of charge.

For storage used primarily for energy shifting, the BESS shall be designed for an average annual use of 365 cycle(s) (a cycle is a discharge equal to the portion of the BESS Contract Capacity allocated for energy shifting, and sufficient charging to return the BESS to 100% State of Charge)

--END--

**EXHIBIT F-1**  
**DESCRIPTION OF GENERATION AND BATTERY STORAGE FACILITIES**

1. Name of Facility:

(a) Location: (TMK No. )

(b) Telephone number (for system emergencies):

(c) E-mail Address:

(d) Contact Information for notices pursuant to the Contract:

Mailing Address:

Address for Delivery by Hand or Overnight Delivery:

Email Address:

2. Owner (If different from Subscriber Organization):

If Subscriber Organization is not the owner, Subscriber Organization shall provide Company with a certified copy of a certificate warranting that the owner is a corporation, partnership or limited liability company in good standing with the Hawai'i Department of Commerce and Consumer Affairs which shall be attached hereto as Exhibit F-1-1 (Good Standing Certificates).

3. Operator:

4. Name of person to whom payments are to be made:

(a) Mailing address:

(b) Hawai'i Gross Excise Tax License number:

5. Equipment:

(a) Type of facility and conversion equipment:

**[For example: Small power production facility designated as a  
Qualifying Facility that produces electric energy using  
\_\_\_\_\_.]**

(b) Design and capacity

Contract Capacity: The net instantaneous active power capacity for export to the Point of Interconnection that is contractually guaranteed: (“Contract Capacity”):

\_\_\_\_\_ kW

Total Number of Generators (PV Modules, BESS Modules, & Inverters):

**Example 1 (PV + BESS; AC-Coupled) :**

**Seventy-five thousand (75000) Brand W, 200 W DC,  
PV Modules;**

**Ten (10) Brand X, 1500 kW AC, PV-Inverters;**

**Ten (10) Brand Y, 1650 kW DC, BESS Modules**

**Ten (10) Brand Z, 1500 kW AC, BESS Inverters**

**Example 2 (PV + BESS; DC-Coupled) :**

**Seventy-five thousand (75000) Brand X, 200 W DC,  
PV Modules;**

**Ten (10) Brand Y, 1650 kW DC, BESS Modules**

**Ten (10) Brand Z, 1500 kW AC, Central Inverters**

Description of Equipment:

**[For example: Describe the type of energy conversion equipment, capacity, and any special features (i.e. modules per converter; AC or DC coupling; DC/AC ratio; plant controller information, etc.).]**

**Individual Unit: [if more than one type of generator, list information for each generator]**

kW	kVAR Consumed	kVAR Produced
<u>Maximum Facility Auxiliary load</u>		

Generator:

Type (PV Inverter, BESS Inverter, Central Inverter) \_\_\_\_\_

Rated Power \_\_\_\_\_ kW (AC)

Voltage \_\_\_\_\_ V, \_ phase

Frequency \_\_\_\_\_ Hz

Class of Protection \_\_\_\_\_

Rated Current \_\_\_\_\_ A

- (c) Installed Nameplate Capacity: Shall be the aggregate sum of the net nameplate active power capability of all generator and converter equipment installed.

The Installed Nameplate Capacity of this Facility shall be: \_\_ kW

- (d) Net Nameplate Capacity : Shall be the net instantaneous active power capability of the Facility at the point of interconnection, considering all generation and converter equipment and power plant controls which may act to limit the Facility capability.

The Net Nameplate Capacity of this Facility shall be: \_\_\_\_ kW

- (e) Description of Facility SCADA and control system(s)

- (f) The “Allowed Capacity” of this Contract shall be the lower of (i) Contract Capacity or (ii) the Net Nameplate Capacity of the Facility installed by the Commercial Operations Date.

- (g) Subscriber Organization may propose revisions to this Section 5 (Equipment) of Exhibit F-1 (Description of Generation Battery and Storage Facilities) (“Section 5”) for Company’s approval prior to commencement of construction, provided, however, that (i) no such revision to this Section 5 shall change the type of Facility or conversion equipment deployed at the

Facility from a solar energy conversion facility using photovoltaic equipment; (ii) Subscriber Organization shall be in compliance with all other terms and conditions of this Contract; and (iii) such revision(s) shall not change the characteristics of the Facility equipment or the specifications used in the IRS. Any revision to this Section 5 complying with items (i) through (iii) above shall be subject to Company's prior approval, which approval shall not be unreasonably withheld. If Subscriber Organization's proposed revision(s) to this Section 5 otherwise satisfies items (i) and (ii) above but not item (iii) such that Company, in its reasonable discretion, determines that a re-study or revision to all or any part of the IRS is required to accommodate Subscriber Organization's proposed revision(s), Company may, in its sole and absolute discretion, conditionally approve such revision(s) subject to a satisfactory re-study or revision to the IRS and Subscriber Organization's payment and continued obligation to be liable and responsible for all costs and expenses of re-studying or revising such portions of the IRS and for modifying and paying for all costs and expenses of modification to the Facility, the Company-Owned Interconnection Facilities based on the results of the re-studies or revisions to the IRS. Any changes made to this Attachment F of the Contract as a result of this Section 5(f) of Exhibit F-1 (Description of Generation and Battery Storage Facilities) shall be reflected in a written amendment to the Contract.

Subscriber Organization understands and acknowledges that Company's review and approval of Subscriber Organization's proposed revisions to this Section 5 and any necessary re-studies or revisions to the IRS shall be subject to Company's then-existing time and personnel constraints. Company agrees to use commercially reasonable efforts, under such time and personnel constraints, to complete any necessary reviews, approvals and/or re-studies or revisions to the IRS.

Any delay in completing, or failure by Subscriber Organization to meet, the Commercial Operations Date as a result of any revisions pursuant to this Section 5 by Subscriber Organization (whether requiring a re-study or revision to the IRS or not) shall be borne entirely by Subscriber Organization and Company shall not be responsible or liable for any delay or failure to meet any such milestones by Subscriber Organization.

6. Insurance carrier(s): **[SUBSCRIBER ORGANIZATION TO PROVIDE INFORMATION]**
7. If Subscriber Organization is not the operator, Subscriber Organization shall provide a copy of the agreement between Subscriber Organization and the operator which requires the operator to operate the Facility and which establishes the scope of operations by the operator and the respective rights of Subscriber Organization and the operator with respect to the sale of electric energy from Facility no later than the Commercial Operations Date. In addition, Subscriber Organization shall provide a certified copy of a certificate warranting that the operator is a corporation, partnership or limited liability company in good standing with the Hawai'i Department of Commerce and Consumer Affairs no later than the Commercial Operations Date.
8. Subscriber Organization shall provide a certified copy of a certificate warranting that Subscriber Organization is a corporation, partnership or limited liability company in good standing with the Hawai'i Department of Commerce and Consumer Affairs which shall be attached hereto as Exhibit F-1-1 (Good Standing Certificates).

9. Subscriber Organization, owner and operator shall provide Company a certificate and/or description of their ownership structures which shall be attached hereto as Exhibit F-1-2 (Ownership Structure).
  
10. In the event of a change in ownership or identity of Subscriber Organization, owner or operator, such entity shall provide within 30 Days thereof, a certified copy of a new certificate and a revised ownership structure.

--END--

**EXHIBIT F-2**  
**CONSULTANTS LIST**

(To be completed as per Section 3(F) of Attachment F)



**EXHIBIT F-3**  
**REQUIRED MODELS**

*To be completed based on the Project's characteristics. The Required Models are listed in the RFP Appendix B, Attachment 6 -Model and Interconnection Requirements (IRS) Scope of the RFP.*

*Modeling requirements are set forth in the RFP Appendix B, Attachment 3 Hawaiian Electric Facility Technical Model Requirements and Review Process.*

*[EXHIBIT F-4 WILL BE REVISED TO REFLECT  
THE RESULTS OF IRS]*

**EXHIBIT F-4**  
**GENERATOR AND ENERGY STORAGE CAPABILITY CURVE(S)**

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**EXHIBIT F-5**  
**SINGLE-LINE DRAWING AND INTERFACE BLOCK DIAGRAM**

**(To be attached as per Section 1.A. of Attachment F)**

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**EXHIBIT F-6**  
**RELAY LIST AND TRIP SCHEME**

**(To be attached as per Section 1.A. of Attachment F.)**

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**EXHIBIT F-7**  
**CONTROL SYSTEM ACCEPTANCE TEST CRITERIA**

**[THIS ATTACHMENT WILL NEED TO BE MODIFIED BASED ON THE RESULTS OF  
THE IRS]**

1. The Control System Acceptance Test for the Facility will be conducted, following installation of the Facility. The Control System Acceptance Test procedures will be in accordance with criteria set forth herein. The Control System Acceptance Test shall be performed in accordance with Good Engineering and Operating Practices and demonstrate to Company's satisfaction that the Facility and the interconnection portion of the Facility, including Company-Owned Interconnection Facilities, have met the provisions of Section 5. (Company Dispatch) of the Contract and Section 3. (Performance Standards) of Attachment F (Facility Owned by Subscriber Organization).
  - A. Control System Acceptance Test procedures will be developed by Company for the Subscriber Organization's review at least sixty (60) Days in advance of performing the tests based on the date provided by Company.
  - B. The procedures will include, but not be limited to, demonstration of the functional requirements of the Facility defined in Section 5. (Company Dispatch) of the Contract and Section 3. (Performance Standards) of Attachment F (Facility Owned by Subscriber Organization) such as, but not limited to:
    1. Interconnection equipment and communications to support remote monitoring of the Facility and control of Facility breakers
    2. Droop characteristic and change of frequency control / response modes (if applicable)
    3. Real power delivery under remote Company Dispatch, Active Power Dispatch. For facilities with directly controlled storage, the storage will be operated to perform at least two full charging/discharging cycles.
    4. Accurate provision of limits for Minimum and Maximum Dispatch (Power Possible, Minimum load capability)
    5. Ramp rates for controlled actions
    6. Control of Facility breakers
    7. Voltage regulation
    8. Grid forming and Black start (if applicable)
    9. BESS Capacity Test and demonstration of the round-trip efficiency of the BESS, each as described in Attachment H (BESS Requirements)
  - C. Testing of primary and redundant communications between Company System Operator and Facility Operator
  - D. The actual dynamic response of the Facility equipment will be confirmed to allow Company transient stability model to reflect the as-left conditions of the unit. During the commissioning, the following will be required:
    1. A final review by Company engineers of the equipment installed to control the operation and protect the plant will be needed upon installation and prior to the start of commercial operation.

2. The review will include off-line tuning and testing results of the excitation and governor control and/or control system and the IEEE block diagram utilized for the PSS/E dynamics program.
  3. During the commissioning of the actual Facility, equipment system testing will be conducted to ensure that similar, well damped, expected responses will be produced by the facility. The as-left parameters obtained from real and reactive local response tuning will be determined for use in the Company planning model. The Subscriber Organization will provide an estimate of the earliest date for the Control System Acceptance Test at least ninety (90) Days before the date.
  - E. The Control System Acceptance Test procedures for the Facility will be mutually agreed upon between Subscriber Organization and Company prior to conducting the test.
  - F. When the Facility is ready for the Control System Acceptance Test, Subscriber Organization shall notify Company at least seven (7) Days prior to the test and shall coordinate with Company. Subscriber Organization shall perform, and Company shall monitor such test no earlier than seven (7) Days from Company's receipt of such notice.
  - G. The Control System Acceptance Test is to be successfully completed prior to the Commercial Operation Date.
2. Examples of the type of tests conducted to meet the aforementioned objectives may include, but are not limited to the following:
- A. On-site Tests
    1. SCADA Test to verify the status and analog telemetry, and if the remote controls between the Company's EMS and the Facility are working properly end-to-end.
    2. Dispatch Test to verify if the Facility's active power limit controls and the Active Power Control Interface with the Company's EMS are working properly. The Test is generally conducted by setting different active power setpoints and limits and observing the proper dispatch at the appropriate ramp rate limiting of the Facility's real power output.
  - B. Control Test for Voltage Regulation to verify the Facility can properly perform automatic voltage regulation as defined in this Exhibit F-7 and pursuant to Attachment F and the Contract. Test is generally conducted by making small adjustments of the voltage setpoint and verifying by observation that the Facility regulates the voltage at the point of regulation to the setpoint by delivering/receiving reactive power to/from the Company System to maintain the applicable setpoint according to the reactive power control and the reactive amount requirements of Sections 3.B (Reactive Power Control) and Section 3.C (Reactive Power Characteristics) of Attachment F (Facility Owned by Subscriber Organization) to the Contract. [**Note: Sub transmission Requirements**]
  - C. Frequency Response Test to verify the Facility provides a frequency droop response as defined in the Contract. Test is generally conducted by adjusting of the frequency reference setting and verifying by observation that the Facility responds per droop and deadband settings, and appropriately modifies the Company issued Dispatch Setpoint. If different modes of frequency response are provided, each mode is tested (i.e.; isochronous, fast frequency response, active power droop response).
  - D. Loss-of-Communication Test to verify the Facility will properly shutdown upon the failure of the direct-transfer-trip communication system. Test is generally conducted by simulating a

communications failure and observing the proper shutdown of the Facility. [If DTT required for the Project]

- E. Round trip efficiency test, as described in Attachment H (BESS Requirements) Section 1. (BESS Tests) to verify that the round-trip efficiency of the BESS is not less than [ ] percent ([ ]%). **[DRAFTING NOTE: The round-trip efficiency percentage will be taken from Subscriber Organization's response to the RFP.]**
- F. BESS Capacity Test to verify the BESS Capacity Ratio.
  - 1. Monitoring Test:
    - a. The monitoring test requires the Facility to operate as it would in normal operations.
    - b. To ensure useful and valid test data is collected for variable facilities, the monitoring test shall end when one of the following criteria is met:
      - 1) For variable energy resources, Facility's gross power production is greater than 85% of its Allowed Capacity, for at least four (4) hours in any continuous 24-hour CSAT period.
      - 2) For solar facilities, the recorded renewable energy resource at the Facility is above 600 W/m<sup>2</sup> for least eight (8) hours in any continuous 48-hour CSAT period.
- G. At the end of the test, an evaluation period is selected based on the criteria that triggered the end of the test.
- H. The performance of the Facility during the period of the successfully completed monitoring test is evaluated for, e.g., voltage regulation, frequency response, dispatch control, operating limits and ramp rate performance, to verify the performance meets the requirements of this Exhibit F-7. according to the criteria set forth in the testing procedures. Certain requirements, such as disturbance ride-through requirements, cannot be adequately tested without actual grid disturbances. These requirements will be confirmed following a grid event based on operational data, which may be after the completion of the Control System Acceptance Test. The Parties understand and agree that a successful completion of the test does not constitute a waiver of any of the performance standards of Subscriber Organization, all of which are hereby reserved, and shall not alleviate Subscriber Organization from any of its obligations under the Contract, in particular, as required in Section 5. (Company Dispatch) and the Performance Standards in Section 3. (Performance Standards) of Attachment F (Facility Owned by Subscriber Organization).

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**EXHIBIT F-8**  
**ACCEPTANCE TEST GENERAL CRITERIA**

**[THIS ATTACHMENT WILL NEED TO BE MODIFIED  
BASED ON THE RESULTS OF THE IRS]**

Upon final completion of Company review of the Facility's drawings, final test criteria and procedures shall be agreed upon by Company and Subscriber Organization no later than thirty (30) Days prior to conducting the Acceptance Test in accordance with the Contract. The Acceptance Test shall include, but not be limited to, the following:

**1. Interconnection.**

- A. A visual inspection of all Interconnection equipment and verification of as-built drawings.
- B. Phase rotation testing to verify proper phase connections.
- C. Based on manufacturer's specification, test the local operation of the Facility's generator breaker(s) and inter-tie breaker(s), and other breaker(s) which connect the Facility equipment to Company System – must open and close locally using the local controls remotely from Company's EMS. Test and ensure that the status shown on the EMS is the same as the actual physical status in the field.
- D. Relay test engineers to connect equipment and simulate certain inputs to test and ensure that the protection schemes such as any under/over frequency and under/over voltage protection or the Direct Transfer Trip operate as designed. (For example, a fault condition may be simulated to confirm that the breaker opens to sufficiently clear the fault. Additional scenarios may be tested and would be outlined in the final test criteria and procedures.) Subscriber Organization to also test the synchronizing mechanisms to which the Facility would be synchronizing and closing into the Company System to ensure correct operation. Other relaying also to be tested as specified in the protection review of the IRS and on the single line diagram, Attachment E (Single-Line Drawing and Interface Block Diagram) for the Facility.
- E. All breaker disconnects and other high voltage switches will be inspected to ensure they are properly aligned and operated manually or automatically (if designed).
- F. Step-Up Transformer Enclosure(s) inspections – The Step-Up Transformer Enclosure(s) may be inspected to test and ensure that the equipment that Subscriber Organization has installed is installed and operating correctly based upon agreed to design. Wiring may be field verified on a sample basis against the wiring diagrams to ensure that the installed equipment is wired properly. The grounding mat at the Step-Up Transformer Enclosure(s) may be tested to make sure there is adequate grounding of equipment.
- G. Communication testing – Communication System testing to occur to ensure correct operation. Detailed scope of testing will be agreed by Company and Subscriber Organization to reflect installed systems and communication paths that tie the Facility to Company's communications system.
- H. Various contingency scenarios to be tested to ensure adequate operation, including testing contingencies such as loss of communications, and fault simulations to ensure that the Facility's breakers, if any, open as they are designed to open. (Back up relay testing)
- I. Metering section inspection; verification of metering PTs, CTs, and cabinet and the installation of the two Company meters.



2. Telephone Communication.

- A. Test to confirm Company has a direct line to the Facility control room at all times and that it is programmed correctly.
- B. Test to confirm that the Facility operators can sufficiently reach Company System Operator.
- C. Verification of dial-up telephone connection for metering cabinet.

3. Drawings, Documentation and Equipment Warranties.

The items below are required components of the Acceptance Test and must be satisfied for successful completion of this Test.

- A. Electronic and three (3) hard copies of all Switchyard construction drawings, specifications, calibrations, and settings including as-built drawings.
- B. Equipment operating and maintenance manuals, spare parts lists, commissioning notes, as-built equipment settings, and other information related to the switchyard equipment.
- C. Contractor construction warranties and equipment warranties.
- D. Phase rotation testing to verify proper phase connections.
- E. Switching Station inspections – The Switching Station may be inspected to test and ensure that the equipment that Subscriber Organization has installed is installed and operating correctly based upon agreed-to design. Wiring may be field verified on a sample basis against the wiring diagrams to ensure that the installed equipment is wired properly. The grounding mat at the Switching Station may be tested to make sure there is adequate grounding of equipment.
- F. If agreed by the Parties in writing, some requirements may be postponed to the Control Systems Acceptance Test.

*Attachment COS*

*COMPANY-OWNED SITE*

[This Attachment sets forth the terms and conditions which shall apply if Subscriber Organization elects to utilize a Company-owned Site.]

ATTACHMENT COS  
COMPANY-OWNED SITE

1. DESCRIPTION OF COMPANY-OWNED SITE.

A. **General.** At the request of Subscriber Organization, Company shall make available to Subscriber Organization an area on Company's property to allow performance of Subscriber Organization's obligations under this Contract, provided that Company shall make available only as much acreage as necessary for Subscriber Organization's performance (the "Company-Owned Site").

1. **During Construction of the Facility.** During such time as Subscriber Organization is actively constructing the Facility, the Company shall make available a reasonable area on Company's property, as determined by Company, for Subscriber Organization's construction activities, which shall be no larger than        acres, as shown on the site plan attached as Exhibit K-1 (Site Plan) to this Attachment COS (Company-Owned Site). The Company shall work with Subscriber Organization to physically demarcate, at Subscriber Organization's expense, the boundaries of the area that will be made available to Subscriber Organization during construction of the Facility.

2. **Upon Completion of the Facility.**

a. Upon Subscriber Organization's completion of the Facility, Company shall make available to Subscriber Organization only as much area as necessary for ongoing operation of the Facility under the terms of this Contract for the remainder of the Term (the "Post-Construction Area"). The Company shall work with Subscriber Organization to physically demarcate, at Subscriber Organization's expense, the boundaries of the Post-Construction Area.

b. Upon Subscriber Organization's request during the Term of this Contract, Company, in its sole discretion, may make available to Subscriber Organization additional acreage, on a temporary basis, for Subscriber Organization's maintenance, repair or replacement of the Facility, or any portion thereof, on an as-needed basis; provided, however, that the additional acreage shall not exceed the boundaries of the area shown on the site plan attached as Exhibit K-1 (Site Plan) to this Attachment COS (Company-Owned Site). At any time during the Term, the actual available area that may be available to Subscriber Organization for such maintenance, repair or replacements activities may change in accordance with the Company's needs and then-current utilization plans for the area, all of which the Company hereby reserves in its sole and absolute discretion.

B. **[Maui only]: Private Roadway and Landscape Buffer.** The Company-Owned Site is located within a project known as the New Central Maui Generation Site Subdivision (the "Subdivision"). Subscriber Organization acknowledges and agrees that Subscriber Organization will benefit from the construction of the following improvements (the "Company Improvements") on or near the Post-Construction Area on property owned by Company within the New Central Maui Generation Site Subdivision: (i) a Private Roadway that will connect the Post-Construction Area to Pulehu Road, a public road owned by the County of Maui; (ii) a landscape buffer along Pulehu Road required to be built under the Land Use Conditions (hereinafter defined) encumbering the land within the Subdivision; and (iii) any other improvements or infrastructure required under the Land

Use Conditions. Subscriber Organization shall share in the cost to design, construct, operate, and maintain the Company Improvements, based on the Post-Construction Area, on a pro rata basis with others utilizing land within the Subdivision. Notwithstanding the foregoing, Company shall have the sole discretion to make reasonable adjustments to Subscriber Organization's share of the Company Improvements based on other uses within the Subdivision. For the purposes of this Attachment COS (Company-Owned Site), "Land Use Conditions" shall mean: (i) that certain Zoning Ordinance 2841 of the County of Maui, as reflected in related Unilateral Contract and Declaration for Conditional Zoning dated June 16, 2000 and recorded in the Bureau of Conveyances of the State of Hawaii as Document No. 2000-085696; and (ii) that certain Findings of Fact, Conclusions of Law, and Decision and Order dated June 22, 1998, issued by the Land Use Commission of the State of Hawaii in Docket No. A97-722, as reflected in the Document Listing Conditions to Reclassification of Land dated July 23, 1998 and recorded in said Bureau as Document No. 98-112111.

- C. **Utilization of Site.** Subscriber Organization shall utilize the Company-Owned Site solely in connection with and for the purposes of constructing a Facility and meeting Subscriber Organization's obligations to Company under this Contract. Subscriber Organization waives and relinquishes any right it may have under Title 11, United States Code, and any other or successor state or federal statute relating to assignment for the benefit of creditors, appointment of a receiver or trustee, bankruptcy, composition, insolvency, moratorium, reorganization, or similar matters ("Bankruptcy Law"), in any proceeding, whether voluntary or involuntary, under any Bankruptcy Law, or otherwise to assert the Company-Owned Site should be used for any purpose other than in connection with and for the purposes of meeting Subscriber Organization's obligations under this Contract.
- D. **Future Subdivision.** Subscriber Organization acknowledges and agrees that Company, in its sole discretion, reserves the right to subdivide the Subdivision at any time during the Term of this Contract. In the event Company exercises its right to subdivide the Subdivision, (i) Subscriber Organization agrees to share in the cost to subdivide the Subdivision on a pro rata basis with others utilizing land within the Subdivision, as determined by the Company, and (ii) Subscriber Organization and Company shall cooperate in good faith to negotiate a lease for Subscriber Organization's use of the Company-Owned Site under terms mutually agreeable to the parties consistent with this Attachment COS (Company-Owned Site).

## 2. **SECURITY AND ACCESS TO SITE.**

### A. **During Construction of the Facility.**

1. **Security.** During such time as Subscriber Organization is actively constructing the Facility, Subscriber Organization at its option may secure the Company-Owned Site with fencing and gates to prevent unauthorized persons or vehicles from entering or crossing through the Company-Owned Site and/or adjacent lands owned or operated by Company. Such fencing and gating shall require the prior written approval of the Company before erecting such fencing and gating.
2. **Access to Company-Owned Site.** During such time as Subscriber Organization is actively constructing the Facility, Company shall provide access to the Company-Owned Site through a separate contractor's entrance, if available, or through other reasonable means as may be determined by Company in its sole discretion.

### B. **Upon Completion of the Facility.**

1. **Secured Facility.** Subscriber Organization shall secure the Facility on the Company-Owned Site and prevent access to the Facility by unauthorized personnel in the same manner or higher as Company secures its power generating facilities in the county in which the Company-Owned Site is located. Notwithstanding Company's then current security procedures for its other facilities, in the event of security concerns as may be determined by the Company's security personnel, Company may require Subscriber Organization to temporarily maintain personnel at the Company-Owned Site 24 hours a day 7 days a week to monitor the security and safety of the Company-Owned Site and Facility.
  2. **Limited Access to Company-Owned Site.** Subscriber Organization shall maintain barriers on the Company-Owned Site to prevent unauthorized persons or vehicles from entering or crossing through the Company-Owned Site and/or adjacent lands owned or operated by Company.
- C. **Personnel.** At all times during the Term of this Contract, Subscriber Organization shall conduct security and background checks on all Subscriber Organization representatives, employees, independent contractors, agents, and other persons who will be allowed access to the Facility by Subscriber Organization and shall require all such persons to take periodic drug tests. Subscriber Organization shall not allow on the Company-Owned Site any persons who do not pass such security checks or drug tests. Due to the critical nature of Company's operations where the Company-Owned Site is situated, Subscriber Organization agrees that if Company, in its sole discretion and after reasonable consultation with Subscriber Organization, determines that the continued presence of any Subscriber Organization representative, employee, contractor or agent on Company property is not consistent with the best interests of Company, then in such an instance Company may request that Subscriber Organization remove such representative, employee, contractor or agent from the Company-Owned Site and Subscriber Organization shall forthwith comply with such request. Subscriber Organization may replace such representative, employee, contractor or agent with another who meets Company's standards at no additional cost to Company.
- D. **Access and Inspection.** At all times during the Term of this Contract, Company and its agents, representatives, and designees may enter the Company-Owned Site upon reasonable notice for any reason, including but not limited to the following: to (a) ascertain whether Subscriber Organization is complying with this Contract; (b) cure any failure of Subscriber Organization to comply with this Attachment COS (Company-Owned Site); (c) inspect the Company-Owned Site and any construction or improvements, including the Facility; (d) perform such tests, borings, and other analyses as Company determines may be necessary or appropriate relating to (non)compliance with any Laws or possible Hazardous Substances Discharge (hereinafter defined). Company and its designees shall not unreasonably interfere with operations of the Facility and shall comply with Subscriber Organization's reasonable instructions.
3. **Compliance.**
- A. **Generally.** Subscriber Organization shall, at Subscriber Organization's expense, in all material respects: (i) comply with all Laws, ordinances, requirements, orders, proclamations, directives, rules, and regulations of any Governmental Authority affecting the Company-Owned Site; (ii) comply with all rules regulating the use of and activities and conduct upon the Company's property, including the Company-Owned Site, as may be established and amended from time to time by the Company in its sole discretion; (iii) comply with the covenants, conditions, and restrictions set forth in any documents recorded against the Company-Owned Site; (iv) procure any and all licenses, permits (including building, demolition, alteration, use, and special permits), approvals, consents, certificates (including certificate(s) of occupancy), rulings, variances, authorizations, or

amendments to any of the foregoing as shall be necessary or appropriate under any Laws to construct and operate the Facility and to perform repair, alteration, demolition, or other work affecting the Facility (“Approvals”); and (v) comply with all Approvals.

- B. **Notice of Inspections.** Subscriber Organization shall give Company notice of any proposed inspection of the Company-Owned Site or the Facility by any Governmental Authority immediately upon Subscriber Organization’s receipt of notice of such inspection.

**4. Subscriber Organization’s Investigation of the Company-Owned Site.**

- A. **Investigations and Reports.** Subscriber Organization shall make such independent investigations as Subscriber Organization deems necessary or appropriate concerning Subscriber Organization’s utilization of the Company-Owned Site for the purposes of meeting Subscriber Organization’s obligations under this Contract. Notwithstanding the foregoing, if Subscriber Organization wishes to conduct an environmental or soil assessment on the Company-Owned Site, including but not limited to any Baseline Assessment conducted under Section 7(a) (Baseline Assessment) of this Attachment COS (Company-Owned Site), Company shall select the environmental or engineering consultant to conduct the investigation and shall contract with the consultant to provide the report at Subscriber Organization’s cost. The provision of any such report to Subscriber Organization shall be subject to the confidentiality provisions of Section 7(l) (Confidentiality) of this Attachment COS (Company-Owned Site).
- B. **Permits, Assurances, and Approvals.** Subscriber Organization agrees to provide Company with copies of all permits, Approvals and assurances pertaining to Subscriber Organization’s construction on the Company-Owned Site, including but not limited to building and grading permits, special management area permits, assurances from Governmental Authorities, utility commitments and service Contracts, and any permits, Approvals or assurances regarding the development or use of water, roadways, utilities or other infrastructure.
- C. **Acceptance of Company-Owned Site.** Subscriber Organization acknowledges that it has, or has had the opportunity, to inspect carefully the Company-Owned Site, and accepts the Company-Owned Site in AS IS condition WITH ALL FAULTS. Subscriber Organization further acknowledges that neither Company nor its agents or employees have made any representations or warranties of any kind whatsoever as to the suitability or fitness of the Company-Owned Site for the construction or operation of the Facility or for any other purpose, nor has Company or its agents or employees agreed to make any repairs, undertake any alterations, or construct any improvements on or with respect to the Company-Owned Site other than such Company-Owned Interconnection Facilities as Company has or may agree to build or install.
- D. **No Company Services.** Subscriber Organization acknowledges and agrees that Company is under no obligation to provide any services such as security, water, utilities or infrastructure to the Company-Owned Site.

**5. Construction, Maintenance and Interference.**

- A. **Construction.** At Subscriber Organization’s sole cost and expense, Subscriber Organization shall construct the Facility in accordance with the requirements of this Contract. Subscriber Organization shall not commence any demolition, construction, reconstruction, restoration, or other work affecting the Company-Owned Site, including construction of the Facility (“Construction”) until it has the applicable necessary Approvals. Prior to commencement of any Construction, Subscriber Organization shall cause each entity involved in such Construction, who is a direct contractor of Subscriber Organization and who has mechanic lien rights under Chapter 507 of the Hawaii Revised Statutes, to deliver to Company a performance and payment bond in a form

acceptable to Company and from a surety reasonably acceptable to Company, covering the faithful performance of such entity's contract with the Subscriber Organization and the payment of all obligations arising thereunder, and naming Company as an obligee. Subscriber Organization shall complete Construction of the Facility within the time periods required by this Contract. Subscriber Organization shall pay for all Construction when and as required by the parties that perform such Construction. All improvements that Subscriber Organization constructs on the Company-Owned Site other than Company-Owned Interconnection Facilities shall be the property of the Subscriber Organization for the Term of this Contract.

- B. **Plans and Specifications.** Subscriber Organization shall promptly provide Company with plans and specifications or surveys (including working plans and specifications and "as-built" plans and specifications and surveys) for any Construction.
- C. **Applications.** Upon Subscriber Organization's request, Company shall, without cost to Company, promptly join in and execute any Application (hereinafter defined) as Subscriber Organization reasonably requests, provided that: (i) such Application is in customary form and imposes no material obligations (beyond obligations ministerial in nature or merely requiring compliance with applicable Laws) upon Company; (ii) no uncured Event of Default exists; and (iii) Subscriber Organization reimburses Company's attorneys' fees and costs. Promptly upon Subscriber Organization's request and without charge (except reimbursement of Company's attorneys' fees and costs), Company shall furnish all information in its possession that Subscriber Organization reasonably requests for any Application. For the purposes of this Attachment COS (Company-Owned Site), "Application" shall mean any Contract, application, certificate, document, or submission (or amendment of any of the foregoing): (i) necessary or appropriate for any Construction allowed under this Attachment COS (Company-Owned Site), including any application for any building permit, certificate of occupancy, utility service or hookup, easement, covenant, condition, restriction, subdivision plat, or such other instrument as Subscriber Organization may from time to time reasonably request for such Construction; (ii) to enable Subscriber Organization from time to time to seek any Approval or to use and operate the Facility in accordance with this Contract; or (iii) otherwise reasonably necessary and appropriate to allow Subscriber Organization to meet its obligations under this Attachment COS (Company-Owned Site).
- D. **Obligation to Maintain.** Subscriber Organization shall remove trash and debris from the Company-Owned Site and the adjoining sidewalk, if any, and maintain them in a reasonably clean condition.
- E. **Interference.** The Company-Owned Site is located on or adjacent to property and infrastructure owned and operated by Company. Subscriber Organization acknowledges and agrees that such property and infrastructure includes Company's existing communications configurations, equipment, and frequencies that exist on or adjacent to the Company-Owned Site as of the Effective Date ("Pre-existing Communications"). Subscriber Organization shall not construct, install, operate, use, maintain, repair, or remove any new or existing equipment that will materially interfere with the Pre-existing Communications and shall be responsible for resolving any technical interference problems between the Facility and the Pre-existing Communications. Subscriber Organization additionally agrees to ensure that the Facility complies with any commercially reasonable communications requirements, specifications or rules developed by Company and provided to Subscriber Organization with respect to the Company-Owned Site throughout the Term of this Contract. Subscriber Organization shall inform and obtain Company's prior written approval before replacing any of its communications equipment or communications service providers (including internet equipment and internet service providers).

**6. Prohibited Liens.**

- A. **Subscriber Organization's Covenant.** Subscriber Organization shall not permit any mechanic's, vendor's, laborer's, or material supplier's statutory lien or other similar lien arising from work, labor, services, equipment, or materials supplied, or claimed to have been supplied, to Subscriber Organization (or anyone claiming through Subscriber Organization) ("Prohibited Lien") to attach to the Company-Owned Site or to any adjacent land owned by the Company. If a Prohibited Lien is filed, Subscriber Organization shall, within 30 Days after receiving notice from Company of such filing (but in any case within 15 Days after Company notifies Subscriber Organization of commencement of any application for a mechanic's lien or foreclosure proceedings), commence appropriate action to cause such Prohibited Lien to be paid, discharged, bonded, or cleared from title. Subscriber Organization shall thereafter prosecute such action with reasonable diligence and continuity. If Company receives notice of any such filing, then Company shall promptly notify Subscriber Organization. Nothing in this Contract shall be construed to obligate Subscriber Organization regarding any lien that results from any act or omission by Company.
- B. **Protection of Company.** Nothing in this Contract shall be deemed or construed in any way to constitute Company's giving Subscriber Organization any right, power or authority to contract for, or permit the rendering of, any services, or the furnishing of any materials that would give rise to the filing of any liens against the Company-Owned Site. Subscriber Organization shall indemnify Company against any claims arising out of Construction undertaken by Subscriber Organization or anyone claiming through Subscriber Organization, and against all Prohibited Liens.

**7. Hazardous Substances.**

- A. **Baseline Assessment.** At Subscriber Organization's request, Company shall obtain a Phase I and/or Phase II Environmental Assessment (hereinafter defined), at Subscriber Organization's sole cost, revealing the environmental conditions of the Company-Owned Site prior to Subscriber Organization's commencement of Construction on the Company-Owned Site ("Baseline Assessment") and, subject to the confidentiality provisions of Section 7.L (Confidentiality) of this Attachment COS (Company-Owned Site), shall provide Subscriber Organization with a copy of the results of the Baseline Assessment. Any Hazardous Substances (hereinafter defined) not disclosed in any Baseline Assessment and discovered on the Company-Owned Site after the Effective Date shall be presumed to be present as a result of Subscriber Organization's utilization of the Company-Owned Site during the Term, unless Subscriber Organization shall prove, by clear and convincing proof, that the Hazardous Substances: (i) were present on the Company-Owned Site prior to the Term; (ii) migrated onto the Company-Owned Site as the result of the activities of a third party; or (iii) are present on the Company-Owned Site as the result of Company's improper actions.
1. For the purposes of this Attachment COS (Company-Owned Site): (A) "Phase I Environmental Assessment" means an environmental assessment and report prepared by a qualified environmental professional reasonably acceptable to Company that meets or exceeds the minimum requirements outlined in the then current version of the American Society of Testing and Materials Standard E 1527-00 (Standard Practice of Environmental Site Assessments: Phase I Environmental Site Assessment Process); and (B) "Phase II Environmental Assessment" means an environmental assessment and report prepared by a qualified environmental professional reasonably acceptable to Company that goes beyond the investigations of a Phase I Environmental Assessment and involves sampling and testing of the Company-Owned Site, including (1) an asbestos survey conducted according to the standards of the Asbestos Hazard Emergency Response Act protocol; (2) testing of any transformers on



the Company-Owned Site for PCBs; (3) testing for lead based paints; (4) soil and groundwater sampling to measure the effect of any actual or suspected release or discharge of Hazardous Substances on the Company-Owned Site; and (5) such other sampling and testing reasonably necessary to determine the environmental condition of the Company-Owned Site.

2. For the purposes of this Attachment COS (Company-Owned Site), “Hazardous Substances” shall include flammable substances, explosives, radioactive materials, asbestos, asbestos-containing materials, polychlorinated biphenyls, chemicals known to cause cancer or reproductive toxicity, pollutants, contaminants, hazardous wastes, medical wastes, toxic substances or related materials, petroleum and petroleum products, and any “hazardous” or “toxic” material, substance or waste that is defined by those or similar terms or is regulated as such under any Laws, including any material, substance or waste that is: (A) defined as a “hazardous substance” under Section 311 of the Water Pollution Control Act (33 U.S.C. §1317), as amended; (B) defined as a “hazardous waste” under Section 1004 of the Resource Conservation and Recovery Act of 1976, 42 U.S.C. §6901, et seq., as amended; (C) defined as a “hazardous substance” or “hazardous waste” under Section 101 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended by the Superfund Reauthorization Act of 1986, 42 U.S.C. §9601 et seq. or any so-called “superfund” or “superlien” law; (D) defined as a “pollutant” or “contaminant” under 42 U.S.C. §9601(33); (E) defined as “hazardous waste” under 40 C.F.R. Part 260; (F) defined as a “hazardous chemical” under 29 C.F.R. Part 1910; or (G) subject to any other Laws regulating, relating to or imposing obligations, liability or standards of conduct concerning protection of human health, plant life, animal life, natural resources, property or the enjoyment of life or property free from the presence in the environment of any solid, liquid, gas, odor or any form of energy from whatever source.

**B. Compliance with Environmental Law.** Subscriber Organization shall keep and maintain the Company-Owned Site, including the land, the air above the land, the surface and run-off water on the land, and the groundwater under the land, in compliance with, and shall not cause or permit the Company-Owned Site or any portion of the Company-Owned Site to be in violation of any Laws regarding: (i) air, environmental, ground water, soil conditions, or threatened or endangered species; or (ii) clean-up, control, disposal, generation, storage, release, transportation, or use of, or liability or standards of conduct concerning, Hazardous Substances (“Environmental Law”).

**C. Use of Hazardous Substances.** Subscriber Organization shall not cause or allow any deposit, discharge, generation, release, or spill of Hazardous Substances at or from the Company-Owned Site, or that arises at any time from Subscriber Organization’s operation of the Facility or any activities conducted on the Company-Owned Site or any adjacent or nearby real property, or resulting from seepage, leakage, or other transmission of Hazardous Substances from other real property to the Company-Owned Site, whether or not caused by Subscriber Organization or the Company and whether occurring before or after the Effective Date (“Hazardous Substances Discharge”), except (i) in the ordinary course of Subscriber Organization’s business (ii) in accordance with the instructions of the manufacturer and for the purpose described in such instructions, and (iii) in strict compliance with all applicable Environmental Law. Subscriber Organization shall not install or remove any tank or combination of tanks (including pipes connected to the tanks) used to contain an accumulation of Hazardous Substances, and the volume of which (including the volume of the underground pipes connected to the tanks) is ten percent or more beneath the surface of the ground (“Underground Storage Tank”) on, within, under or about the Company-Owned Site without first obtaining Company’s written approval. Subscriber Organization shall not accept hazardous waste (as defined under any Environmental Law) generated off the Company-Owned Site for any purpose, including treatment, storage or disposal.

- D. **List of Hazardous Substances.** On the Effective Date and on each anniversary of the Effective Date, and at any other time Company requests, Subscriber Organization shall provide Company with a written list identifying any Hazardous Substances then used, stored, or maintained upon the Company-Owned Site, the use and approximate quantity of each such material, a copy of any material safety data sheet (MSDS) issued by the manufacturer thereof, written information concerning the removal, transportation, and disposal of the same, and such other information as Company may reasonably require or as may be required by Law.
- E. **Notice of Disturbance of Any Hazardous Substances.** Subscriber Organization shall provide Company 30 Days' prior notice before commencing any activities, including repair or remodeling of the Facility or the Company-Owned Site or installation or removal of any personal property from the Company-Owned Site, which could result in the disturbance of any Hazardous Substances. Together with such notice, Subscriber Organization shall advise Company of protective measures to be taken by Subscriber Organization to ensure that Hazardous Substances shall not be released and to ensure compliance with Environmental Law. Subscriber Organization shall comply with all reasonable conditions (including adequate assurance of financial resources to comply with Environmental Law) that may be imposed by Company in connection with Subscriber Organization's proposed activities.
- F. **Hazardous Substances Claims.** Subscriber Organization shall immediately notify Company of: (i) any Hazardous Substances Claims (hereinafter defined); or (ii) Subscriber Organization's discovery of any occurrence or condition of the Company-Owned Site which could subject Subscriber Organization or Company to any liability, or restrictions on ownership, occupancy, transferability or use of the Company-Owned Site under any Environmental Law. For the purposes of this Attachment COS (Company-Owned Site), "Hazardous Substances Claims" shall mean (i) any actual, alleged or threatened Hazardous Substances Discharge; (ii) any and all enforcement, cleanup, removal, mitigation, remediation or other government actions instituted, contemplated or threatened pursuant to Environmental Law affecting the Company-Owned Site; and (iii) all claims made or threatened by any third party against Subscriber Organization or the Company-Owned Site relating to damage, contribution, cost recovery, compensation, loss or injury resulting from any Hazardous Substances.
- G. **Remediation and Removal.** Except for the use of Hazardous Substances permitted by this Attachment COS (Company-Owned Site), Subscriber Organization shall cause any Hazardous Substances Discharge to be: (i) remediated on-site in accordance with applicable Environmental Law; or (ii) removed from the Company-Owned Site for remediation or disposal and to be transported solely by duly licensed Hazardous Substances transporters to duly licensed disposal facilities for final disposition to the extent required by and in accordance with applicable Environmental Law. Subscriber Organization shall deliver to Company copies of any hazardous waste manifest reflecting the proper disposition of such Hazardous Substances. Except in emergencies or as otherwise required by Law, Subscriber Organization shall not take any remedial or removal action in response to a Hazardous Substances Discharge without first notifying Company.
- H. **Proceedings on Hazardous Substances Claims; Indemnity.** Subscriber Organization shall not enter into any legal proceeding or other action, settlement, consent decree or other compromise with respect to any Hazardous Substances Claims without first notifying Company of Subscriber Organization's intention to do so and affording Company the opportunity to join and participate as a party if Company so elects in such proceedings. Subscriber Organization shall be solely responsible for and shall indemnify Company against any Hazardous Substances Claims, including: (i) the costs of any required or necessary removal, repair, cleanup or remediation of the Company-

Owned Site, and the preparation and implementation of any closure, removal, remedial or other required plans; and (ii) all reasonable costs and expenses incurred by Company in connection therewith, including legal costs.

**I. Assurance of Performance.**

1. **Company's Phase II Environmental Assessment.** Company may, but shall not be required to, engage such contractors as Company determines to be appropriate to perform from time to time a Phase II Environmental Assessment, including environmental sampling and testing, of: (A) the Company-Owned Site, the surrounding soil and any adjacent areas, and any ground water located under or surface water located adjacent to the Company-Owned Site or any adjoining property; (B) Subscriber Organization's compliance with all Environmental Law and the provisions of this Attachment COS (Company-Owned Site); and (C) the provisions made by Subscriber Organization for carrying out any removal or remedial action that may be required by reason of the nature of Subscriber Organization's business and operations on the Company-Owned Site.
2. **Cost of Assessment.** All costs and expenses incurred by Company in connection with any such Phase II Environmental Assessment shall be paid by Company, except that if any such Phase II Environmental Assessment shows that: (A) the environmental condition of the Company-Owned Site has materially declined in comparison to any Baseline Assessment; (B) Subscriber Organization has failed to comply with the provisions of this Attachment COS (Company-Owned Site) with respect to Hazardous Substances; (C) the Company-Owned Site (including surrounding soil and any underlying groundwater or adjacent surface water) has become contaminated due to operations or activities not attributable to the Company; or (D) an event that is the basis for a Hazardous Substances Claim occurred during the Term, then all of the costs and expenses of such assessment shall be paid by Subscriber Organization.
3. **Conducting Assessment.** Each Phase II Environmental Assessment shall be conducted: (A) only after advance notice of such assessment has been provided to Subscriber Organization at least 10 Days prior to the date of the assessment; and (B) in a manner reasonably designed to minimize the interruption of Subscriber Organization's operations and use of the Company-Owned Site. Company shall repair any substantial damage to the Company-Owned Site or to the Facility that is directly caused by Company (but not the environmental consultant) during the Phase II Environmental Assessment.

**J. Subscriber Organization's Obligations Prior to End of Term.**

1. **Subscriber Organization's Phase I and Phase II Environmental Assessment Deposit.** No later than 18 months prior to the date upon which this Contract terminates, i.e., the end of the Term, Subscriber Organization shall deposit with Company a sum equal to the then current estimated cost of conducting a Phase I and Phase II Environmental Assessment of the Company-Owned Site. Company shall hold such sum for Subscriber Organization and shall apply or reimburse such sum as provided in this section.
2. **Phase I (or Phase II) Environmental Assessment.**
  - a. No later than the beginning of the last year of the Term, or immediately upon earlier termination of the Term, Company shall cause a Phase I Environmental Assessment of the Company-Owned Site to be conducted and may apply the sums previously deposited by Subscriber Organization to pay for such assessment.. If the assessment costs more than the amount of the deposit, Subscriber Organization shall pay to Company, upon demand, the difference. If the assessment costs less than the amount of the deposit, and if the Phase I

Environmental Assessment does not identify areas of concern that in Company's reasonable judgment indicate that further investigation is required, Company shall, no later than 30 Days after payment in full of the cost of the Phase I Environmental Assessment, return to Subscriber Organization a sum equal to the amount by which the deposit exceeds the actual costs of such assessment. In addition, no later than the end of the Term, Subscriber Organization shall (1) cause all Hazardous Substances previously owned, stored or used by Subscriber Organization to be removed from the Company-Owned Site and disposed of in accordance with all Environmental Law; and (2) remove any Underground Storage Tanks or other containers installed or used by Subscriber Organization to store any Hazardous Substances on the Company-Owned Site, and repair any damage to the Company-Owned Site caused by such removal.

- b. If Company's Phase I Environmental Assessment identifies areas of concern that in Company's reasonable judgment indicate that further investigation is required, Company shall cause a Phase II Environmental Assessment of the Company-Owned Site to be conducted and may apply the sums previously deposited by Subscriber Organization to pay for such assessment. If the assessment costs more than the amount of the deposit, Subscriber Organization shall pay to Company, upon demand, the difference. If the assessment costs less than the amount of the deposit, Company shall, no later than 30 Days after payment in full of such costs, return to Subscriber Organization a sum equal to the amount by which the deposit exceeds the actual costs of such assessment. Subscriber Organization expressly acknowledges and agrees that Subscriber Organization's covenant and obligation to pay all costs and expenses associated with any Phase II Environmental Assessment required under this section, whether commissioned by Subscriber Organization or Company, shall survive termination of this Contract.

**K. Clean-up.**

1. **Environmental Report.** If any written report containing results of any Phase I Environmental Assessment ("Environmental Report") shall: (A) reveal that the environmental condition of the Company-Owned Site has materially declined in comparison to the Baseline Assessment; or (B) Subscriber Organization has materially violated any warranty, representation, or covenant of this Attachment COS (Company-Owned Site); or (C) recommend the repair, closure, remediation, removal or other clean-up (collectively, the "Clean-up") of any Hazardous Substances found on or about the Company-Owned Site, and if Company determines that Subscriber Organization is responsible for such Clean-up, then:
  - a. Company shall provide Subscriber Organization with a copy of such Environmental Report and with a written explanation of the reasons why Company believes that Subscriber Organization is responsible under the principles of this section for conducting the Clean-up identified in such Environmental Report.
  - b. If, within 30 Days after receiving a copy of such Environmental Report and such written statement, Subscriber Organization fails either (1) to complete the Clean-up, or (2) with respect to any Clean-up which cannot be completed within such 30-Day period, fails to proceed with reasonable diligence to complete such Clean-up as promptly as practicable, then Company shall have the right, but not the obligation, to carry out any Clean-up recommended by the Environmental Report or required by any Governmental Authority, and to recover all of the costs and expenses of such Clean-up from Subscriber Organization from the date Company incurred such costs and expenses until paid in full.

2. **Emergency.** If the Environmental Report reveals a situation which, in Company's sole discretion, constitutes an emergency, then Company shall have the right, but not the obligation, to carry out any Clean-up recommended by the Environmental Report or required by any Governmental Authority, and to recover all of the costs and expenses of such Clean-up from Subscriber Organization from the date Company incurred such costs and expenses until paid in full.
3. **Submission of Report to Government.** To the extent required by Laws, Company shall be entitled to submit the Environmental Report to any Governmental Authority.
4. **Completion of Clean-up Before Termination.** Subscriber Organization shall complete Clean-up prior to termination of this Contract, and shall fully comply with all Environmental Law and requirements of any Governmental Authority over the Clean-up, including any requirement to file such assessment, mitigation plan, risk assessment or other information with any such Governmental Authority prior to such termination.
5. **Subscriber Organization's Inability to Complete.** Should any such Clean-up for which Subscriber Organization is responsible not be completed or should Subscriber Organization not receive any Approvals regarding the Company-Owned Site or areas adjacent to the Company-Owned Site required under Environmental Law prior to the expiration or sooner termination of this Contract, including any extensions of this Contract, then Subscriber Organization shall deposit with Company an amount of money equal to the balance of the estimated costs of the Clean-up.

**L. Confidentiality.**

1. **Keeping Information Confidential.** Except if required to do so by Law, or compelled by subpoena or discovery proceedings in any legal action or governmental proceeding, Subscriber Organization agrees that Subscriber Organization shall not disclose, discuss, disseminate or copy any information, data, findings, communications, conclusions and reports regarding the environmental condition of the Company-Owned Site, to any person, including any Governmental Authority, without the prior written consent of Company. Upon completion of any Clean-up of the Company-Owned Site, Subscriber Organization shall deliver and return to Company, all information, data, findings, communications, conclusions and reports regarding the environmental condition of the Company-Owned Site whether provided to Subscriber Organization by Company or not.
2. **Scope of Obligation.** Subscriber Organization's obligation to maintain the confidentiality of all information, data, findings, communications, conclusions and reports regarding the environmental condition of the Company-Owned Site, include but are not limited to Subscriber Organization's officers, employees, agents, attorneys, environmental consultants and contractors. Subscriber Organization's obligation to maintain the confidentiality of all information, data, findings, communications, conclusions and reports regarding the environmental condition of the Company-Owned Site, shall survive the termination of this Contract.

- M. Copies of Environmental Reports.** Subscriber Organization shall provide Company with a copy of any and all environmental assessments, audits, studies and reports regarding Subscriber Organization's past or current activities on the Company-Owned Site or the environmental condition of the Company-Owned Site within 30 Days of Subscriber Organization's receipt of such materials. Subscriber Organization shall be obligated to provide Company with a copy of such

materials without regard to whether they are generated by Subscriber Organization or prepared for Subscriber Organization, or how Subscriber Organization comes into possession of such materials.

- N. **Survival of Contracts.** The covenants of this section, including the indemnification provision, shall survive the expiration or termination of this Contract, or any termination of Subscriber Organization's utilization of the Company-Owned Site.

## 8. Archeological and Historical Items.

- A. **Discovery of Items.** In the event any human remains, artifacts, historical items, or any of them (collectively the "Discovered Items") are discovered on the Company-Owned Site, Subscriber Organization shall, at Subscriber Organization's sole expense and subject to the approval of Company, be responsible to: (i) cause all excavation in the immediate area which may damage the Discovered Items and the potential historic site to cease; (ii) cause the site to be stabilized and secured to temporarily protect the Discovered Items against damage, theft, or both; (iii) cause the Discovered Items to be left untouched so that their archaeological or historical context may be accurately documented; and (iv) cause the discovery to be reported immediately to Company and to Governmental Authorities as required by applicable Laws. If the artifacts or historical items are found without human remains, and leaving the artifacts or historical items in their stabilized and secured site poses a substantial risk of loss or damage to all or part of them, and their removal is therefore necessary, Subscriber Organization shall cause such removal and shall cause any tampering with the artifacts, the historical items, and the site to be minimized as much as possible.
- B. **Human Remains.** In the case of the discovery of human remains, Subscriber Organization shall, at Subscriber Organization's sole expense and in addition to the duties set forth in this section, cause to be prepared and executed a mitigation plan acceptable to Company and to Governmental Authorities possessing jurisdiction over such matters. Subscriber Organization shall also be responsible to obtain written verification that the mitigation plan has been successfully implemented.
- C. **Company's Reservation.** If any Discovered Items are discovered, then Company shall have the right at all reasonable times to enter the Company-Owned Site upon reasonable notice for the purposes of searching for, exploring for, and removing any of the Discovered Items for preservation as permitted by applicable Laws. All objects, antiquities and specimens of Hawaiian or other ancient art or handicraft or of prehistoric, historic or archaeological interest found on the Company-Owned Site belong to and at all times shall remain the property of Company.
- D. **No Studies by Subscriber Organization.** No archaeological studies or historic preservation studies may be sought to be conducted in or on the Company-Owned Site by Subscriber Organization or anyone acting by or through Subscriber Organization. If Subscriber Organization wishes to conduct such studies, or if Subscriber Organization is required by applicable Laws to permit such studies (Subscriber Organization to provide bases for conclusion that such Laws mandate any such requested studies), Subscriber Organization shall obtain Company's prior written consent and shall permit Company, at its option, to commission such studies as required, or Company may permit Subscriber Organization to commission such studies provided that Subscriber Organization shall provide Company with prior notice of the commencement of such studies. If Subscriber Organization commissions such studies, Subscriber Organization shall upon completion of such studies cause a complete copy of the results of such studies to be provided to Company at the earliest opportunity but no later than 15 days after its issuance.

## 9. Transfers.

- A. **Company's Right to Convey.** Company may transfer title to the Company-Owned Site from time to time at any time without prior notice to, or consent from, Subscriber Organization, provided that any such transfer is subject to Subscriber Organization's right to utilize the Company-Owned Site under this Contract. Company will promptly notify Subscriber Organization of such a transfer.
- B. **Subscriber Organization's Limited Right.** Subscriber Organization may only transfer the rights to utilize the Company-Owned Site under this Attachment COS (Company-Owned Site) to a permitted assignee of all of the rights and obligations of the Subscriber Organization under this Contract. Any attempt by Subscriber Organization to separately transfer the rights to utilize the Company-Owned Site under this Attachment COS (Company-Owned Site) shall be void. Any permitted assignee of Subscriber Organization shall assume all obligations and liabilities of Subscriber Organization under this Attachment COS (Company-Owned Site). No transfer shall affect any obligations of Subscriber Organization or rights of Company under this Attachment COS (Company-Owned Site).

## 10. End of Term.

- A. **Right of First Refusal.** Provided that the CBRE Program has been extended by the PUC beyond its current twenty-year term, the Subscriber Organization shall have a right of first refusal to negotiate an extension to the Contract (including the license to use the Company-Owned Site) for an extended term coinciding with the extended term of the CBRE Program. The terms and conditions of the extended term of the Contract shall be subject to the CBRE Program parameters as extended.
  - 1. Subscriber Organization shall provide Company with written notice of its intent exercise its right of first refusal prior to the later to occur of: (a) one (1) year prior to the end of the Term of the Contract; or (b) thirty (30) days after the PUC issues its order extending the CBRE Program. If Subscriber Organization fails to exercise its right of first refusal by such date, Subscriber Organization's right of first refusal shall expire and be of no further force and effect.
  - 2. If Subscriber Organization timely exercises its right of first refusal, Subscriber Organization and Company shall have three (3) months (the "Negotiation Period") to negotiate the terms and conditions of the extended term of the Contract. The Parties may extend the Negotiation Period by written agreement between the Parties, provided, however, that the Negotiation Period shall not extend beyond the original end of the term of the Contract. If the Parties fail to reach agreement on an extended Contract by the end of its original term, the Contract shall terminate and be of no further force and effect and the remaining provisions of this Section 10 (End of Term) shall apply. If the extended Contract is subject to PUC approval prior to becoming effective, the Parties shall, if they are able to do so, come to agreement on the extended Contract and Company shall file the application for approval of the extended Contract on or prior to the end of the original term of the Contract. The Contract shall be deemed extended on a month-to-month basis during the pendency of the application for approval of the extended Contract. The Parties may negotiate amended terms to the Contract for the period after the completion of the original term through the effective date of the extended Contract.
  - 3. If the CBRE Program is extended later than four (4) months prior to the end of the original term of the Contract, Subscriber Organization shall nonetheless retain its right of first refusal and the time to exercise such right and the minimum 3-month Negotiation Period. The original term of the Contract shall be deemed extended on a month-to-month basis during the pendency of the Negotiation Period and, if an extended Contract is agreed to, the application for approval of the extended Contract (if PUC approval is required). The Parties may negotiate amended

terms to the Contract for the period after the completion of the original term through the effective date of the extended Contract.

- B. Improvements.** Upon the termination of this Contract, or in the event this Contract is declared null and void under the Null and Void Rights of this Contract (“Contract Termination”), Subscriber Organization shall have the option to: (i) at its sole cost and expense, remove all Subscriber Organization-owned improvements, including the Facility and the Subscriber Organization-Owned Interconnection Facilities (“Improvements”) from the Company-Owned Site, and, in conjunction with such removal, shall develop and implement a program to recycle, to the fullest extent possible, or to otherwise properly dispose of, all such removed Improvements; or (ii) if Subscriber Organization does not desire to keep the Improvements, offer the Improvements to Company at a price equal to the salvage value of the Improvements as determined or supported by an appraiser agreeable to the Parties. If the Company does not wish to purchase the Improvements or if the Parties are unable to come to agreeable terms for the purchase and sale of the Improvements, Subscriber Organization, at its sole cost and expense, shall remove all of the Improvements from the Company-Owned Site, and, in conjunction with such removal, shall develop and implement a program to recycle, to the fullest extent possible, or to otherwise properly dispose of, all such removed infrastructure.
- C. Subscriber Organization’s Removal of Improvements.** If Subscriber Organization elects to or is required to remove the Improvements upon termination of the Contract, Subscriber Organization shall have reasonable access to the Company-Owned Site for a period of up to ninety (90) Days after termination of this Contract to dismantle, pack and remove the Improvements from the Company-Owned Site (the “Removal Period”). Subscriber Organization shall work promptly and diligently to remove the Improvements. The Removal Period shall automatically terminate upon the earlier to occur of: Subscriber Organization’s completion of removal of the Improvements from the Company-Owned Site or ninety (90) Days after the termination of the Contract. The surviving obligations of this Contract shall apply during the Removal Period, including Subscriber Organization’s obligations to provide insurance and to indemnify Company.
- D. Company’s Removal of Improvements.** If Company determines that Subscriber Organization is not making diligent efforts to remove the Improvements, or if Company has operational concerns over the removal of the Improvements, Company shall notify Subscriber Organization of Company’s intention to remove the Improvements at Subscriber Organization’s cost. Company shall provide Subscriber Organization at least five (5) Days notice of Company’s election to remove the Improvements at Subscriber Organization’s cost. Upon completion of such removal by Company, Company shall draw upon Operating Period Security for reimbursement of such costs, or if such security is not available, invoice Subscriber Organization for such costs.
- E. Restoration of the Company-Owned Site.** After Contract Termination and removal of Subscriber Organization’s Improvements by Subscriber Organization or by Company, as the case may be, Subscriber Organization shall, at its sole cost and expense, restore the Company-Owned Site to its condition prior to Subscriber Organization’s Construction. Restoration pursuant to this Section shall be completed within 90 Days of Contract Termination, or as otherwise agreed to by both Parties in writing.
- F. Assignment of Rights; Orderly Transfer.** If Company purchases the Improvements under the provisions of Section 10.B. (End of Term) of this Attachment COS (Company-Owned Site), Subscriber Organization shall assign to Company, without recourse, and give Company copies or originals of, all assignable licenses, permits, contracts, warranties, and guarantees then in effect for the Facility. The parties shall cooperate to achieve an orderly transfer of the Improvements from



Subscriber Organization to Company, including delivery of such books and records (or copies thereof) as Company reasonably requires.

**11. Miscellaneous.**

- A. **Modification.** The parties reserve the right to modify this Attachment COS (Company-Owned Site) by mutual agreement set forth in writing. Such modifications shall not be considered amendments to this Contract requiring PUC approval.
- B. **Security.** Subscriber Organization acknowledges and agrees that Subscriber Organization's performance under this Attachment COS (Company-Owned Site) is secured by both the Development Period Security and the Operating Period Security. Any costs and expenses due to Company, or reimbursable to Company, may at Company's option, be paid or reimbursed to Company from the applicable Development Period Security or Operating Period Security.
- C. **Confidential Information.** Without limitation of the obligations set forth elsewhere in this Contract, each party (including its officers, directors, employees, representatives, brokers, attorneys and advisers) shall, except as otherwise provided by applicable Laws, or in connection with proceedings before the State of Hawaii Public Utilities Commission or other Governmental Authority with jurisdiction over the Company-Owned Site or this Contract, or in connection with the evaluation for financing, or as part of disclosure to its affiliates, attorneys, consultants, and advisers in order to conduct its business or proceedings to enforce this Attachment COS (Company-Owned Site) or this Contract, keep the contents of this Attachment COS (Company-Owned Site) and any information related to the Company-Owned Site, Subscriber Organization and the Subscriber Organization's utilization of the Company-Owned Site pursuant to this Attachment COS (Company-Owned Site) confidential, whether or not marked as "confidential" (collectively, the "Confidential Information"). The Confidential Information shall not include any information publicly known, or which becomes publicly known, other than through the acts of a party to the Contract, or any of their respective officers, directors, employees, representatives, brokers, attorneys or advisers. Subscriber Organization may retain possession of all or any part of the Confidential Information to the extent such Confidential Information relates solely to the Facility and Subscriber Organization's operation of the Facility.
- D. **No Real Property Interest Conveyed.** Notwithstanding anything to the contrary contained herein, this Contract shall not result in the conveyance or transfer to Subscriber Organization, directly or indirectly, expressly or impliedly, or give rise to, any real property right, title, or interest.

**DRAFTING NOTES:**

- 1. **ATTACHMENT COS MAY BE REVISED TO ACCOUNT FOR MATTERS SUCH AS THE SPECIFICS OF THE SITE IN QUESTION, SUBSCRIBER ORGANIZATION'S FACILITY AND ANY NECESSARY ACCESS ARRANGEMENTS THROUGH COMPANY'S FACILITIES.**
- 2. **PROVISIONS OF THE CONTRACT CONCERNING MATTERS SUCH AS LAND RIGHTS, SCOPE OF INDEMNIFICATION AND DRAWS UPON DEVELOPMENT PERIOD SECURITY OR OPERATING PERIOD SECURITY WILL BE REVISED TO ACCOUNT FOR ATTACHMENT COS.**

**EXHIBIT K-1**  
**SITE PLAN**

**[TO BE DETERMINED]**

*Attachment DCC*

*DC-Coupled Storage*

**ATTACHMENT DCC  
DC-COUPLED STORAGE**

This Attachment DCC - DC COUPLED STORAGE sets forth the modifications to the MID-TIER STANDARD FORM CONTRACT for Renewable Dispatchable Generation (PV+BESS) for projects designed with a single Inverter System (as defined below) such that the PV System and BESS are "DC Coupled."

1. **Deletion of Defined Term.** Definition of "PV System Equivalent Availability Factor Performance Metric" will be deleted from the Schedule of Defined Terms.

2. **Addition of New Defined Terms.** The following will be added to the Schedule of Defined of Terms:

"Inverter System": The electric DC to AC and AC to DC power conversion equipment as more particularly described in Section 5 of Exhibit F-1 (Description of Generation and Storage Facility).

"Inverter System Equivalent Availability Factor": Shall have the meaning set forth in Section 1. A (Calculation of the Inverter System Equivalent Availability Factor) of Attachment C (Required Performance Metrics; Liquidated Damages).

"Inverter System Equivalent Availability Factor Performance Metric": Shall have the meaning set forth in Section 1. B (Inverter System Equivalent Availability Factor Performance Metric and Liquidated Damages) of Attachment C (Required Performance Metrics; Liquidated Damages).

3. **Revisions to Defined Term.** The definition in the Scheduled of Defined Terms for the following is revised to read as follows:

"CBRE Facility": Subscriber Organization's renewable electric energy facility that is the subject of this Contract, including the PV System, Inverter System, the BESS, all Subscriber Organization-Owned Interconnection Facilities and all other equipment, devices, associated appurtenances owned, controlled, operated and managed by Subscriber Organization in connection with, or to facilitate, the production, generation, storage, transmission, delivery or furnishing by Subscriber Organization of, electric energy to Company and required to interconnect with the Company System.

4. **Global Changes.**

- All references in the Contract to "PV System Equivalent Availability Factor" will be changed to "Inverter System Equivalent Availability Factor".
- All references in the Contract to the "PV System Equivalent Availability Factor Performance Metric" will be changed to "Inverter System Equivalent Availability Factor Performance Metric".

5. **Contract Section 4.C.** This Section is revised to read as follows:

4. C. Assurance of Capability of CBRE Facility to Deliver Net Energy Potential and Availability of BESS. In order to provide Company with reasonable assurance that, subject to the Renewable Resource Variability, the CBRE Facility's Net Energy Potential will be available for Company Dispatch: (i) the Inverter System Equivalent Availability Factor Performance Metric shall be used to evaluate the availability of the Inverter System for dispatch by Company; (ii) the Guaranteed Performance Ratio

("GPR") Performance Metric shall be used to evaluate the efficiency of the PV System; (iii) the BESS Capacity Performance Metric shall be used to confirm the capability of the BESS to discharge continuously for four (4) hours at Maximum Rated Output or to discharge continuously for a total energy (MWh) equal to the BESS Contract Capacity if the test is conducted at less than Maximum Rated Output; (iv) the BESS EAF Performance Metric shall be used to determine whether the BESS is meeting its expected availability; (v) the BESS EFOF Performance Metric shall be used to evaluate whether the BESS is experiencing excessive unplanned outages; and (vi) the RTE Performance Metric shall be used to evaluate the storage efficiency of the BESS. Whenever the PV System potential output is in excess of the Company Dispatch, the excess energy from the PV System shall be used to maximize the BESS State of Charge so long as this does not conflict with the operating parameters of the BESS set forth in Section 9.D. (Battery Energy Storage System) of Attachment F (Facility Owned by Subscriber Organization) to this Contract. Subscriber Organization shall design, operate and maintain the CBRE Facility in a manner consistent with the standard of care reasonably expected of an experienced owner/operator with the desire and financial resources necessary to design, operate and maintain the CBRE Facility to achieve the Performance Metrics. The foregoing is without limitation to Subscriber Organization's other obligations under this Contract, including the obligation to operate the CBRE Facility in accordance with Good Engineering and Operating Practices. The Performance Metrics are set forth in Attachment C (Required Performance Metrics; Liquidated Damages) of this Contract and shall be interpreted consistent with the North American Electric Reliability Corporation Generating Availability Data System ("NERC GADS") Data Reporting Instructions.

6. Attachment C (Required Performance Metrics; Liquidated Damages) Section 1. is revised to read as follows:

1. INVERTER SYSTEM EQUIVALENT AVAILABILITY FACTOR; LIQUIDATED DAMAGES; TERMINATION RIGHTS.

A. Calculation of the Inverter System Equivalent Availability Factor. Following the end of each LD Period, the Inverter System Equivalent Availability Factor shall be calculated for such LD Period as follows:

$$\text{Inverter System Equivalent Availability Factor} = 100\% \times \frac{AH-EDH}{PH}$$

where:

Period Hours (PH) is the total number of hours in the LD Period counting twenty-four (24) hours per day. In a normal year, PH = 8,760 and in a leap year PH = 8,784 .

Available Hours (AH) is the number of hours that the Inverter System is not on Outage. It is the sum of all Service Hours (SH) + Reserve Shutdown Hours (RSH).

An "Inverter System Outage" exists whenever the entire Inverter System is not online producing electric energy and is not in a Reserve Shutdown state.

Inverter System Service Hours (SH) is the number of hours during the LD Period the Inverter System is online and producing or consuming electric energy to meet Company Dispatch.

Inverter System Reserve Shutdown Hours (RSH) is the number of hours the Inverter System was available to the Company System but not converting electric energy or is offline at the Company's request for reasons other than Subscriber Organization-Attributable Non-Generation or the measured

plane of array irradiance is below the inverter manufacturer's minimum irradiance level for production. All hours between 7:00 pm and 6:00 am will be considered RSH. The Inverter System will be considered RSH in these hours, even if the system would otherwise be in an outage or derated state. A BESS Outage or Derating can exist due to an Inverter System Outage or Derating during Inverter System Reserve Shutdown Hours and the effect of such Inverter System Outage or Derating on the BESS Availability shall be included when calculating the BESS Annual Equivalent Availability Factor in accordance with Attachment H (BESS Annual Equivalent Availability Factor).

An "Inverter System Derating" exists if the Inverter System is available for Company Dispatch, but at less than full potential output for the given irradiance and BESS conditions, including deratings due to Subscriber Organization-Attributable Non-Generation. For avoidance of doubt, if there is an Inverter System Outage there cannot also be an Inverter System Derating.

Equivalent Derated Hours (EDH) is the sum of ESADH, EPDH, and EUDH. For deratings due to inverter unavailability, the equivalent full outage hour(s) are calculated by multiplying the actual duration of the derating (hours) by the number of inverters in the Inverter System unavailable and dividing by the total number of inverters in the Inverter System. For deratings, that do not impact the availability of an entire inverter or set of entire inverters, the equivalent full outage hour(s) are calculated by multiplying the actual duration of the derating (hours) by the size of the derating (in MW) divided by the Contract Capacity.

Equivalent Subscriber Organization-Attributable Derated Hours (ESADH): A Subscriber Organization-Attributable Derating occurs when there is an Inverter System Derating, due to Subscriber Organization-Attributable Non-Generation or deratings by Company pursuant to Section 5.C (Company Rights of Dispatch). Each individual derating is transformed into equivalent full outage hour(s). These equivalent hour(s) are then summed.

Equivalent Planned Derated Hours (EPDH) includes Planned Deratings (PD) and Maintenance Deratings (D4). A Planned Derating is when the Inverter System experiences a derating scheduled well in advance and for a predetermined duration. A Maintenance Derating is a derating that can be deferred beyond the end of the next weekend (Sunday at midnight or before Sunday turns into Monday) but requires a reduction in capacity before the next Planned Derating (PD). Each individual derating is transformed into equivalent full outage hour(s). These equivalent hour(s) are then summed.

Equivalent Unplanned Derated Hours (EUDH): An Unplanned Derating (Forced Derating) occurs when the Inverter System experiences a derating that requires a reduction in availability before the end of the nearest following weekend. Each individual Unplanned Derating is transformed into equivalent full outage hour(s). These equivalent hour(s) are then summed.

The effect of Force Majeure is taken into account in calculating the Inverter System Equivalent Availability Factor over the 12 calendar month LD Period as follows: When an LD Period contains any hours in a month during which the Inverter System or a portion of the Inverter System is unavailable due to Force Majeure, then such month shall be excluded from the LD Period and the LD Period shall be extended back in time to include the data used to calculate the Inverter System Equivalent Availability Factor from the next previous month during which there was no such unavailability of the Inverter System or a portion thereof due to Force Majeure. This means the Inverter System Equivalent Availability Factor would not change from that determined in the month directly preceding a month containing Force Majeure.

EXAMPLE: The following is an example of an Inverter System Equivalent Availability Factor calculation and is included for illustrative purposes only. Assume the following:

- Inverter System has 10 inverters and the Facility has a Contract Capacity of 30 MWs.
- LD Period = first 12 calendar months of the Contract (non-leap year).
- Inverter System was online and producing electric energy for 8,015 hours and was available but not producing electric energy due to lack of sufficient irradiance and BESS SOC for production for 500 hours.
- 3 Inverters were offline for 100 hours due to a Planned Derating.
- 2 Inverters were offline for 50 hours due to an Unplanned Derating.
- The Inverter System had a 3 MW derating for 100 hours due to Subscriber Organization-Attributable Non-Generation.

The Inverter System Equivalent Availability Factor would be calculated as follows:

$$PH = 8,760 \text{ hours in 12 calendar months}$$

$$SH = 8,015 \text{ hours}$$

$$RSH = 500 \text{ hours}$$

$$AH = SH + RSH = 8,015 \text{ hours} + 500 \text{ hours} = 8,515 \text{ hours}$$

$$ESADH = 100 \text{ hours} \times \left( \frac{3 \text{ MW}}{30 \text{ MW}} \right) = 10 \text{ hours}$$

$$EPDH = 100 \text{ hours} \times \left( \frac{3 \text{ inverters}}{10 \text{ inverters}} \right) = 30 \text{ hours}$$

$$EUDH = 50 \text{ hours} \times \left( \frac{2 \text{ inverters}}{10 \text{ inverters}} \right) = 10 \text{ hours}$$

$$EDH = ESADH + EPDH + EUDH = 10 \text{ hours} + 30 \text{ hours} + 10 \text{ hours} = 50 \text{ hours}$$

$$EAF = 100\% \times \frac{8,515 - 50}{8,760} = 96.6\%$$

B. Inverter System Equivalent Availability Factor Performance Metric and Liquidated Damages. For each LD Period, a Inverter System Equivalent Availability Factor shall be calculated as provided in accordance with Section 1.A. (Calculation of Inverter System Equivalent Availability Factor) of Attachment C to this Contract. In the event the Inverter System Equivalent Availability Factor is less than 98% (the "Inverter System Equivalent Availability Factor Performance Metric") for any LD Period, Subscriber Organization shall be subject to liquidated damages as set forth in this Section 1.B (Inverter System Equivalent Availability Factor Performance Metric and Liquidated Damages). For avoidance of doubt, because the Inverter System Equivalent Availability Factor is calculated over an LD Period of 12 calendar months, the first month for which liquidated damages would be calculated

under this Section 1.B. (Inverter System Equivalent Availability Factor Performance Metric and Liquidated Damages) would be the last calendar month of the initial Contract Year. If the Inverter System Equivalent Availability Factor for a LD Period is less than the Inverter System Equivalent Availability Factor Performance Metric, Subscriber Organization shall pay, in accordance with Attachment C, Section 8. (Payment of Liquidated Damages for Failure to Achieve Performance Metrics; Limitation on Liquidated Damages), and Company shall accept, as liquidated damages for Subscriber Organization's failure to achieve the Inverter System Equivalent Availability Factor Performance Metric for such LD Period, an amount calculated in accordance with the following formula:

<u>Inverter System Equivalent Availability Factor</u>	<u>Amount of Liquidated Damages Per Calendar Month</u>
<b>97.9% and below</b>	For each one-tenth of one percent (0.001) by which the Inverter System Equivalent Availability Factor for such LD Period falls below the Inverter System Equivalent Availability Factor Performance Metric, an amount equal to 0.001917 of the Applicable Period Lump Sum Payment for the last calendar month of such LD Period.

For purposes of determining liquidated damages under the preceding formula, the amount by which the Inverter System Equivalent Availability Factor for the LD Period in question falls below the applicable threshold shall be rounded to the nearest one-tenth of one percent (0.001). Each Party agrees and acknowledges that (i) the damages that Company would incur if the Subscriber Organization fails to achieve the Inverter System Equivalent Availability Factor Performance Metric for a LD Period would be difficult or impossible to calculate with certainty and (ii) the aforesaid liquidated damages are an appropriate approximation of such damages.

EXAMPLE: The following is an example calculation of liquidated damages for the Inverter System Equivalent Availability Factor Performance Metric and is included for illustrative purposes only. Assume the monthly Lump Sum Payment is \$1,000,000 and the Inverter System Equivalent Availability Factor is 96.6% as calculated in the example in Section 1.A. (Calculation of the Inverter System Equivalent Availability Factor) above.

The liquidated damages would be calculated as follows:

Applicable Period Lump Sum Payment = \$1,000,000

$\$1,000,000 \times .001917 = \$1,917$

$98.0\% - 96.6\% = 1.4\%$

$1.4\%/0.1\% = 14$

$\$1,917 \times 14 = \$26,838$

C. Inverter System Equivalent Availability Factor Termination Rights. The Parties acknowledge that, although the intent of the liquidated damages payable under Section 1.B. (Inverter System Equivalent Availability Factor Performance Metric and Liquidated Damages) is to compensate Company for the damages that Company would incur if the Subscriber Organization fails to achieve the Inverter System Equivalent Availability Factor Performance Metric for a LD Period, such liquidated damages are not intended to compensate Company for the damages that Company would incur if a pattern of



underperformance establishes a reasonable expectation that the Inverter System is likely to continue to substantially underperform the Inverter System Equivalent Availability Factor Performance Metric. Accordingly, and without limitation to Company's rights under said Section 1.B.) (Inverter System Equivalent Availability Factor Performance Metric and Liquidated Damages) for those LD Periods during which the Subscriber Organization failed to achieve the Inverter System Equivalent Availability Factor Performance Metric, the failure of the Facility to achieve a Inverter System Equivalent Availability Factor of not less than **84%** for each of three consecutive Contract Years shall constitute an Event of Default under the Contract for which Company shall have the rights (including but not limited to the termination rights) set forth in Section 13. (Events of Default) and Section 15. (Damages in the Event of Termination by Company) of the Contract.

7. **Cross references elsewhere in the Contract to Attachment C, Section 1.A. and Section 1.B. All Cross-References elsewhere in the Contract to any of Attachment C, Sections 1.A. and 1.B. are corrected to reflect the revised captions for those Sections as set forth above.**

8. **Attachment C, Section 2. (Measured Performance Ratio; Liquidated Damages; Termination Rights) is revised to read as follows:**

**2. MEASURED PERFORMANCE RATIO; LIQUIDATED DAMAGES; TERMINATION RIGHTS**

**A. Calculation of Measured Performance Ratio.**

1. The Measured Performance Ratio ("MPR") represents the PV System's measured power output compared to its theoretical DC power output as adjusted for the plane of array irradiance and weather conditions measured at the Site. The net PV System output in MW will be measured at such points mutually agreed to by the Parties on the Facility's single-line diagram attached hereto as Attachment F, Exhibit F-5 (Single-Line Drawing and Interface Block Diagram).

- Following the end of each MPR Assessment Period, the MPR shall be calculated for such MPR Assessment Period (using the previous 12 months of data) as follows:

$$MPR_{corr} = \frac{\sum_i P_{AC_i} + \sum_i P_{DC_i}}{\sum_i \left[ P_{DC_{STC}} \left( \frac{G_{POA_i}}{G_{STC}} \right) \left( 1 - \frac{\delta}{100} (T_{cell\_typ\_avg} - T_{cell_i}) \right) \right]}$$

Where:

*i* = each 15-minute interval during the MPR Assessment Period where the conditions set forth in Section 2.A.1. are met.

*P<sub>AC\_i</sub>* is the active power output of the PV System measured at the POI averaged over time period *i* (MW)

*P<sub>DC\_i</sub>* is the measured power output of the PV System measured at the input to the BESS charging system averaged over time period *i* (MW)

*G<sub>STC</sub>* = plane of array irradiance at the standard condition of 1,000 W/m<sup>2</sup>

*P<sub>DC<sub>STC</sub></sub>* is the DC rated capacity of the PV System at the standard test conditions of 1,000 W/m<sup>2</sup> and 25°C (MW), (i.e., the DC power rating of the PV panels at standard test conditions multiplied by the number of PV panels in the Facility);

$G_{POA_i}$  is the measured plane of array irradiance averaged over time period  $i$  ( $W/m^2$ );

$T_{cell_i}$  = cell temperature computed from measured meteorological data averaged over time period  $i$  using the equation provided below. ( $^{\circ}C$ )

$T_{cell\_typ\_avg}$  = annual average irradiance-weighted cell temperature computed from one year of weather data using the GPR Performance Metric weather file and the equation below. ( $^{\circ}C$ ) Calculated once per GPR.

$\delta$  = temperature coefficient for power ( $\%/^{\circ}C$ , negative in sign) that corresponds to the installed photovoltaic modules

$$T_{cell\_typ\_avg} = \frac{\sum_j [G_{POA\_typ\_j} \times T_{cell\_typ\_j}]}{\sum_j G_{POA\_typ\_j}}$$

Where:

$j$  = each hour of the year in the GPR Performance Metric weather file (hours 1-8760)

$G_{POA\_typ\_j}$  = Plane of array irradiance for each hour of the year determined from the GPR Performance Metric weather file and tracker orientation. This irradiance is zero (0) when the sun is not up. ( $W/m^2$ )

$T_{cell\_typ\_j}$  = calculated cell operating temperature for each hour of the year. Computed using the equation for  $T_{cell_i}$  below but using the GPR Performance Metric weather file for the weather variables in the equation.

$$T_{cell_i} = G_{POA_i} \times e^{(a+b \times WS_i)} + T_{a_i} + \left( \frac{G_{POA_i}}{G_{STC}} \times dT_{cond} \right)$$

Where:

$T_{a_i}$  = the measured ambient temperature averaged over time period  $i$  [ $^{\circ}C$ ]

$WS_i$  = the measured wind speed corrected to a measurement height of 10 meters (using the anemometer height and proper Hellmann coefficient) averaged over time period  $i$  [m/s]

$a$  = empirical constant reflecting the increase of module temperature with sunlight as presented in Table 2 below.

$b$  = empirical constant reflecting the effect of wind speed on the module temperature as presented in Table 2 below [s/m]

$e$  = Euler's constant and the base for the natural logarithm.

$dT_{cond}$  = conduction temperature coefficient from module to cell as presented in Table 2 below.

<b>Table 2. Empirical Convective Heat Transfer Coefficients Module Type</b>	<b>Mount</b>	<b><i>a</i></b>	<b><i>b</i></b>	<b><i>dT<sub>cond</sub></i></b>
Glass/cell/glass	Open rack	-3.47	-0.0594	3
Glass/cell/glass	Close-roof mount	-2.98	-0.0471	1
Glass/cell/polymer sheet	Open rack	-3.56	-0.0750	3
Glass/cell/polymer sheet	Insulated back	-2.81	-0.0455	0
Polymer/thin-film/steel	Open rack	-3.58	-0.1130	3

The time periods used in the foregoing calculation shall be only periods during which, for the entire 15-minute interval, the PV System output is allowed to convert all irradiance to gross power (whether directed to the BESS or POI) and the measured plane of array irradiance is not less than 600 W/m<sup>2</sup>. Data points that will be excluded from the calculation of the MPR are limited to data points where: (A) the G<sub>POA</sub> is below 600 W/m<sup>2</sup>, (B) G<sub>POA</sub> above the maximum threshold, (C) the Inverter System is in Reserve Shutdown, (D) when the Inverter System has a Planned or Unplanned Derating, (E) the PV System was not allowed to convert the full gross DC output to energy to deliver to the BESS and/or POI, due to Company Dispatch being less than the PV System potential at the measured irradiance and the BESS reaching its maximum State of Charge, (F) there is an Inverter System Outage, (G) the BESS is discharging, or (H) there is Force Majeure effecting the PV System. The aforementioned 15-minute intervals are fixed intervals that commence, in sequence, at the top of each hour and at 15, 30 and 45 minutes past the hour. At the end of each month, Subscriber Organization shall provide Company a report that lists all hours when such excluded data points occur (from the Facility's SCADA system as necessary) to validate the exclusion of any data points from the calculation set forth in Section 2. A., above. This information shall be validated on a monthly basis.

The effect of Force Majeure is taken into account in calculating the MPR for the MPR Assessment Period as follows: When an MPR Assessment Period contains any hours in a month during which the PV System or a portion of the PV System is unavailable due to Force Majeure, then such month shall be excluded from the MPR Assessment Period and the MPR Assessment Period shall be retroactively extended to include the next previous month during which there was no such unavailability of the PV System or a portion thereof due to Force Majeure. This means the MPR would not change from that determined in the month directly preceding a month containing Force Majeure.

B. MPR Test. In the event that the set of operational data points under Section 2.A that is available for any month to calculate the MPR cannot be validated to Company's reasonable satisfaction or in the event there were not at least 16 such data points during such month that could be used to calculate the MPR, the Company shall have the right to perform a test ("MPR Test") to collect the data points for such month to be used to calculate the MPR in lieu of the use of operational data for such month. The Company shall retain sole discretion as to when to conduct the MPR Test and the MPR Test may be conducted at any point during the month following the month for which Company was either unable to validate the set of operational data points for such month or there were not at least 16 data points available during such month, provided that Company will provide Subscriber Organization three (3) Business Days' notice prior to conducting the MPR Test. The MPR Test shall have a minimum duration of four (4) hours and shall run until at least 16 data points are collected that meet the criteria set forth in Section 2.A), subject to the limitation set forth in the last sentence of this Section 2.B. To the extent possible, the Company shall schedule the MPR Test for a period where the Inverter System and BESS are fully available and weather conditions are expected to be optimum allowing the PV System to generate at full capacity for the duration of the MPR Test (if possible). However, if Company chooses

a period where some of the Facility inverter(s) are unavailable,  $P_{DCSTC}$  shall be adjusted to account for any reduction in capability to accept energy from the PV System due to the unavailable inverter(s).

1. For each MPR Assessment Period that includes one or more months for which a MPR Test was performed, the data points collected during said MPR Test for such month(s) shall be used together with the data points for months for which an MPR Test was not conducted to calculate the MPR for the MPR Assessment Period in question using the formula set forth in Section 2.A. above. The result of the calculation based on the MPR Test shall be the MPR for the MPR Assessment Period in question.

EXAMPLE: The following is an example of a Measured Performance Ratio calculation and is included for illustrative purposes only. Assume the following:

- Facility with 120,000 panels with a standard test condition rating of 300 W
- $P_{DCSTC} = 120,000 \times 300 \text{ W} = 36 \text{ MW}$
- For illustrative purposes only, 4 hours of data which met the criteria specified in Section 2. A. have been recorded over the MPR Assessment Period. It should be noted that all available operational data that meets the criteria specified in Section 2.A.1. shall be included in the actual calculation:

Time Period	Average Measured Plane of Array Irradiance (W/m <sup>2</sup> )	Average Measured Active Power at POI (MW)	Average Measured DC Power at BESS Charging Input (MW)	Average Measured Ambient Temperature (°C)	10 Meter Elevation Average Measured Wind Speed (m/s)
1	690	16	0	27	3
2	850	2	21	26	8
...	...	...	...	...	...
i	750	19	1	29	7

$$MPR_{corr} = \frac{\sum_i P_{AC_i} + \sum_i P_{DC_i}}{\sum_i \left[ P_{DCSTC} \left( \frac{G_{POA_i}}{G_{STC}} \right) \left( 1 - \frac{\delta}{100} (T_{cell\_typ\_avg} - T_{cell_i}) \right) \right]}$$

where:

$$T_{cell_i} = G_{POA_i} \times e^{(a+b \times WS_i)} + T_{a_i} + \left( \frac{G_{POA_i}}{G_{STC}} \times dT_{cond} \right)$$

Assuming:

The temperature coefficient ( $\delta$ ) of the installed modules is -0.4%/°C

The average irradiance-weighted cell temperature ( $T_{cell\_typ\_avg}$ ) has been calculated as 28°C

The installed modules are a glass/cell/polymer sheet module type using an open rack mount. (a = -3.56; b = -0.0750;  $dT_{cond} = 3$ )

$$\sum_i P_{AC\_i} = 16 \text{ MW} + 11 \text{ MW} + \dots + 19 \text{ MW} = \mathbf{255 \text{ MW}}$$

$$\sum_i P_{DC\_i} = 0 \text{ MW} + 22 \text{ MW} + \dots + 10 \text{ MW} = \mathbf{50 \text{ MW}}$$

$$\sum_i \left[ P_{DCSTC} \left( \frac{G_{POA_i}}{G_{STC}} \right) \left( 1 - \frac{1}{100} (T_{cell\_type\_avg} - T_{cell\_i}) \right) \right] = 36 \text{ MW} \times [((690/1000) \times (1 - (0.4/100) \times (28 - ((690) \times e^{(-3.56 - 0.075 \times 3)} + 27) + ((690/1000) \times 3)))) +$$

$$(850/1000) \times (1 - (0.4/100) \times (28 - ((850) \times e^{(-3.56 - 0.075 \times 8)} + 26) + ((850 \times 3)))) +$$

... +

$$(750/1000) \times (1 - (0.4/100) \times (28 - ((750) \times e^{(-3.56 - 0.075 \times 7)} + 29) + ((750 \times 3))))]$$

$$= \mathbf{374.76 \text{ MW}}$$

$$\text{MPR} = (255 + 50) \text{ MW} / 374.76 \text{ MW} = \mathbf{0.814}$$

**9. Attachment B, Section 3.D. (Lump Sum Pro-Rata Adjustments), Subsections D.1. through D.4. are revised to read as follows:**

**D. Lump Sum Pro-Rata Adjustments.**

- Under the Company's previous forms of as-available power purchase agreements for renewable energy, the independent power producer was compensated for the production and delivery of electrical energy and assumed the risk of non-payment for events such as Force Majeure that prevented such production and delivery. Although under the Contract most or all of Subscriber Organization's compensation will be in the form of a Lump Sum Payment rather than for the production and delivery of electrical energy, it is not the intent of the Parties that Subscriber Organization should be entitled to unrestricted compensation in circumstances in which an independent power producer would not have been able to earn compensation under the Company's prior form of power purchase agreements (*i.e.*, if the Facility or any portion thereof is unable to produce and deliver electric energy). Although the liquidated damages that are payable if the Inverter System Equivalent Availability Factor fails to satisfy the Inverter System Equivalent Availability Factor Performance Metric address this issue in certain of the circumstances when the Inverter System or a portion thereof is unable to generate electric energy, the Inverter System Equivalent Availability Factor does not account for events of Force Majeure because months containing such events are excluded from the calculation under Attachment C Section 1.A. (Calculation of the Inverter System Equivalent Availability Factor) of the Contract. Furthermore, in the case of the PV System, the liquidated damages that are payable if the MPR fails to satisfy the GPR Performance Metric addresses this issue in certain of the circumstances when the PV System or a portion thereof is unable to generate electric energy while inverters are available, the MPR does not account for events of Force Majeure because periods containing such events are excluded from the calculation under Section 2.A. (Calculation of Measured Performance Ratio) of the Contract. Similarly, in the case of the BESS, although the liquidated damages that are payable if the BESS Annual Equivalent Availability Factor fails to satisfy the BESS EAF Performance Metric addresses this issue in certain of the circumstances when the BESS or a portion thereof is unavailable to respond to Company Dispatch, the BESS Annual Equivalent Availability Factor does not account for events of Force Majeure because months containing such events are excluded

from the calculation under Attachment H (BESS Requirements) Section 2 (BESS Annual Equivalent Availability Factor) of the Contract.

2. Accordingly, and without limitation to the generality of the foregoing provisions of Section 3 (Calculation of Lump Sum Payment) of this Attachment B (Company Payments for Energy, Dispatchability and Availability of BESS), the monthly Lump Sum Payment shall be adjusted downward pro rata for each hour or portion thereof during the calendar month in question that the Facility or a portion thereof was not available to generate energy or respond to Company Dispatch because of a Force Majeure condition (i) affecting the Facility or any portion thereof or (ii) that otherwise delays or prevents the Subscriber Organization from making the Facility or a portion thereof generate energy and make it available for Company Dispatch.
3. In the case of a BESS Force Majeure, such downward adjustment in the Lump Sum Payment shall be limited to the BESS Allocated Portion of the Lump Sum Payment. Further, during any periods in which there is a Force Majeure affecting both (i) the PV System or Inverter System, and (ii) the BESS, the Lump Sum Payment shall only be adjusted for the effect of the Force Majeure on the PV System or Inverter System.
4. The hours the Facility is affected by a Force Majeure are converted to equivalent full outage hours by multiplying the actual duration of the event (hours) by (i) the size of the reduction in MWs or number of devices, divided by (ii) the Contract Capacity if the size of the reduction is in MWs or the total number of devices in the affected system if the size of the reduction is a device count. These equivalent hour(s) are then summed. The summation of equivalent full outage hours is then divided by the months total period hours (number of days in the month x 24hrs/day) to determine the pro-rated factor the Lump Sum Payment will be adjusted by. To avoid any concern of double counting in this calculation any concurrent Force Majeure affecting both the PV System and Inverter System will only consider the more significantly affected system in this calculation; if the affect is equal the equivalent full outage hours from just one of the systems will be included in the calculation. For all non-concurrent Force Majeure, the equivalent full outage hours of the non-concurrent event shall be included in the summation of equivalent full outage hours for calculating the pro-rated effect on the Lump Sum Payment.

**Example 1:** if a Facility has ten inverter(s) and, during the month of May (which has 31 calendar days or 744 calendar hours), one inverter is not available to respond to Company Dispatch for a period of 360 hours due to a Force Majeure condition as aforesaid, the monetary amount of the resulting downward adjustment to the monthly Lump Sum Payment for the month of May would be calculated as follows:

○ Monetary Amount of Downward Adjustment =  $(MLSP \times 1/10) \times 360/744$

**Example 2:** if a Facility has ten inverter(s) and 10 MW of PV panels, and during the month of May (which has 744 period hours) an event or events of Force Majeure cause one inverter to not be available to respond to Company Dispatch for a period of 360 hours, and 2 MW of PV panels to be unavailable for 120 hours, 60 hours of which occurred concurrently with the Inverter System as aforesaid, the monetary amount of the resulting downward adjustment to the monthly Lump Sum Payment for the month of May would be calculated as follows:

First, determine what adjustment factor to use during the concurrent Force Majeure:

PV System Concurrent FM factor = 2/10

Inverter System Concurrent FM factor = 1/10

Since the PV System Concurrent FM Factor is greater than the Inverter System Concurrent FM Factor it is used during the concurrent FM time:

$$\text{Monetary Amount of Downward Adjustment} = \text{MLSP} \frac{(1/10 \times (360 - 60)) + (2/10 \times (120 - 60))}{31 * 24}$$

where:

MLSP = The monthly Lump Sum Payment that would be payable for such month but for the downward adjustment.

Example 3: if a Facility has forty BESS modules and, during the month of June (which has 720 period hours), one BESS module is not available to respond to Company Dispatch for a period of 240 hours due to a Force Majeure condition as aforesaid, the monetary amount of the resulting downward adjustment to the monthly Lump Sum Payment for the month of June would be calculated as follows:

$$\text{Monetary Amount of Downward Adjustment} = (\text{BLSP} \times 1/40) \times 240/720$$

where:

BLSP = The BESS Allocated Portion of the Lump Sum Payment that would be payable for such month but for the downward adjustment.

For purposes of determining the monetary amount of the foregoing downward adjustment, the product obtained by multiplying a monetary value by a fraction shall be rounded to the nearest cent.

**10. Attachment E (Monthly Reporting and Dispute Resolution By Independent AF Evaluator) Section 1. is revised to read as follows:**

1. MONTHLY REPORT. Commencing with the month during which the Commercial Operations Date is achieved, and for each calendar month thereafter during the Term, Subscriber Organization shall provide to Company a Monthly Report in Excel, Lotus or such other format as Company may require, which Monthly Report shall include (i) the data for the calendar month in question populated into the form of "Monthly Report" below, (ii) the data for the BESS Measurement Period ending with the calendar month in question populated into the form of "BESS Measurement Period Report" below, and (iii) Subscriber Organization's calculations of the performance metrics and any liquidated damages assessments for the LD Period ending with such calendar month as set forth below. Subscriber Organization shall deliver such Monthly Report to Company by the fifth (5<sup>th</sup>) Business Day following the close of the calendar month in question. Subscriber Organization shall deliver the Monthly Report electronically to the address provided by the Company. Company shall have the right to verify all data set forth in the Monthly Report by inspecting measurement instruments and reviewing Facility operating records. Upon Company's request, Subscriber Organization shall promptly provide to Company any additional data and supporting documentation necessary for Company to audit and verify any matters in the Monthly Report.

**Inverter System & PV System Monthly Report**  
**NAME OF IPP FACILITY: [Facility Name]**

**MONTHLY REPORT PERIOD: [Month Day, Year] to [Month Day, Year]**

Enter the information for each Force Majeure event effecting the Inverter System and/or the PV System during the reporting period. Dates and times should be entered to the nearest minute. Duration and equivalent hours should be rounded to 2 decimal places. When using MWs for item (D) below, Contract Capacity is to be provided for (E); and when using number of devices for item (D), total number of devices is to be provided for (E).

Date/Time Start (A)	Date/Time End (B)	Duration (hrs) (C) = (B-A)	Size of effect in MW or Number of devices system that are offline (D)	Contract Capacity or Total number of devices in the effected system (E)	Equivalent Hours (hrs) (C x D)/E
...					

Calendar hours in the reporting period: \_\_\_\_\_

Total equivalent hours for the reporting period (from above, with proper accounting for any simultaneous events): \_\_\_\_\_

Please provide the following availability information even in months containing

Force Majeure even though it will not be applied in the Inverter System EAF Calculation.

Enter the information for each Outage during the reporting period. Dates and times should be entered to the nearest minute. Duration should be rounded to 2 decimal places.

Date/Time Start (A)	Date/Time End (B)	Duration (hrs) (B-A)
...		

Calendar hours in the reporting period: \_\_\_\_\_

Total Outage hours for the reporting period (from above): \_\_\_\_\_

Available Hours (AH) in the reporting period: \_\_\_\_\_

AH from the last eleven (11) reporting periods: \_\_\_\_\_

AH for the last twelve (12) reporting periods: \_\_\_\_\_



Enter the information for each Subscriber Organization Attributable Derating events during the reporting period. Dates and times should be entered to the nearest minute. Duration and equivalent hours should be rounded to 2 decimal places. When using MWs for item (D) below, Contract Capacity is to be provided for (E); and when using number of inverters for item (D), total number of inverters is to be provided for (E).

Date/Time Start (A)	Date/Time End (B)	Duration (hrs) (C) = (B-A)	Size of derating in MWs or Number of Inverters (D)	Contract Capacity or Total number of Inverters in the Inverter system (E)	Equivalent Hours (hrs) (C x D)/E
...					

Total Equivalent Subscriber Organization Attributable Derated hours (ESADH) for the reporting period: \_\_\_\_\_

ESADH from the last eleven (11) reporting periods: \_\_\_\_\_

ESADH for the last twelve (12) reporting periods: \_\_\_\_\_

Enter the information for each Planned Derating event during the reporting period. Dates and times should be entered to the nearest minute. Duration and equivalent hours should be rounded to 2 decimal places. When using MWs for item (D) below, Contract Capacity is to be provided for (E); and when using number of inverters for item (D), total number of inverters is to be provided for (E).

Date/Time Start (A)	Date/Time End (B)	Duration (hrs) (C) = (B-A)	Size of derating in MWs or Number of Inverters (D)	Contract Capacity or Total number of Inverters in the Inverter system (E)	Equivalent Hours (hrs) (C x D)/E
...					

Total equivalent planned derated hours (EPDH) for the reporting period: \_\_\_\_\_

EPDH from the last eleven (11) reporting periods: \_\_\_\_\_

EPDH for the last twelve (12) reporting periods: \_\_\_\_\_

Enter the information for each Unplanned Derating event during the reporting period. Dates and times should be entered to the nearest minute. Duration and equivalent hours should be rounded to 2 decimal places. When using MWs for item (D) below, Contract Capacity is to be provided for (E); and when using number of inverters for item (D), total number of inverters is to be provided for (E).

Date/Time Start (A)	Date/Time End (B)	Duration (hrs) (C) = (B-A)	Size of derating in MWs or Number of Inverters (D)	Contract Capacity or Total number of Inverters in the Inverter system (E)	Equivalent Hours (hrs) (C x D)/E
...					

Total equivalent unplanned derated hours (EUDH) for the reporting period: \_\_\_\_\_

EUDH for the last eleven (11) reporting periods: \_\_\_\_\_

EUDH for the last twelve (12) reporting periods: \_\_\_\_\_

Period Hours (PH) is : \_\_\_\_\_ (8760 hours if no 29th day in February in the last twelve months; otherwise 8784 hours; also, can be adjusted appropriately depending on any month(s) containing Force Majeure in the last 12 reporting periods))

Enter the Available Hours, ESADH, EPDH, and EUDH for the last twelve (12) reporting periods as calculated above.

AH (A)	ESADH (B)	EPDH (C)	EUDH (D)	Inverter System Annual Equivalent Availability Factor $100\% \times (A - B - C - D)/PH$

If the month for which this monthly report has been prepared contains a Force Majeure event please indicate the Inverter System Annual Equivalent Availability Factor calculated in the previous month's monthly report.

Enter the following properties for the facility's PV panels that are used in the calculation of the Measured Performance Ratio. Refer to Attachment C (Required Performance Metrics; Liquidated Damages) for the definitions of terms.

DC rated capacity of the system at standard test conditions ( $P_{DC_{STC}}$ ): \_\_\_\_\_

Temperature coefficient of power in %/°C( $\delta$ ): \_\_\_\_\_

Temperature empirical constant ( $a$ ): \_\_\_\_\_

Wind speed empirical constant ( $b$ ): \_\_\_\_\_

Conduction temperature coefficient ( $dT_{cond}$ ): \_\_\_\_\_

Annual average irradiance-weighted cell temperature ( $T_{cell\_typ\_avg}$ ) \_\_\_\_\_

For the reporting period, provide 15-minute interval averaged site data for the following measurements in .csv format (refer to Attachment C (Required Performance Metrics; Liquidated Damages) for the definitions of terms). The data set should include an indication of whether each interval is included or excluded in the calculation of the Measured Performance Ratio and the reason for exclusion (refer to article 2.6 for data requirements).

**Measured data:**

- $P_{AC\_i}$  is the active power output of the PV System measured at the POI averaged over time period  $i$  (MW)
- $P_{DC\_i}$  is the measured DC power output of the PV System measured at the DC input to the BESS charging system averaged over time period  $i$  (MW)
- $G_{POAi}$  is the measured plane of array irradiance averaged over time period  $i$  ( $W/m^2$ );
- $T_{a\_i}$ = the measured ambient temperature averaged over time period  $i$  [ $^{\circ}C$ ]
- $WS_i$ = the measured wind speed corrected to a measurement height of 10 meters (using the anemometer height and proper Hellmann coefficient) averaged over time period  $i$  [m/s]

**Calculated data:**

- Computed cell temperature ( $T_{cell\_i}$ )

Using the data provided above, enter the calculated values for Measured Performance Ratio rounded to the third decimal place (0.001).

Measured Performance Ratio for the reporting period: \_\_\_\_\_

Measured Performance Ratio for this reporting period and the previous eleven (11) reporting periods: \_\_\_\_\_

Enter the Applicable Contract Year and calculated Degradation Factor for the reporting period. Refer to Contract Attachment C, Section 2.C. for how these should be calculated.

Applicable Contract Year: \_\_\_\_\_

Degradation Factor: \_\_\_\_\_

**BESS Measurement Period Report**  
**NAME OF IPP FACILITY: [Facility Name]**

**BESS MEASUREMENT PERIOD: [Month Day, Year] to [Month Day, Year]**

Enter the applicable information to demonstrate satisfaction of the BESS Capacity Performance Metric during the reporting period. This can be from either the most recent BESS Capacity Test performed during the period or taken from operational data reflecting the net output of the BESS.

Date/Time Start	Date/Time End	Total MWh delivered to the POI (A)	BESS Contract Capacity (MWh) (B)	BESS Capacity Ratio 100% x (A/B)

Enter the applicable information to demonstrate satisfaction of the BESS RTE Performance Metric during the reporting period. This can either be from the most recent BESS RTE Test performed during the period or taken from operational data reflecting the charging/discharging of the BESS.

Date/Time Start	Date/Time End	Total MWh delivered to the POI (A)	Charging Energy (MWh) (B)	BESS RTE Ratio 100% x (A/B)

Enter the information for each Force Majeure event effecting the BESS during the reporting period. Dates and times should be entered to the nearest minute. Duration, size of reduction, maximum rated output, and equivalent hours should be rounded to 1 decimal place.

Date/Time Start (A)	Date/Time End (B)	Duration (hrs) (C) = (B-A)	Size of Reduction (MW) (D)	Maximum Rated Output (MW) (E)	Equivalent Hours (hrs) (C x D)/E
...					

Calendar hours in the reporting period: \_\_\_\_\_

Total equivalent hours for the reporting period (from above, with proper accounting for any simultaneous events): \_\_\_\_\_

Please provide the following BESS availability information even in months containing Force Majeure even though it will not be applied in the Inverter System EAF Calculation.

Enter the information for each BESS Outage during the reporting period. Dates and times should be entered to the nearest minute. Duration should be rounded to 1 decimal place.

Date/Time Start (A)	Date/Time End (B)	Duration (hrs) (B-A)
...		

Calendar hours in the reporting period: \_\_\_\_\_

Total Outage hours for the reporting period (from above): \_\_\_\_\_

Available Hours (AH) in the reporting period: \_\_\_\_\_

AH from the last three (3) reporting periods: \_\_\_\_\_

AH for the last four (4) reporting periods: \_\_\_\_\_

Enter the information for each BESS Planned Derating event during the reporting period. Dates and times should be entered to the nearest minute. Duration, size of reduction, maximum rated output, and equivalent hours should be rounded to 1 decimal place.

Date/Time Start (A)	Date/Time End (B)	Duration (hrs) (C) = (B-A)	Size of Reduction (MW) (D)	Maximum Rated Output (MW) (E)	Equivalent Hours (hrs) (C x D)/E
...					

Total equivalent planned derated hours (EPDH) for the reporting period: \_\_\_\_\_

EPDH from the last three (3) reporting periods: \_\_\_\_\_

EPDH for the last four (4) reporting periods: \_\_\_\_\_

Enter the information for each BESS Unplanned Derating event during the reporting period. Dates and times should be entered to the nearest minute. Duration, size of reduction, maximum rated output, and equivalent hours should be rounded to 1 decimal place.

Date/Time Start (A)	Date/Time End (B)	Duration (hrs) (C) = (B-A)	Size of Reduction (MW) (D)	Maximum Rated Output (MW) (E)	Equivalent Hours (hrs) (C x D)/E
...					

Total equivalent unplanned derated hours (EUDH) for the reporting period: \_\_\_\_\_

EUDH for the last three (3) reporting periods: \_\_\_\_\_

EUDH for the last four (4) reporting periods: \_\_\_\_\_

Period Hours (PH) is : \_\_\_\_\_ (8760 hours if no 29<sup>th</sup> day in February in that last twelve months; otherwise 8784 hours; also can be adjusted appropriately depending on any month(s) containing Force Majeure in the last 12 reporting periods)

Enter the Available Hours, EPDH, EUDH, and Period Hours for the last four (4) reporting periods as calculated above.

AH (A)	EPDH (B)	EUDH (C)	BESS Annual Equivalent Availability Factor $100\% \times (A - B - C)/PH$

Enter the information for each Unplanned (Forced) Outage during the reporting period. Dates and times should be entered to the nearest minute. Duration should be rounded to 1 decimal place.

Date/Time Start (A)	Date/Time End (B)	Duration (hrs) (B-A)
...		

Total Forced Outage Hours (FOH) for the reporting period (from above): \_\_\_\_\_

FOH from the last three (3) reporting periods: \_\_\_\_\_

FOH for the last four (4) reporting periods: \_\_\_\_\_

Enter the FOH and EUDH for the last four (4) reporting periods as calculated above.

FOH (A)	EUDH (B)	BESS Annual Equivalent Forced Outage Factor $100\% \times (A + B)/8760$

If the BESS Measurement Period for which this report has been prepared contains a month with a BESS Force Majeure event, please indicate the proper 12-month period used to calculate the BESS Annual Equivalent Availability Factor for this report.

**11. Attachment H Section 1. (BESS Tests). This Section 1. is revised to read as set forth in Attachment H hereto.**

12. Attachment H Section 2. (BESS Annual Equivalent Forced Outage Factor) . This Section 2. is revised to read as set forth in Attachment H hereto.

## **ATTACHMENT H** **BESS REQUIREMENTS**

### **1. BESS TESTS**

Prior to achieving Commercial Operations, and in each BESS Measurement Period, unless waived by Company, Subscriber Organization shall demonstrate that the BESS satisfies the (1) BESS Capacity Performance Metric, and (2) the RTE Performance Metric, each as defined and further described below.

#### **A. BESS Capacity Performance Metric**

- The BESS Capacity Performance Metric reflecting the net output of the BESS from the Point of Interconnection can be demonstrated either through (i) operational data or (ii) a scheduled formal BESS Capacity Test.
- The "BESS Capacity Performance Metric" shall be deemed to be satisfied where the BESS Capacity Ratio is not less than **100%** for an applicable BESS Measurement Period. The "BESS Capacity Ratio" shall be the number, expressed as a percentage, equal to the total "Discharge Energy" (MWh discharge) delivered to the Point of Interconnection to bring the BESS from (i) its maximum State of Charge or (ii) 100% State of Charge to a 0% State of Charge, divided by the BESS Contract Capacity.
- A "BESS Capacity Test" is when the Company coordinates Company Dispatch to demonstrate the BESS maintains the power output required to follow the dispatch signal provided by the Company through a control setpoint, as measured at the Point of Interconnection, and is able to continuously discharge energy to the Point of Interconnection according to Company Dispatch to bring the BESS from (i) its maximum State of Charge or (ii) 100% State of Charge to a 0% State of Charge.
- The BESS Capacity Test can only be performed when the BESS is at the lower of: (i) its maximum State of Charge or (ii) 100% State of Charge prior to the start of the BESS Capacity Test and during the BESS Capacity Test, Company Dispatch allows for continuous discharge of the BESS to 0% State of Charge with energy delivered to the Point of Interconnection.

#### **B. RTE Performance Metric.**

- The "RTE Performance Metric" is set forth in Section 6.A. (RTE Test and Liquidated Damages) of Attachment C (Required Performance Metrics; Liquidated Damages) to the Contract. The RTE Performance Metric reflecting the charging/discharging of the BESS can be demonstrated either through (i) operational data or (ii) a scheduled formal RTE Test.
- Demonstration of the RTE Performance Metric requires measurement of "Charging Energy" (MWh charge) at the BESS charging input to bring the BESS from a 0% State of Charge to a 100% State of Charge from the PV System or grid according to Company Dispatch, followed by measurement at the Point of Interconnection of the "Discharge Energy" (MWh discharge) delivered to the grid to bring the BESS to a 0% State of Charge according to Company Dispatch. The exact point of measurement for Charging Energy will be mutually agreed to by the Parties on the Facility's single-line diagram attached to the Contract as Attachment F, Exhibit F- 5 (Single-Line Drawing and Interface Block Diagram). For the purposes of evaluating satisfaction of the RTE Performance

Metric, the "RTE Ratio" shall be the number, expressed as a percentage, equal to the total Discharge Energy delivered to the Point of Interconnection during the BESS Capacity Test, divided by the Charging Energy measured at the BESS charging input.

- The formula for the RTE Ratio is as follows:  $RTE\ Ratio = 100\% \times (MWh\ discharge)/(MWh\ charge)$
- The RTE Performance Metric will be deemed to have been "passed" or "satisfied" to the extent the RTE Ratio is not less than the RTE Performance Metric set forth in Section 6.A. (RTE Test and Liquidated Damages) of Attachment C (Required Performance Metrics; Liquidated Damages) to the Contract.
- An "RTE Test" is when the Company coordinates Company Dispatch to demonstrate the charging/discharging requisite to satisfy the RTE Performance Metric.
- The RTE Test may be conducted concurrently with a BESS Capacity Test.
- For purposes of the RTE Test, the charging cycle shall begin when the BESS is at a 0% State of Charge prior to a (i) 100% discharge cycle or (ii) BESS Capacity Test if being conducted concurrently and the Charging Energy is the amount of energy, as measured at the BESS DC charging input, that brings the BESS to a 100% State of Charge.

### **C. BESS Test Procedures**

- After Commercial Operations, Subscriber Organization shall demonstrate satisfaction of the BESS Capacity Performance Metric by reference to the operational data reflecting the net output of the BESS from the Point of Interconnection, or by conducting a scheduled formal BESS Capacity Test during such BESS Measurement Period. Once Subscriber Organization demonstrates satisfaction of the BESS Capacity Performance Metric through either operational data or a scheduled formal BESS Capacity Test (100% discharge cycle), the BESS shall be deemed to have met the BESS Capacity Performance Metric and satisfied ("passed") the BESS Capacity Test for the applicable BESS Measurement Period.
- After Commercial Operations, Subscriber Organization shall demonstrate satisfaction of the RTE Performance Metric by reference to the operational data reflecting the charging/discharging of the BESS, or by conducting a scheduled formal RTE Test during such BESS Measurement Period. Once Subscriber Organization demonstrates satisfaction of the RTE Performance Metric through either operational data or a scheduled formal RTE Test (100% charge/discharge cycle), the BESS shall be deemed to have met the RTE Performance Metric and satisfied ("passed") the RTE Test for the applicable BESS Measurement Period.
- Any BESS Capacity Test or RTE Test (each a "BESS Test" and collectively, the "BESS Tests") scheduled in lieu of being demonstrated by reference to operational data shall be performed at a time reasonably requested by Company in its sole discretion.
- Subscriber Organization shall be permitted up to a total of three (3) BESS Tests (100% discharge cycles) within a BESS Measurement Period to demonstrate satisfaction of the BESS Capacity Performance Metric and the RTE Performance Metric for such BESS Measurement Period, unless additional such tests are authorized by Company. If upon completion of the first BESS Test, Subscriber Organization does not "pass" either the BESS Capacity Test or the RTE Test, Company shall attempt to notice up to two (2) additional BESS Tests within a BESS Measurement Period, for Subscriber Organization to further demonstrate its performance. If a scheduled formal BESS Test is requested by Subscriber Organization, Company shall attempt to schedule a formal BESS



Test and Company shall provide notice to Subscriber Organization no less than three (3) Business Days prior to conducting such scheduled formal BESS Test.

- If, during a BESS Measurement Period, Subscriber Organization fails to pass a BESS Capacity Test, the BESS shall nevertheless be deemed to have satisfied the BESS Capacity Performance Metric for the applicable BESS Measurement Period if (i) Company failed to notice up to three BESS Capacity Tests in order for Subscriber Organization to further demonstrate the BESS' performance during such BESS Measurement Period, or (ii) Subscriber Organization was unable to perform at least two (2) such noticed BESS Capacity Tests during such BESS Measurement Period due to (a) conditions on the Company System other than Subscriber Organization-Attributable Non-Generation or (b) an act or omission by Company. If Subscriber Organization-Attributable Non-Generation is cause for the inability to demonstrate the BESS Capacity Performance Metric, the BESS Capacity Ratio used to assess LDs shall be the highest demonstrated in operational data or the most recently completed test during the applicable BESS Measurement Period.
- If, during a BESS Measurement Period, Subscriber Organization does not demonstrate satisfaction of the BESS Capacity Performance Metric through operational data or a BESS Capacity Test, assessment of Liquidated Damages will be based on the last of the BESS Capacity Tests performed.
- If, during a BESS Measurement Period, Subscriber Organization fails to pass an RTE Test, the BESS shall nevertheless be deemed to have satisfied the RTE Performance Metric for the applicable BESS Measurement Period if (i) Company failed to notice up to three RTE Tests in order for Subscriber Organization to further demonstrate the BESS' performance during such BESS Measurement Period, or (ii) Subscriber Organization was unable to perform at least two (2) such noticed RTE Tests during such BESS Measurement Period due to (a) conditions on the Company System other than Subscriber Organization-Attributable Non-Generation or (b) an act or omission by Company. If Subscriber Organization-Attributable Non-Generation is cause for not adequately demonstrating the RTE Performance Metric, the RTE Ratio used to assess LDs shall be the highest demonstrated in operational data or the most recently completed test during the applicable BESS Measurement Period.
- If, during a BESS Measurement Period, Subscriber Organization does not demonstrate satisfaction of the RTE Performance Metric through operational data or RTE Tests, assessment of Liquidated Damages will be based on the last of the RTE Tests performed.
- Company will conduct any necessary BESS Test(s) through Company Dispatch. Company shall have the right to attend, observe and receive the results of all BESS Tests. Subscriber Organization shall provide to Company the results of each BESS Test (including time stamped graphs of system performance based in operational data or test data) no later than ten (10) Business Days after any BESS Test.

## **2. BESS ANNUAL EQUIVALENT AVAILABILITY FACTOR**

1. To the extent the Commercial Operations Date occurs on a date other than the first day of a BESS Measurement Period, the period between the Commercial Operations Date and the first day of the next BESS Measurement Period if any, shall be ignored for purposes of this BESS Availability Factor.
2. For the purposes of calculating the BESS Annual Equivalent Availability Factor for the first three (3) full BESS Measurement Periods in the first Contract Year, the calculation will assume that the BESS is one hundred percent (100%) available for the remaining hours of the Contract Year. If an Inverter System Outage or Derating exists as set forth in Attachment C (Required Performance Metrics; Liquidated Damages) Section 1.A. (Calculation of the Inverter System Equivalent Availability Factor) of the Contract,

those hours will be excluded in the BESS Annual Equivalent Availability Factor, except Inverter System Outages or Deratings that effect BESS availability but which occur during Inverter System Reserve Shutdown Hours as set forth in this Attachment H (Bess Annual Equivalent Availability Factor).

3. "BESS Annual Equivalent Availability Factor" shall be calculated as follows:

$$\text{BESS Annual Equivalent Availability Factor} = 100\% \times \frac{AH - EPDH - EUDH}{PH}$$

Where:

PH is period hours (8760 hours; except leap year is 8784).

Available Hours (AH) is the number of hours that the BESS is not on Outage. It is sum of all Service Hours (SH) + Reserve Shutdown Hours (RSH).

A "BESS Outage" exists whenever the entire BESS is offline and unable to charge or discharge electric energy and is not in Reserve Shutdown state.

If the Inverter System is in Reserve Shutdown but would have otherwise been on Outage the Inverter System Outage is counted as a BESS Outage during that period due to its effect on the BESS Availability.

Service Hours (SH) is the number of hours during the applicable BESS Measurement Period and the immediately preceding three (3) full BESS Measurement Periods the BESS is online and (i) charging from the PV System or Company System, or (ii) discharging electric energy to the Company System.

Reserve Shutdown Hours (RSH) is the number of hours during the applicable BESS Measurement Period and the immediately preceding three (3) full BESS Measurement Periods the BESS is available but not charging or discharging electric energy or is offline at the Company's request for reasons other than Subscriber Organization-Attributable Non-Generation or there is an Inverter System Outage or Derating as set forth in Attachment C (Required Performance Metrics; Liquidated Damages), Section 1.A. (Calculation of Inverter System Equivalent Availability Factor).

A "BESS Derating" exists when the BESS is available but at less than Maximum Rated Output. For the avoidance of doubt, if there is a BESS Outage occurring there cannot also be a BESS Derating. If the Inverter System is in Reserve Shutdown but would have otherwise had a derating the Inverter System Derating is counted as a BESS Derating during that period due to its effect on the BESS availability.

EPDH is the equivalent planned derated hours, including Planned Deratings (PD) and Maintenance Deratings (D4). A Planned Derating is when the BESS experiences a derating scheduled well in advance and for a predetermined duration. A Maintenance Derating is a derating that can be deferred beyond the end of the next weekend (Sunday at midnight or before Sunday turns into Monday) but requires a reduction in capacity before the next Planned Derating (PD). Each individual derating is transformed into equivalent full outage hour(s) by multiplying the actual duration of the derating (hours) by (i) the size of the reduction (MW) divided by (ii) Maximum Rated Output. These equivalent hour(s) are then summed for the applicable BESS Measurement Period and the immediately preceding three (3) full BESS Measurement Periods. If the Inverter System is experiencing a Planned Derating as set forth in Attachment C (Required Performance Metrics; Liquidated Damages), Section 1.A.

(Calculation of Inverter System Equivalent Availability Factor) any BESS Planned Derating during the Inverter System Planned Derating is excluded from the BESS EPDH calculation.

EUDH is the equivalent unplanned derated hours. An Unplanned Derating (Forced Derating) occurs when the BESS experiences a derating that requires a reduction in availability before the end of the nearest following weekend. Unplanned Deratings include those due to Subscriber Organization-Attributable Non-Generation effecting BESS availability, but which occur during Inverter System Reserve Shutdown Hours. Each individual Unplanned Derating is transformed into equivalent full outage hour(s) by multiplying the actual duration of the derating (hours) by (i) the size of the reduction (MW) divided by (ii) the Maximum Rated Output. These equivalent hour(s) are then summed for the applicable BESS Measurement Period and the immediately preceding three (3) full BESS Measurement Periods. If the Inverter System is experiencing an Unplanned Derating as set forth in Attachment C (Required Performance Metrics; Liquidated Damages), Section 1.A. (Calculation of Inverter System Equivalent Availability Factor) any BESS Unplanned Derating during the Inverter System Unplanned Derating is excluded from the BESS EUDH calculation.

The effect of Force Majeure is taken into account in calculating the BESS Annual Equivalent Availability Factor over a 12 calendar month period as follows: When such 12 month period contains any hours in a month during which the BESS or a portion of the BESS is unavailable due to Force Majeure, then such month shall be excluded from the 12 month period and the calculation period shall be extended back in time to include the data used to calculate the BESS EAF from the next previous month during which there was no such unavailability of the BESS or a portion thereof due to Force Majeure. This means the BESS Annual Equivalent Availability Factor would not change from that determined in the month directly preceding a month containing Force Majeure.

The following examples are provided as illustrative examples only:

*Example A:* The BESS was continuously available, with no Planned or Unplanned (Forced) Deratings during the applicable BESS Measurement Period and in the immediately preceding three (3) full BESS Measurement Periods. In this case AH = 8760, EPDH and EUDH = 0 hours

$$\text{BESS EAF} = 100\% \times \frac{8,760-0}{8,760} = 100\%$$

*Example B:* During the applicable BESS Measurement Period and the immediately preceding three (3) full BESS Measurement Periods. The BESS was online and charging from the PV System or discharging electric energy to the Company System for 8,400 hours and was available but not discharging electric energy due to lack of stored energy (i.e., not Subscriber Organization-Attributable Non-Generation) for 226 hours. The BESS experienced a Planned Derating of 7.2 MWs for 100 hours for maintenance that was scheduled a month in advance. The BESS also experienced an Unplanned Derating of 6.2 MWs for 100 hours as the derating could not be deferred to beyond the nearest following weekend. The Inverter System experienced a 4 MW Unplanned Derating for 35 hours not during RSH (i.e., an Inverter System Derating, as set forth in Section 1.A. of Attachment C (Required Performance Metrics; Liquidated Damages) to the Contract. The BESS Maximum Rated Output is 10 MW.

Inverter System Derating = (35 hours x 4MW/10MW) = 14 hours

PH = 8,760 hours in 12 calendar months

SH = 8,400 hours

$$\text{RSH} = 226 \text{ hours} + 14 \text{ hours}$$

$$\text{AH} = \text{SH} + \text{RSH} = 8,400 \text{ hours} + 226 \text{ hours} = 8,640 \text{ hours}$$

$$\text{EPDH} = 100 \text{ hours} \times 7.2\text{MW}/10\text{MW} = 72 \text{ hours}$$

$$\text{EUDH} = 100 \text{ hours} \times 6.2\text{MW}/10\text{MW} = 62 \text{ hours (Unplanned Derating (Forced Derating))}$$

$$\text{BESS EAF} = 100\% \times \frac{8,640 - 72 - 62}{8,760} = 97.1\%$$