

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

In The Matter of the Application of)
)
HAWAIIAN ELECTRIC COMPANY, INC.,) DOCKET NO. 2015-0389
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.)
_____)

THE HAWAIIAN ELECTRIC COMPANIES'
COMMUNITY BASED RENEWABLE ENERGY PHASE 2 TARIFF AND
APPENDICES, AND RFPS AND MODEL CONTRACTS FOR
LMI SUBSCRIBERS AND TRANCHE 1

Book 6 of 9

Filed February 23, 2022

EXHIBIT 9

Redlines of Changed Sections of Rule No. 29
CBRE Phase 2 from August 25, 2021 version

Rule No. 29
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM
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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 Company¹ (“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 2²:
 - 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 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.

¹ 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.

² 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.

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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

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.

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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, 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;

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- 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.
- 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 ~~3-3~~-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

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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.
 - 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 (20th) day of any month, such transfer will be effective as of the first (1st) day of that month. For any notice of transfer after the twentieth (20th) day of a month, the transfer will be effective as of the first (1st) day of the next month.

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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 (20th) day of any month, such transfer will be effective as of the first (1st) day of that month. For any notice of transfer after the twentieth (20th) day of a month, the transfer will be effective as of the first (1st) 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.
 - 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

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the first day of the month of notification if such transaction was completed on or prior to the twentieth (20th) day of the month. Transactions completed after the twentieth (20th) day of the month will be effective as of the first (1st) 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, 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:

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Energy Credit Rates for Each Applicable Rate Schedule:

Schedule R, TOU-RI, TOU-R, TOU-EV	15.00 cents per kWh daily
Schedule G, TOU-G	15.00 cents per kWh daily
Schedule J, TOU-J, U, SS, EV-F	15.00 cents per kWh daily
Schedule P	15.00 cents per kWh daily
Schedule DS	15.00 cents per kWh daily
Schedule F	15.00 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 (1st) 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 (20th) 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”).
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 15th 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.

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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:

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.

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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

Example CBRE Facility Characteristics			
Credit Rate (cents/kWh)		15.00	
Facility Capacity (kW)		100	

Billing Month	Subscribed Capacity (kW)	Unsubscribed Capacity	Unsubscribed Energy Credit Rate (cents/kWh)
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, the following shall be placed into effect for the remainder of the term of the ~~CBRE~~ Facility:

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- 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 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

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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

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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.

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2. Demonstrating transparency and a willingness to engage in early communication with communities is an important part of a Project's viability and success. For all projects, regardless of size, Subscriber Organization shall designate a community representative responsible for interfacing and communicating with the community and interested persons regarding Subscriber Organization's project. 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

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information, and address shall be provided for those other entities;

- e. Proposed ~~CBRE Phase 2~~ Facility name, address, and estimated completion date;
- 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

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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 ("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:

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- 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
- 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

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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 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">• 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.• If applications do exceed the available CBRE Program capacity, then a CCRP mechanism will be employed to award capacity.

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- 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).
- 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.
- 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 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.

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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 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.

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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.
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

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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:

- 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;

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- e. Plane of Array Solar Irradiance in Watts/m²;
- 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.

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 Level³ that are selected shall follow the applicable Rule No. 14H interconnection process at the time of

³ 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.

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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.
- 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-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

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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.
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

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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.
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

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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:
 - 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 (1st) 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

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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 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

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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

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.

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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.⁴ 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.

⁴ Currently, the Framework for Competitive Bidding or the "Framework" dated December 8, 2006, adopted by the Commission in Docket No. 03-0372.

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- 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

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required to bid a proposed Lump Sum Payment as required under the applicable RFP in 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 (1st) 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 (1st) 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 (20th) 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 15th 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

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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 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 ~~9~~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

Example CBRE Facility Characteristics	
Lump Sum Payment (\$)	1000.00
Facility Capacity (kW)	1000

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Billing Month	Subscribed Capacity (kW)	Unsubscribed Capacity (%)	Lump Sum Payment Attributable to SO (\$)	Lump Sum Payment with 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~~nine-month grace period described below. For a period of ~~9~~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 ~~9~~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%.

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- 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 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 ~~96~~ 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 ~~96~~ 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.

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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 ($10\% * 0.25 = 2.5\%$). 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.

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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 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 ~~96~~ 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

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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.
 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.

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- 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.
 - 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

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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. ~~After~~ ~~Prior to~~ executing the PPA, ~~but only after the Subscriber Organization has been awarded CBRE Phase 2 program capacity, and after Subscriber Organization's community outreach has commenced,~~ Subscriber Organizations may announce the availability, market, and solicit Subscribers provided that they disclose the project is not yet final. If applicable to the Subscriber Organization's project, Subscriber Organization shall comply with the Proximity-Based Priority Enrollment requirement of Part II, Section K below. 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

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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.
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.

~~K.~~ 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.

9.

~~L.K.~~ PROXIMITY BASED PRIORITY ENROLLMENT

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1. Subscriber Organizations developing CBRE Mid-tier Projects, CBRE Large Projects and CBRE LMI Projects on undeveloped land shall comply with these proximity-based priority enrollment provisions (“Priority Enrollment Program”) of this Part II, Section K. For purposes of this Priority Enrollment Program, “undeveloped land” shall mean land without existing development (i.e. the majority of the land (by square footage) does not have impervious cover)⁵. CBRE Small Projects shall be exempt from this Priority Enrollment Program.
2. The Priority Enrollment Program shall comprise the following elements:
 - a. During the first three (3) months of Subscriber Organization’s enrollment of Subscribers for subscriptions in Subscriber Organization’s Facility (the “Priority Period”), Subscriber Organization shall enroll as residential Subscribers only Customers with active eligible electric accounts within the same or any adjoining census tract as that of the applicable Facility (the “Priority Census Tracts”). Current State of Hawaii census tract information shall be used to determine the Priority Census Tracts.⁶
 - b. Subscriber Organization shall identify the Priority Census Tracts of its Facility in the “Project Description” for the Facility in the CBRE Online Portal.
 - c. Subscriber Organization shall be permitted to market and promote its Facility to the population at-large but during the Priority Period may only accept for enrollment eligible Customers from the Priority Census Tracts. Other Customers expressing interest in a Subscriber Organization’s Facility may not be enrolled or pre-enrolled, e.g., holding a reservation for a Subscription that would otherwise be available to an eligible Customer, during the Priority Period.
 - d. Subscriber Organization shall ensure the Priority Enrollment Program is available only to eligible Customers from Priority Census Tracts during the Priority Period by monitoring their Facility subscription capacity held by pending applications in the CBRE Online Portal. Pending applications in the CBRE Online Portal that are from ineligible Customers must be rejected in the CBRE Online Portal

⁵ Including rooftops, parking lots, streets, sidewalks, driveways, and surfaces that are impermeable to infiltration of rainfall into underlying soils/groundwater

⁶ As of the effective date of this Tariff, current Hawaii census tract information may be found at <https://hystategis.maps.arcgis.com/apps/OnePane/basicviewer/index.html?appid=7245ce23fcd74ad49a2e763506a2ceb>. Such information and the provided internet address are subject to update and change.

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periodically to ensure that Contract capacity shall not be “reserved” for ineligible Customers outside the Priority Census Tracts during the Priority Period. Subscriber Organization may manually establish a queue of such ineligible Customers interested in their Facility for later enrollment after the Priority Period has expired.

e. Subscriber Organization shall be solely responsible for ensuring that only eligible Customers from the Priority Census Tracts are enrolled by Subscriber Organization during the Priority Period. Company may reject or disenroll any Subscriber enrolled during the Priority Period that is found not to be eligible for priority enrollment under this Priority Enrollment Program.

3. Any other Customer seeking a subscription in Subscriber Organization’s Facility with a service account outside of the Priority Census Tracts may be enrolled after the Priority Period if Subscriptions are available. There shall be no continuing priority for eligible Customers in Priority Census Tracts once the Priority Period expires.

4. Subscriptions committed to before the Facility’s Commercial Operations Date must be enrolled by Subscriber Organization by the Commercial Operations Date for the Facility. Subscriptions committed to after the Commercial Operations Date must be enrolled by Subscriber Organization within 30 calendar days. Subscriber bill credits will begin to accrue in alignment with Part II, Section C.4 of this Tariff.

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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);

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- c. Housing Choice Voucher Program (Section 8);
 - 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)⁷ 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

⁷ 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.

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2. An IRC Section 501(c)(3) organization; or
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.

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D. LMI SUBSCRIBER ANNUAL VERIFICATION DURING TERM

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 ~~ninesix~~ (96) 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 ~~snineix~~ (96) month correction period.

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E. PAYMENT REDUCTIONS AND LIQUIDATED DAMAGES

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 ~~96~~ months of commercial operations as specified below.

1. Effective after ~~96~~ months of commercial operations for a CBRE LMI Project, the following shall be placed into effect for the ~~ninesix~~-month period (months ~~710-1215~~) 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 ~~7-10~~ and month ~~1215~~, 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 ~~7-10~~ and month ~~1215~~, 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 ~~7-10~~ and month ~~1215~~, 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.

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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 liquidated damages for the Subscriber Organization's failure to maintain the Interim LMI Subscriber Percentage in any month between month ~~7-10~~ and month ~~12-15~~, inclusive, after initial commercial operations of the CBRE LMI Project.

2. Effective after ~~12-15~~ 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.

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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 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 ~~96~~ months following initial commercial operations, the Subscriber Organization shall incur no payment reduction if it should fall below its Committed LMI Percentage. Effective after ~~96~~ months of commercial operations, the following shall be placed into effect for the ~~ninesix~~-month period (months ~~7-10~~ -~~12~~~~15~~) 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~~~~10~~ and month ~~12~~~~15~~, 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~~~~10~~ and month ~~12~~~~15~~, 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

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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 Committed LMI Shortfall Percentage exceeds 15% for any month between month ~~7-10~~ and month ~~15-12~~, 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 ~~7-10~~ and month ~~12-15~~, inclusive, after initial commercial operations of the CBRE Mid-Tier or Large Project.

5. Effective after ~~12-15~~ 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

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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.

- 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 ~~ninesix~~ 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,

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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 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.

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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

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[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”).¹ 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 20th 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 21st 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 (5th) 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 (10th) 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

¹ 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.

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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 (20th) 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

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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

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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.

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- 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. 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. ~~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-consume~~ 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.

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- 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 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]COMMUNITY REPRESENTATIVE. 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:

- o Name: [name of Subscriber Organization's Community Representative]
- o Contact Information: [email address]; [phone number]

Subscriber Organization shall include current contact information for Subscriber Organization's Community Representative and any subsequent changes thereto in the CBRE Online Portal.

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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.

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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

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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 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 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.
- 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.

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~~ the CBRE Tariff and all applicable Laws

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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
- 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.]

HAWAIIAN ELECTRIC COMPANY, INC.

SHEET NO. 49.23-S
Effective March 10, 2022

Hawai'i Electric Light Company, Inc.

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

By: _____

By: _____

Name: _____

Name: _____

Date: _____

Date: _____

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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.

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"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

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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.

- (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

Superseding Sheet No. 49.26-D
Effective November 22, 2021

Revised Sheet No. 49.26-D
Effective March 10, 2022

APPENDIX VIII

SIMPLIFIED INTERCONNECTION REQUIREMENTS STUDY (IRS) SCOPE AND PROCESS

Island	O`ahu, Maui, Hawai`i Island	
Size	<250kW	
kV of Interconnecting Line	Connecting to 4kV, 12kV	
Technical Reviews	After Completeness Review of Subscriber Organization Application: Initial Technical Review (ITR) If results of ITR identify the need for further analysis: Supplemental Review (SR) SR will determine if an IRS is required and its specific scope – for Small Projects, the scope will be limited to a Simplified IRS	
Hosting Capacity	Available Hosting Capacity on Circuit to Accommodate Project	No Hosting Capacity on Circuit to Accommodate Project
Scope	Secondary System ¹ Only: <ul style="list-style-type: none"> ○ Steady State – Thermal and Voltage Analysis² ○ Transformer Loading Analysis³ 	Primary System ⁴ and/or Secondary System: <ul style="list-style-type: none"> ● Steady State – Thermal and Voltage Analysis² ● Transformer Loading Analysis³
IRS Fee	\$2,000 flat fee for the study ⁵ (Costs of identified mitigation necessary to interconnect the studied Project, if required, are not included)	
Schedule	90 days maximum ⁶ (Simplified IRS to commence after SO agrees to Simplified IRS terms and pays the IRS Fee)	
Who Performs the IRS	Hawaiian Electric (using information provided by Subscriber Organization in its Application)	
Reference Single Line Diagram	Typical Small Project (Less than 250 kW) Interconnection Single Line Diagram for CBRE (see Rule 29 Appendix XV)	
Mitigations	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 ⁷	

¹ The utility system between the service transformer and the customer meter

² 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 spike issues

³ Transformer load analysis focused on whether the Project, together with the load already on the circuit, requires an additional transformer in order to accept the Project.

⁴ The utility system between the service transformer and substation transformer

⁵ Quoted Fee for Simplified IRS for CBRE Phase 2 only

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

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

HAWAIIAN ELECTRIC COMPANY, INC.

Order No. 38217 filed February 8, 2022, Docket 2015-0389

Transmittal Letter dated February 23, 2022.

EXHIBIT 10

Redlines of Changed Sections of the LMI CBRE RFP
from August 25, 2021 version



Hawaiian Electric

DRAFT

REQUEST FOR PROPOSALS

FOR

COMMUNITY-BASED RENEWABLE ENERGY PROJECTS

FOR

LOW- AND MODERATE-INCOME SUBSCRIBERS

O‘AHU, MAUI, AND HAWAI‘I ISLAND

~~AUGUST 25, 2021~~

FEBRUARY 23, 2022

Docket No. 2015-0389

This Request for Proposals (“RFP”) is a DRAFT only. Hawaiian Electric Company, Inc. (“Hawaiian Electric”), Maui Electric Company, Limited (“Maui Electric”), and Hawai‘i Electric Light Company, Inc. (“Hawai‘i Electric Light”) (each a “Company” and collectively, the “Companies”) will employ a competitive bidding process to select Community Based Renewable Energy projects consistent with the State of Hawai‘i Public Utilities Commission’s (“PUC”) Competitive Bidding Framework. Under the Competitive Bidding Framework, the Companies filed initial drafts of the RFP with the (PUC). This 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, the Companies will issue the final RFP.

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Chapter 1: Introduction and General Information

Hawaiian Electric Company, Inc. (“Hawaiian Electric”), Maui Electric Company, Limited (“Maui Electric”), and Hawai‘i Electric Light Company, Inc. (“Hawai‘i Electric Light”) (each a “Company” and collectively, the “Companies”) seek proposals for Community-Based Renewable Energy (“CBRE”) projects, also referred to as shared solar,¹ dedicated to Low- and Moderate-Income Subscribers (“LMI Subscribers”), for the Hawaiian Electric System, Maui Electric System, and Hawai‘i Electric Light System on the islands of O‘ahu, Maui, and Hawai‘i, respectively (each a “System”), in accordance with this Request for Proposals (“RFP”).

Affiliates of the Company may submit a Proposal in response to this RFP subject to the requirements of this RFP. The Company will not submit a Proposal in response to this RFP. Proposers may submit separate Proposals for any single island or any combination thereof.

In this RFP, the Company seeks new dispatchable photovoltaic (“PV”) generation projects (with or without a Battery Energy Storage System (“BESS”)) of at least 250 kW as shown in Table 1 below. Projects that are being proposed at the transmission level on Maui and Hawai‘i Island must be paired with BESS.

Mid-Tier Projects will utilize a pre-approved standard form contract in the form of Appendix K (“Mid-Tier SFC”). Each Mid-Tier Project will be limited to a maximum of 5 MW on **O‘ahu** and 2.5 MW on **Maui** and **Hawai‘i Island**.

Large Projects, which include any Project exceeding 5 MW on **O‘ahu** and 2.5 MW on **Maui** and **Hawai‘i Island**, and any Project interconnecting at the transmission level, will utilize the Company’s Model Renewable Dispatchable Generation Power Purchase Agreement (“RDG PPA”) which can be found in Appendix L.

**Table 1
Project Size and Contract Options by Island**

	Large Projects / Contract<u>RDG PPA*</u>	Mid-Tier Projects / Contract<u>Mid-Tier SFC*</u>
Oahu	>5 MW /RDG PPA	250 kW – 5 MW /Mid-Tier SFC
Maui & Hawai‘i Island	>2.5 MW /RDG PPA**	250 kW – 2.5 MW /Mid-Tier SFC

¹ 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.

* Any project interconnecting at the transmission level will be considered a Large Project and must use the RDG PPA.

** Any project interconnecting at the transmission level on Maui or Hawai'i Island is required to be paired with a BESS.

Each successful Proposer will provide dispatchable PV generation and ~~optionally, as applicable,~~ a BESS to the Company pursuant to the terms of an RDG PPA or Mid-Tier SFC. RDG PPAs for Large Projects will be subject to review and approval by the State of Hawai'i Public Utilities Commission ("PUC"), while the Mid-Tier Projects selected in this RFP will not be subject to further PUC review and approval.

The Company's RDG PPA and Mid-Tier SFC employ an innovative contracting mechanism which is very different than traditional PPA structures. Proposers are instructed to thoroughly review the RDG PPA attached as Appendix L and the Mid-Tier SFC attached as Appendix K based on the size of their project. The structure of the RDG PPA and 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 RDG PPA and 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. Depending on 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; circuit availability; and changes to regulatory or legal requirements, among other things, the Company will select one (1) project, but may optionally choose to select additional projects through this RFP.

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, in the RDG PPA and Mid-Tier SFC, attached as Appendix L and K, respectively, and, if applicable, the DC Coupled Term Sheet, attached as Appendix M.

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.

Unless identified for a specific island, the requirements in this RFP apply to all projects proposed for the islands of O'ahu, Maui, and Hawai'i.

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, and Order No. 37879 issued on July 27, 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 Parts 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 that utilize PV technology as the source energy, which may be paired with storage-, as applicable. No other generation technologies may be proposed. Proposals may be submitted as: (1) Generation only Projects; or (2) Generation paired with a BESS Projects (“Paired Projects”).

1.2.3 The Project shall be dedicated to LMI Subscribers. A minimum of 60% of the Project’s capacity shall be reserved for LMI Customers, as defined in Tariff Rule No. 29 in Appendix J. Up to 40% of the Project’s capacity may be allocated to a LMI Anchor Tenant(s), as defined in Tariff Rule No. 29 in Appendix J. Unsubscribed RDG compensation will be subject to the requirements in Article 2 of the RDG PPA or Attachment C of the 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 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.

1.2.5 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.

1.2.6 Projects submitted in response to this RFP must be located on O‘ahu, Maui, or Hawai‘i Island.

1.2.7 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)²~~and~~, are not located within a Tsunami

² 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

Evacuation Zone,³ and are not located within the Hawaii Department of Land and Natural Resources flood map's flood zones A, AE, AEF, AH, AO, VE based on the Federal Emergency Management Agency's Digital Flood Insurance Rate Maps.⁴ 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.

- 1.2.8 Projects on **Maui** and **Hawai'i Island** must interconnect to the Company's System at the transmission level (69 kV) or distribution level (12 kV or lower). Projects on **O'ahu** must interconnect to the Company's System at the transmission level (138 kV), sub-transmission level (46 kV) or distribution level (12 kV or lower). Projects ~~on~~ O'ahu interconnecting at the transmission level can interconnect via a new substation or to an existing Company substation with sufficient available space. Projects interconnecting at the distribution level (12 kV or lower) must not exceed 3 MW.
- 1.2.9 Projects submitted in response to this RFP must be 250 kW or larger. Proposers for CBRE projects smaller than 250 kW should refer to the Company's CBRE website for instructions on how to submit proposals at <http://www.hawaiianelectric.com/sharedsolar>. No single point of failure from the Facility shall result in a decrease in net electrical output greater than 142 MW on O'ahu, 20 MW on Maui, and 30 MW on Hawai'i Island. Additionally, in meeting the single point of failure requirement, if the Facility exceeds the MW of the single point of failure limit, the Facility must be segmented in equally sized capacities (MW). Each segment must have its own POI into the System that can be independently dispatched via the Company's energy management system. Revisions will need to be made to the RDG PPA to account for multiple POI.
- 1.2.10 Contracts for Projects selected through this RFP must use the RDG PPA or Mid-Tier SFC, as described in Section 3.8. Under the RDG PPA and Mid-Tier SFC, the Company shall maintain exclusive rights to fully direct dispatch of the Facility, subject to availability of the resource and Section 1.2.11 below. The term of the RDG PPA or Mid-Tier SFC will be 20 years.
- 1.2.11 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

Resources Contract No: 64064. This report is available at: https://climateadaptation.hawaii.gov/wp-content/uploads/2017/12/SLR-Report_Dec2017.pdf

³ 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").

⁴ 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"). See Hawaii Department of Land and Natural Resources Flood Hazard Assessment Tool at <http://gis.hawaiiinfip.org/FHAT/>.

the Facility's Allowed Capacity (in MW) for a minimum of four (4) continuous hours throughout the term of the RDG PPA or Mid-Tier SFC.

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.

- 1.2.12 Grid-charging is not required for Paired Projects. However, if grid-charging capability is included, the Paired Project 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 electing to include grid-charging capability that are incapable of claiming the ITC must be capable of being 100% charged from the grid from the GCOD.
- 1.2.13 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.
- 1.2.14 Proposals must specify a GCOD no later than ~~August 31, 2026~~ February 28, 2027. 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 RDG PPA or 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).
- 1.2.15 If selected, Proposers will be responsible for all costs throughout the term of the RDG PPA or Mid-Tier SFC, including but not limited to Project development, completion of an Interconnection Requirements Study ("IRS"), the cost of conducting a greenhouse gas analysis, land acquisition, permitting, financing, construction of the Facility and all Seller-Owned Interconnection Facilities, and the operation and maintenance ("O&M") of the Facility.
- 1.2.16 If selected, Proposers will be solely responsible for the decommissioning of the Project and the restoration of the Site upon the expiration of the PPA, as described in Attachment G, Section 7 of the RDG PPA or the Mid-Tier SFC.
- 1.2.17 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 PPA 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 RDG PPA or the Mid-Tier SFC. The applicable PPA 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
- Monitor contract negotiations with Proposers
- 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 2, Item 9). 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 contacts for this RFP are:

For O‘ahu	For Maui	For Hawai‘i Island
Jasmine Wong Shawn Uehira Energy Contract Manager Hawaiian Electric Company, Inc.	Isaac Kawahara Energy Contract Manager Hawaiian Electric Company, Inc.	Michael Ito Energy Contract Manager Hawaiian Electric Company, Inc.

RFP Email Address: 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 2, ~~Item 9~~. 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. Each Energy Contract Manager, in consultation with the Independent Observer, will confirm that Proposals were submitted by the Proposal Due Date in Section 3.1, Table 2, ~~Item 9~~. The Electronic Procurement Platform automatically closes to further submissions after the IPP and Affiliate Proposal Due Date in Section 3.1, Table 2, ~~Item 9~~.

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.

Project Size	Proposal Fee
250 kW and larger, up to and including 2.5 MW	\$1,000
Larger than 2.5 MW, up to and including 10 MW	\$2,500
Larger than 10 MW	\$5,000

- 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, Facility size, or with/without storage 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 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 2, ~~Item 9~~. 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:

For O‘ahu	For Maui	For Hawai‘i Island
Payable to: Hawaiian Electric Company, Inc.	Payable to: Maui Electric Company, Ltd.	Payable to: Hawai‘i Electric Light Company, Inc.
Jasmine Wong Shawn Uehira Energy Contract Manager Hawaiian Electric Company, Inc. Mail Code CP21AL12 -IU PO Box 2750 Honolulu, Hawai‘i 96840	Isaac Kawahara Energy Contract Manager Hawaiian Electric Company, Inc. Mail Code CP21AL12 -IU PO Box 2750 Honolulu, Hawai‘i 96840	Michael Ito Energy Contract Manager Hawaiian Electric Company, Inc. Mail Code CP21AL12 -IU PO Box 2750 Honolulu, Hawai‘i 96840

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

For O‘ahu	For Maui	For Hawai‘i Island
Hawaiian Electric Company, Inc. Ward Receiving Attention: Jasmine Wong Shawn Uehira , Energy Contract Manager Mail Code CP21 <u>AL12</u> -IU 799 S. King St. Honolulu, Hawai‘i 96813	Hawaiian Electric Company, Inc. Ward Receiving Attention: Isaac Kawahara, Energy Contract Manager Mail Code CP21 <u>AL12</u> -IU 799 S. King St. Honolulu, Hawai‘i 96813	Hawaiian Electric Company, Inc. Ward Receiving Attention: Michael Ito, Energy Contract Manager Mail Code CP21 <u>AL12</u> -IU 799 S. King St. Honolulu, Hawai‘i 96813

Due to COVID-19 disease 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 Proposals⁵ to RFPs issued by the Company. Requirements for Company Self-Build (“Self-Build Option” or “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. However, the Company will not submit a SBO to this RFP. 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, ~~Item 9~~.

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).

⁵ A Proposal will also be treated as an Affiliate Proposal if the Affiliate is a partner for the Proposal.

- 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.⁶ 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.

⁶ 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.

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 an RDG PPA or 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 or negotiation 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, and either the requirements of the RDG PPA or Mid-Tier SFC. This RFP and either the RDG PPA or Mid-Tier SFC set forth the minimum requirements that all Proposals must satisfy to be eligible for consideration in this RFP. Additional Performance Standards may be required based on the results of the IRS.

- 2.1.1 For Paired Projects, the functionality and characteristics of the BESS must be maintained throughout the term of the RDG PPA or Mid-Tier SFC. To be clear, Proposers may not propose any degradation for either capacity or efficiency in their Proposals.
- 2.1.2 Grid forming and black start capability⁷ are preferred but not required for distribution and subtransmission-connected Facilities that include a BESS. These capabilities are given preference as part of the non-price criteria, Locational Value: Non-Wires Alternative and Community Resilience, in Section 4.4.2 in this RFP.

Grid forming and self-energization capability⁸ are required for transmission connected projects that include a BESS, as applicable.

⁷ ~~The ability to start itself and provide power to the Company's grid a designated set of loads within an established microgrid area 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 grid during start up (if the Project remains connected) or while connecting provide backup power to the loads the Project established microgrid area if the grid connection is picking up (not the start up and connecting of the deenergized. This is a Facility itself) and site specific design requiring Company review and depending on the design may be required to apply in the appropriate Microgrid Services Tariff accordingly.~~

⁸ See Section 3 of Attachment B of the appropriate RDG PPA for the appropriate definition of grid forming and self-energization capability expected of transmission connected projects.

2.2 System Information

- 2.2.1 For Projects intending to interconnect to the Company System at the distribution level (12 kV or lower on **O‘ahu, Maui and Hawai‘i Island**), 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~~ **available circuit capacity for a** Project at a specific location. Direct questions to the RFP Email Address in Section 1.6.
- 2.2.2 For Projects on **O‘ahu** interconnecting to 46 kV circuits, Company information regarding an initial assessment of potential MW capacity of 46 kV circuits will be made available to Proposers only after execution of the CBRE NDA.⁹ Proposers should perform their own evaluation of project locations, and the Company does not guarantee any project output or ability to connect based on such information. Prior to submitting a proposal, Proposers are encouraged to inquire about the ~~viability of interconnecting a proposed~~ **available MW capacity for a** Project at a specific location. Direct questions to the RFP Email Address in Section 1.6.
- 2.2.3 For Projects on **O‘ahu** interconnecting to 46 kV circuits, the proposed Project output cannot exceed the available hosting capacity limit during the daytime hours of 8am to 5pm.¹⁰ ~~The~~ **Together with existing and expected generation sources available during those hours prior to the GCOD, the** proposed Project output at all other hours (5pm to 8am) cannot exceed the identified conductor limit ~~(less any existing or expected generation sources available during those hours prior to the GCOD)~~. For example, a solar resource paired with a BESS may interconnect to a circuit with a stated hosting capacity of zero provided that no energy is exported during the hours of 8am and 5pm and the export of power does not exceed the conductor limit after 5pm. Specifically, as it pertains to interconnection to the O‘ahu 46 kV system, Proposers may inquire regarding the viability of upgrading 46 kV conductors to increase available capacity based on a specific location (direct questions to the RFP Email Address in Section 1.6). Prior to the RFP, developers may inquire as to viability of proposed real project locations for interconnection.

⁹ Appendix E contains the Mutual Confidentiality and Non-Disclosure Agreement for this RFP.

¹⁰ The available hosting capacity is not a final determination whether it is feasible to interconnect a Proposed Facility. The available hosting capacity provided in response to inquiries to the Company represents the power system’s conditions at the time the analysis is conducted. This analysis will examine steady-state thermal capacity and voltage issues during daytime minimum loading conditions only.

2.2.4 For Projects interconnecting to the Company System at the transmission level (138 kV on O‘ahu and 69 kV on Maui and Hawai‘i Island), prior to submitting a proposal, Proposers are encouraged to inquire about the available MW capacity for a Project at a specific location. Please direct questions to the RFP Email Address in Section 1.6.

2.2.5 Projects interconnecting to transmission level circuits require additional analyses. The available capacity of a transmission line is dependent on many factors including location of the Point of Interconnection, system load, generating unit dispatch, and transmission line contingencies. As a result, load flow analyses are required to confirm the available line capacities for various scenarios. Detailed load flow analyses will be performed as part of the project selection process. Prior to the RFP, developers may inquire as to viability of proposed real project locations for interconnection as well as specific requirements of that proposed interconnection.

2.2.4.2.6 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.

2.3 Interconnection to the Company System

The Proposer must provide information pertaining to the design, development, and construction of the Seller-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.

In addition to the Performance Standards For Projects starting from 250 kW and findings of the IRS, the design of the less than 1 MW in size, Project single line and three line diagrams, and an equipment list shall be submitted with the Proposal. For Projects greater than or equal to 1 MW in size, a completed Project Interconnection Facilities, including power rating, Point(s) of Interconnection (“POI”) with the Company System, and scheme of Requirement Study Data Request worksheet, which can be found in Appendix B, Attachment 2, all project diagram(s), models for equipment and controls (see Appendix B, Attachments 3 and 6), list(s) identifying components and respective files (for inverters and power plant controller), and complete documentation with instructions must be submitted with their Proposal submission.

2.3.1.1 The Company will also make available typical drawings to Proposers to familiarize you with the Company’s engineering expectations for the Proposer’s interconnection, must meet Company standards. The Company will provide its construction standards and procedures to facilities. The drawings may not reflect the exact requirements of your project but should provide useful guidance to assist with your Proposal. The most updated Engineering Standards will be provided to Projects who are selected to the final

~~award group and continue through negotiations. To request the Proposer (Engineer, Procure, Construct Specifications for Hawaiian Electric Power Lines and Substations) if requested typical drawings, submit a request 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 Hawaiian Electric, Maui Electric, or Hawai'i Electric Light 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.

~~2.3.1.2~~

~~2.3.1.3~~ ~~2.3.2~~ Each Company's 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/>. 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.

~~2.3.22~~ ~~2.3.3~~ The Proposer shall be responsible for all costs for Seller-Owned Interconnection Facilities required to interconnect a Project to the Company System. Costs for Company-Owned Interconnection Facilities should not be included in the Proposal pricing, unless specified in Appendix H.

~~2.3.32~~ ~~2.3.4~~ Selected Proposers shall be responsible for the actual final costs of all Seller-Owned Interconnection Facilities, 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 Seller-Owned Interconnection Facilities exceed the amounts proposed. Selected Proposers shall not be responsible for the costs of the Company-Owned Interconnection Facilities, subject to any limitations set forth in Appendix H. However, the Company will develop assumed costs for Company-Owned Interconnection Facilities based on the typical CBRE interconnection, and will use these assumed costs as a proxy in the evaluation process. For those portions of the Company-Owned Interconnection Facilities to be constructed by the selected Proposers, Company shall reimburse the selected Proposers for such work ~~as set forth in Appendix H~~. Selected Proposers shall confirm the scope and cost of work for Company-Owned Interconnection Facilities prior to starting any such work. The Company will not be responsible for reimbursing any costs related to work deemed excessive and/or corrective in nature. See Appendix H for further details regarding Company-Owned Interconnection Facilities cost responsibilities.

~~2.3.42~~ ~~2.3.5~~ Proposers are required to account for all costs for distribution-level service ~~interconnectionconnection~~ for station power in their pricing proposal.

~~2.3.52~~ ~~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 5.1.2. 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 RDG PPA or Mid-Tier SFC.

Chapter 3: Instructions to Proposers

3.1 Schedule for the Proposal Process

Table 2 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 2
Proposed RFP Schedule**

Milestone	Schedule Dates
(1) Draft RFP filed	July 9, 2020
(2) Technical 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 Final RFP filed per Order 37879	August 25, 2021 ⁺⁺
(8) Proposed Final RFP filed per Order 38217	February 23, 2022¹²
(8)(9) Final RFP issued	September 16, 2021¹³ March 17, 2022¹⁴
(9)(10) IPP and Affiliate Proposal due date	November 16, 2021 May 17, 2022 at 2:00 pm HST
(10)(11) Priority List selected	January 24 July 26, 2022
(11)(12) BAFOs due	January 31 August 2, 2022
(12)(13) Final Award Group selected	May 16 November 15, 2022
(13)(14) Contract Negotiations Start	May 23 November 22, 2022

⁺⁺All subsequent dates in the proposed schedule may be modified based on further guidance provided by the PUC.

¹²All subsequent dates in the proposed schedule may be modified based on further guidance provided by the PUC.

¹³ Order 37879, page 69, “RFPs shall be approved automatically 15 days after their filing, unless the Commission orders otherwise.” The schedule reflects the RFP being issued one week after its anticipated approval date.

¹⁴ Per Order 38217, page 17-18, “Hawaiian Electric’s final CBRE Phase 2 Tranche 1 and LMI RFPs and Rule 29 tariffs for Hawaii Island, Maui, and Oahu shall be approved automatically 15 days after they are filed, unless the Commission orders otherwise.” The schedule reflects the RFP being issued one week after its anticipated approval date.

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:

www.hawaiianelectric.com/competitivebiddingLMICBRERFP

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.

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 RDG PPA or 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 agent¹⁵ 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:

¹⁵ 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.

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.
- 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 Large Projects will be in the form of the RDG PPA, attached as Appendix L. Appendix L-1 and Appendix L-2 are Project Specific Addenda for Large Projects located on O‘ahu or Maui/Hawai‘i Island, respectively. In addition, Appendix L-4 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 The Power Purchase Agreement for proposals selected under this RFP for Mid-Tier Projects will be in the form of the 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-1 and Appendix K-2 are Project Specific Addenda for Mid-Tier Projects located on O‘ahu or Maui/Hawai‘i Island, respectively. In addition, 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.”
- 3.8.3 If selected, any Affiliate Proposers will be required to enter into an RDG PPA or Mid-Tier SFC with the Company.
- 3.8.4 In general, under the RDG PPA and 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 (if applicable) 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.
- 3.8.5 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. Proposers may propose modifications to other sections of the RDG PPA but are encouraged to accept such terms as written in order to expedite the overall RFP process and potential contract negotiations. As a component of their respective Proposals, Proposers who elect to propose modifications shall provide a Microsoft Word red-line version of the relevant document identifying specific proposed modifications to the model language that the Proposer is agreeable to, as well as a detailed explanation and supporting rationale for each modification.
- 3.8.5.1 General comments, drafting notes and footnotes such as “parties to discuss,” and reservation of rights to propose modifications at a later time are unacceptable and will be considered non-responsive. Proposed modifications to the RDG PPA shall be limited to targeted revisions to, and not deletions or waivers of, the agreement’s terms, conditions,

covenants, requirements or representations. Proposed modifications will also be evaluated as a non-price evaluation criterion as further described in Section 4.4.2. In order to facilitate this process, the Company will make available electronic versions of the model agreements on the RFP website and through the Electronic Procurement Platform for the RFP. Any proposed modifications to the RDG PPA will be subject to negotiation between the Company and the Final Award Group and should not be assumed to have been accepted either as a result of being selected to the Final Award Group or based on any previously executed PPA. As stated above, since general comments, drafting notes, and footnotes without accompanying specific proposed language modifications are unacceptable and non-responsive, the Company will not negotiate provisions simply marked by such general comments, drafting notes and footnotes.

3.8.5.2 The Company has an interest in maintaining consistency for certain provisions of the RDG PPAs, such as the calculation of availability and payment terms. Therefore, for such provisions, the Company will endeavor to negotiate similar and consistent language across PPAs for the Final Award Group.

3.8.6 Proposals that do not include specific proposed modifications to the attached RDG PPAs will be deemed to have accepted the RDG PPA in its entirety.

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 RDG PPA or 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 RDG PPA or 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 PPA 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 PPA.

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.¹⁶
- 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 RDG PPA or 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 RDG PPA or Mid-Tier SFC. Please review the model PPA 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. Upon selection, the Final Award Group may be requested to provide further detailed cost information if requested by the PUC or the Consumer Advocate as part of the PPA approval process. If requested,

¹⁶ If a Proposal is selected to the Final Award Group and an RDG PPA or 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 RDG PPA or 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 RDG PPA or 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 RDG PPA or Mid-Tier SFC. See Article 2 and Attachment U of the RDG PPA or the Mid-Tier SFC.

such information would be provided to the PUC, Consumer Advocate, and Company pursuant to a protective order in the docket.

- 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 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.

3.12 Confidentiality

- 3.12.1 Each prospective [IPP or Affiliate](#) Proposer must submit an executed CBRE NDA in the form attached as [Appendix E](#) by the [IPP and Affiliate](#) Proposal Due Date specified in the RFP Schedule in [Section 3.1, Table 2, Item 9](#). 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 and facilitating potential contract negotiations.
- 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 an RDG PPA or 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 RDG PPA or 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 RDG PPA or the Mid-Tier SFC are minimum requirements. Proposers shall not propose an amount lower than that set forth in the RDG PPA or the Mid-Tier SFC.

3.13.3 Each Proposer for a Large Project shall be required to provide a satisfactory irrevocable standby letter of credit in favor of the Company from a bank chartered in the United States to guarantee Proposer's payment of interconnection costs which the Proposer is responsible in excess of the portion of the Total Estimated Interconnection Costs and/or all relocations costs in excess of Total Estimated Relocation Costs that are payable to Company as required and set forth in Attachment G to the RDG PPA.

3.13.4 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 RDG PPA or Mid-Tier SFC.

Chapter 4: Evaluation Process and Evaluation Criteria

4.1 Proposal Evaluation and Selection Process

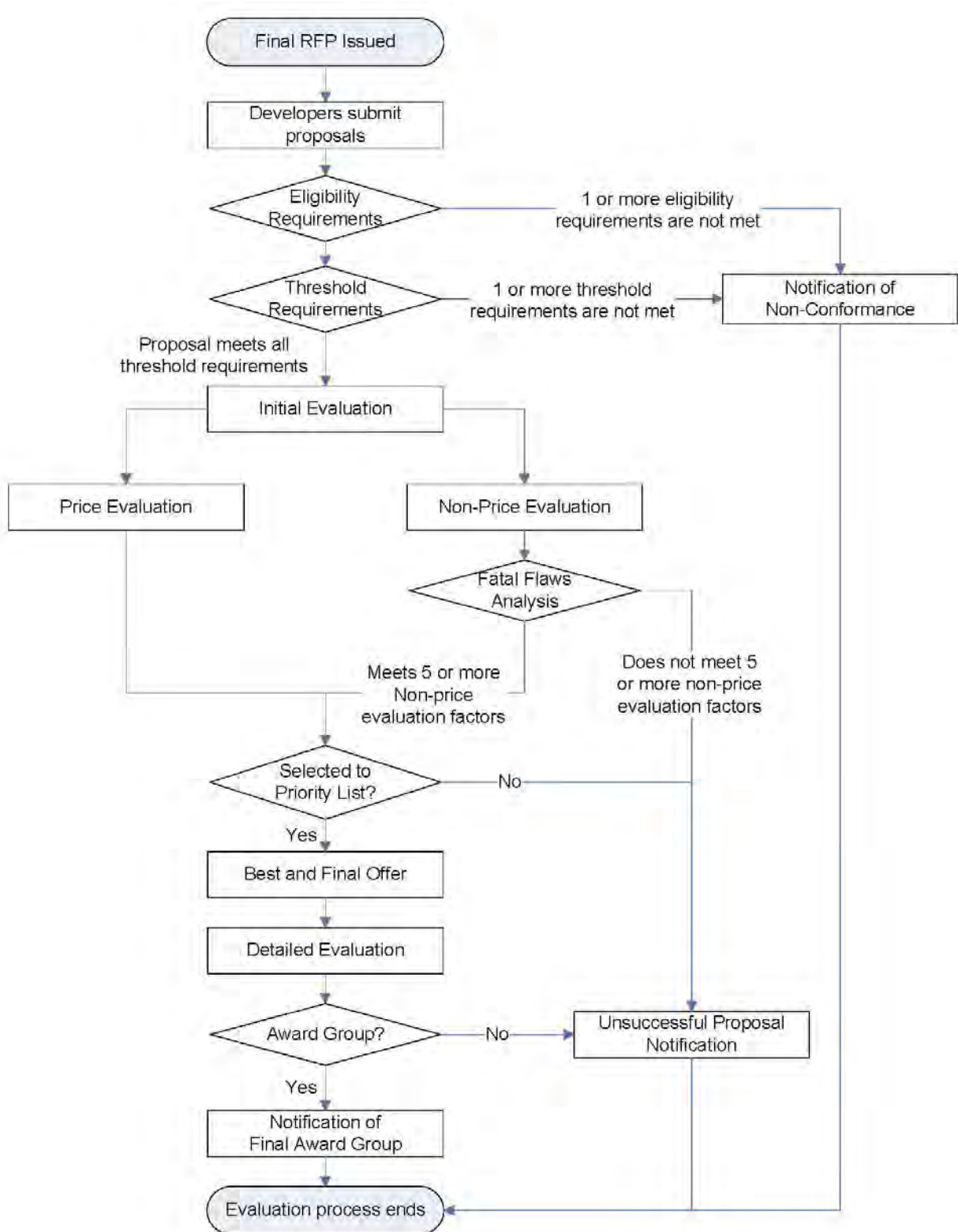
The Company will evaluate the Proposals of each island via separate island-specific evaluations. The Company will employ a multi-step evaluation process for each island. This Chapter provides a description of each step of the process, along with the requirements of Proposers at each step. Figure 1 sets forth the flowchart for the proposal evaluation and selection process for each island.

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.¹⁷ 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.¹⁸ 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.

¹⁷ 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.

¹⁸ 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 O'ahu, Maui or Hawai'i Island.
- The Proposal must be for a PV project.
- The proposed Project must be 250 kW or larger.
- The proposed Projects PPA term length must be twenty (20) years.
- (Maui or Hawai'i Island) Projects must interconnect to ~~a~~the Company's System at the transmission (69 kV) or distribution ~~ei~~level (12 kV or lower).
- (O'ahu only) Projects must interconnect to the Company's System at the transmission (138 kV), sub-transmission (46 kV) or distribution level (12 kV or lower).
- (Maui or Hawai'i Island) Projects that interconnect to the Company's System at the transmission level (69 kV) must include a BESS.
- Projects interconnecting at the distribution level (12 kV or lower) must not exceed 3 MW.
- The Project must be dedicated to LMI Subscribers with a minimum of 60% dedicated to LMI Customers as described in Section 1.2.3.
- Project infrastructure and point of interconnection must be located outside the 3.2 foot 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, and not located within the Hawaii Department of Land and Natural Resources flood map's flood zones A, AE, AEF, AH, AO, VE based on the Federal Emergency Management Agency's Digital Flood Insurance Rate Maps.

- The Proposal must specify a GCOD no later than ~~August 31, 2026~~February 28, 2027.
- 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 RDG PPA or Mid-Tier SFC ("Site Control") as specified in the Proposer's Proposal (taking into account the timelines set forth in this RFP for selection, negotiation, and execution of an RDG PPA or 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 RDG PPA or 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 PPA negotiations. 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), ~~and a comprehensive communications plan~~plan for reporting construction schedules and activities which include resulting impacts (ex. traffic, noise, and dust) and mitigation plans beginning at least one month prior to the start of scheduled work, and a comprehensive communications plan which factors in monthly Project status updates. Hawaiian Electric will carefully review the Community Outreach Plans to ensure that outreach to area elected officials and known community leaders and organizations is documented and that the plan is tailored by community and

includes the outreach schedule, communication plans and required project information that will be shared in each engagement.

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.
8. Available **Circuit Capacity** (This criterion will only be applied to proposed Projects that intend to interconnect to Company's ~~46/138 kV~~ or 46 kV system on **O'ahu** ~~), or 69 kV system on Maui and Hawai'i Island~~): The output capacity of the proposed Project must not exceed the available capacity of the ~~46 kV~~ circuit to which it will interconnect, ~~except in cases where~~. This criterion is intended as a check to ensure that the Proposer will bear proposed Project's net nameplate capacity, together with approved and existing projects, is within the available MW Capacity of 46 kV transmission conductor upgrade as noted in the line or substation identified for interconnection. (see RFP Section- 2.2.3.-5)

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. For each island, 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 8 months later than the earliest GCOD and will then receive $50 \times (1 - (8/30)) = 37$ points.

The eligible Proposal with the lowest Levelized Program Capacity Price 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 ~~twelve~~ (~~12~~thirteen (13)) non-price criteria categories set forth below:

1. Community Outreach
2. State of Project Development and Schedule
3. Performance Standards
4. Locational Value: Non-Wires Alternative (NWA) and 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. RDG PPA Contract Proposed Modifications
11. Guaranteed Commercial Operations Date
12. Cultural Resource Impacts

13. Land Use and Impervious Cover

Each of the first six criteria – Community Outreach, State of Project Development and Schedule, Performance Standards, Locational Value: NWA and 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, 11, and 113 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 more robust and customized the stakeholder list, meeting frequency, and commitments are defined in the plan, the higher the rating the Proposer will receive as part of the scoring and evaluation process. 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. 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) Local labor and prevailing wage commitment. Proposers will be scored more favorably if their plan commits to at least 80% of non-supervisory construction and operations workers' hours associated with the construction or repowering of a Project will be paid at the prevailing wage equivalent under HRS Chapter 104 during all periods of construction. Proposers are also highly encouraged to hire qualified construction, operations, and maintenance works who reside in the county where the Project is being constructed, and the State of Hawaii, in that order, before hiring non-resident labor.
- 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, including monthly Project status updates.

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, 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 RDG PPA or 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 RDG PPA or 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: Non-Wires Alternative and Community Resilience** – The Company has identified areas on the grid where the siting of a CBRE Project would support grid needs, non-wires alternatives and/or community resilience. Non-wires alternatives have been identified for areas with grid needs. For Projects that support non-wires alternatives, the capability to grid-charge is needed to reliably meet distribution capacity needs. For Projects to support community resilience, a BESS with grid-forming and black start capability is needed for the purposes of being able to energize any proposed community or “island” as a

microgrid from a de-energized state. The black start capability is not needed to energize the entire grid. 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. Proposers are encouraged to and will be scored more favorably for locating projects in the following:

- Areas ~~where the grid needs that are identified in Appendix I have a higher certainty rating with~~ Distribution Grid Needs can ~~also~~ be found ~~on~~ the Company's Locational Value Map:
~~<https://www.hawaiianelectric.com/clean-energy-hawaii/integration-tools-and-resources/locational-value-maps/Maps>;~~
~~<https://www.hawaiianelectric.com/clean-energy-hawaii/integration-tools-and-resources/locational-value-maps/>~~
 - Grid Service Definitions:
 - Distribution Capacity: A supply and/or a load modifying service that DERs provide as required via the dispatch of power output for generators and electric storage, and/or reduction in load that is capable of reliably and consistently reducing net loading on desired distribution infrastructure in response to Company Dispatch
 - Distribution Reliability: A load modifying or supply service capable of improving local distribution reliability under abnormal conditions in response to Company Dispatch
 - Areas with identified community resilience that are more vulnerable to extended outages are:
 - **Maui:** Hana
 - **O'ahu:** Ko'olaupoko moku
5. **Commitment to Residential Subscriber Participation** – Proposals will be evaluated on the stated commitments of the Project's Subscriber Organization to residential Subscribers. All residential Subscribers must be LMI Customers. At a minimum, Subscriber Organizations will be required to set aside 60% of the Project's capacity for residential Subscribers. Proposers that commit to reserving a portion larger than 60% of their Project capacity for residential Subscribers 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. Financing options, upfront fees, payment over time, public funding options, and other creative approaches will be preferred along with programs that offer higher expected LMI Customer level savings, favorable payback periods and mechanisms, and other LMI Customer

benefits. In addition, Proposals shall describe the extent to which LMI 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 encourage LMI Customer and potential LMI Anchor Tenant participation, as well as the Proposer's plan to educate, inform, and stimulate the market in order to achieve their target levels of participation of LMI and residential customers. Efforts may include community or community organization partnerships. Proposers must include details on Direct-to-consumer marketing strategies on how the Subscriber Organization will reach traditionally hard-to-reach LMI Customers.
 - 3) **Subscriber Retention:** Proposals will also be assessed on the stated plans to acquire and retain a market that is historically less financially and socially stable than more affluent residential markets, including how turnover and churn will be handled as well as how participation targets will be maintained among a potentially less stable market segment.
 - 4) **Program Experience:** Proposals will also be evaluated on Proposers documented success in reaching and retaining participation of LMI and residential customers 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. **RDG PPA Contract Proposed Modifications** – Proposers are encouraged to accept the contract terms identified in the RDG PPA in its entirety in order to expedite the overall RFP process and potential contract negotiations. Proposers who accept the RDG PPA without edits or utilize the Mid-Tier SFC, which is non-negotiable and cannot be marked up as part of their Proposal, will receive a higher score and will be the only proposals that can achieve the highest scoring for this non-price evaluation criterion. Technology-specific or operating characteristic-required modifications, with adequate explanation as to the necessity of such modifications, will not jeopardize a project's ability to achieve the highest score. Proposers who elect to propose modifications to the model agreements shall provide a Microsoft Word red-line version of the applicable document identifying specific proposed modifications to the model agreement language, as well as a detailed explanation and supporting rationale for each modification. General comments without proposed alternate language, drafting notes without explanation or alternate language, footnotes such as “parties to discuss,” or a reservation of rights to make additional modifications to the model agreements at a later time are unacceptable, will be considered unresponsive, and will result in a lower score (see also [Section 3.8](#)). The Company and Independent Observer will evaluate the impact that the proposed modifications will have on the overall risk assessment associated with the evaluation of each Proposal.
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 RDG PPA or 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.

13. Land Use and Impervious Cover - The Company encourages Proposers to site Projects on developed lands and to preserve open spaces and agricultural lands. Proposers will be scored more favorably for locating Projects on:

- Land with greater existing impervious cover;¹⁹
- Land zoned industrial or industrial mixed use, commercial or business mixed use or apartment mixed use under the State Land Use Classification with a preference in that order; or
- Land deemed as reclaimed, such as Brownfield.²⁰

In addition, projects that minimize the net increase of impervious cover of a Project site will be scored more favorably.

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. For each island, 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 for each island 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 Program

¹⁹ As defined by the EPA (8 Tools of Watershed Protection in Developing Areas | Watershed Academy Web | US EPA), "the sum total of all hard surfaces within a watershed including rooftops, parking lots, streets, sidewalks, driveways, and surfaces that are impermeable to infiltration of rainfall into underlying soils/groundwater."

²⁰ As defined by the EPA (Overview of EPA's Brownfields Program | US EPA), "a property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant."

Capacity Price. Selection to a Priority List does not assure an eligible Project's inclusion in the selection of a 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 Lists. Proposers selected to the Priority Lists will have the opportunity to update (downward only)²¹ 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

Proposers will not be allowed to increase their price²² 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.²³

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 a Final Award Group.

For each island, the detailed evaluation process will consist of an assessment of combinations of Proposals from the respective island's Priority List. Using the current forecast and planning assumptions developed for the Company's Integrated Grid Planning process in Docket No. 20192018-9-0165 ~~filed on August 19, 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. This evaluation will incorporate estimated costs for Company-Owned Interconnection Facilities and system upgrades that will be paid for by the utility as described further in Appendix H.

²¹ 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.).

²² 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.

²³ 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.

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 portfolio and the energy under the RDG PPA or 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.
4. The cost of imputed debt, if applicable.

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 for each island, 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 a 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 for each island. Mid-Tier Projects selected to a Final Award Group will execute a Mid-Tier SFC with the Company in the form of Appendix K. Large Projects, and any Project interconnecting at the transmission level, selected to a Final Award Group will enter into RDG PPA (in the form of Appendix L) negotiations. All Proposers will be notified at this stage of the evaluation process whether their Proposal is included in a Final Award Group.

Selection to a Final Award Group and/or entering into contract negotiations does not guarantee execution of an RDG PPA or 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 a Priority List or a Final Award Group, the Company reserves the right, at any time prior to submission of the PPA Application with the PUC, in consultation with the Independent Observer, to disqualify the Proposer from the RFP. If discovery of the incorrect or misrepresented information is made after the Company has filed its PUC application for approval of the PPA with the Proposer, the Company will disclose the incorrect or misrepresented information to the PUC for evaluation and decision as to whether such Proposer should be disqualified and the Company's application dismissed.

Following any removal of a proposal from a 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 PPA, 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 a Priority List to determine (1) if another proposal should be added to a Final Award Group; or (2) if the remaining proposals in a 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 all projects starting from 250 kW and less than 1 MW in size, ~~Project single line and three line diagrams and an equipment list shall be submitted for each Proposal. For all projects greater than or equal to 1 MW in size (regardless of whether an IRS is required), a complete package of completed Project Interconnection Requirement Study Data Request worksheets, Project single line and three line diagrams, worksheet, which can be found in Appendix B, Attachment 2, all project diagram(s), models for equipment and controls; (see Appendix B, Attachments 3 and 6), list(s) to clearly identify the identifying components and respective files (for inverters and power plant controller), and complete documentation with instructions shall~~ must be submitted ~~for each Proposal. The submittal shall be done~~ within 30 days after selection to the Final Award Group ~~(see Section 2.11 of Appendix B)~~.

For all Projects 1 MW or larger, within 30 days after selection to the Final Award Group, final submissions, to incorporate any updates to the information submitted in response to Section 2.3.1, shall be made, and shall be in compliance with the Project data and modeling requirements described below.

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 greater than or equal to 1 MW in size, 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 a 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 that will require an IRS, 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 within 30 days after selection to a Final Award Group, 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. 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 RDG PPA (see RDG PPA [Section 12.4](#)) or 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 Negotiation Process

Within five (5) business days of being notified by the Company of its intent to enter into RDG PPA contract negotiations or execute a Mid-Tier SFC, Proposers selected for a 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 a Final Award Group will be required to keep their Proposal valid through the award period. RDG PPA contract negotiations will take place in parallel with the IRS process.

The Company intends to execute and file the RDG PPA with the PUC for approval and later amend the RDG PPA 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 29.21](#) of the RDG PPA (Community Outreach Plan) 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 Groups no more than five (5) business days after the notification is given to Proposers who are selected to a Final Award Group. Selected Proposers shall not disclose their selection to the public before the Company publicly announces the Final Award Group selections.

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 selections. 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 a 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, [plan for reporting construction related updates, labor and prevailing wage commitment](#), and a comprehensive communications plan [which factors in monthly Project status updates](#).

The Proposer's Community Outreach Plan shall be a public document identified on the Proposer's Project website for the term of the PPA 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~~ Further information and instructions regarding expectations for the Community Outreach Plan can be found in Appendix B, Attachments 4 and 5.

Prior to the execution date of the PPA, 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; (ii) an opportunity to engage in a dialogue about concerns, mitigation measures, and potential community benefits of the proposed Project; ~~and (iii)(iii)~~ an update regarding the Proposer's cultural impact plan, including any findings made and mitigations identified to-date as part of the Archaeological Literature Review and Field Inspection Report discussed in Section 5.7; and (iv) for Large Projects, information concerning the process and/or intent for the public's input and engagement, including advising attendees that they will have thirty (30) calendar days from the date of said public meeting to submit written comments to Company and/or Proposer for inclusion in the Company's submission to the PUC of its application for a satisfactory PUC Approval Order and for inclusion on the Proposer's website. The Proposer shall collect all public comments, and then provide the Company copies of all comments received in their original, unedited form. If an RDG PPA is executed by the Proposer and the Company, the Company may submit any and all public comments (presented in its original, unedited form) as part of its PUC application for this Project. 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 Groups (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 RDG PPA or Mid-Tier SFC relating to Community Outreach.

Following the submission of the PUC application for the Project, and prior to the date when the Parties' statements of position are to be filed in the docketed PUC proceeding for the Project, the Proposer shall provide another opportunity for the public to comment on the proposed Project.

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 Greenhouse Gas Emissions Analysis

Proposers whose Proposal(s) for Large Projects are selected for a Final Award Group shall cooperate with and promptly provide to the Company and/or Company's consultant(s) upon request all information necessary, in the Company's sole and exclusive discretion, for such consultant to prepare a greenhouse gas ("GHG") emissions analysis and report in support of a PUC application for approval of the RDG PPA for the Project (the "GHG Review"). Proposers shall be responsible for the full cost of the GHG Review associated with their Project under a Greenhouse Gas Analysis Letter Agreement between the Proposer and the Company. The GHG Review is anticipated to address whether the GHG emissions that would result from approval of the RDG PPA and subsequent to addition of the Project to the Company's System are greater than the GHG emissions that would result from the operations of the Company's System without the addition of the Project, whether the cost for renewable, dispatchable generation, and/or energy storage services as applicable under the RDG PPA is reasonable in light of the potential for GHG emissions, and whether the terms of the RDG PPA are prudent and in the public interest in light of its potential hidden and long-term consequences.

5.5 PUC Approval

Any signed RDG PPA for Large Projects or any Project interconnecting at the transmission level resulting from this RFP is subject to PUC approval as described in the RDG PPA, including Article 12 and Section 29.20 thereof. 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 RDG PPA or 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 RDG PPA or Mid-Tier SFC.

5.7 Archaeological Literature Review and Field Inspection Report

All Projects selected to a Final Award Group must, within five (5) months of selection, complete and submit to the Company an Archaeological Literature Review of existing cultural documentation filed with the State Historic Preservation Division and a Field Inspection Report. For any archaeological and/or historical sites identified in the project area, the Proposer must provide a plan for mitigation from an archaeologist licensed in the State of Hawai'i. This mitigation plan must be posted on the Project website for transparency.

Any results available at the time of the Community Outreach meeting required prior to PPA execution discussed in Section 5.3, must be presented at that time, along with an update regarding the developer's cultural impact plan.

DRAFT

REQUEST FOR PROPOSALS

FOR

COMMUNITY-BASED RENEWABLE ENERGY PROJECTS

FOR

LOW- AND MODERATE-INCOME SUBSCRIBERS

O‘AHU, MAUI AND HAWAI‘I ISLAND

~~AUGUST 25, 2021~~

FEBRUARY 23, 2022

Docket No. 2015-0389

Appendix A – Definitions



Hawaiian 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 RDG PPA and Mid-Tier SFC.

“Battery Energy Storage System” or “BESS” has the meaning set forth in the RDG PPA and Mid-Tier SFC.

“BESS Contract Capacity” has the meaning set forth in the RDG PPA and 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 RDG PPA and 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.

“Companies” means Hawaiian Electric Company, Inc., Maui Electric Company, Ltd., and Hawai‘i Electric Light Company, Inc., collectively.

“Company” means Hawaiian Electric Company, Inc., Maui Electric Company, Ltd., or Hawai‘i Electric Light Company, Inc., each a Hawai‘i corporation.

“Company-Owned Interconnection Facilities” has the meaning set forth in Section 1.a of Attachment G of the RDG PPA and 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.

“DC Coupled Term Sheet” means the Term Sheet for Large CBRE DC Coupled Projects (PV+BESS) which is attached as Appendix L-4, and summarizes the revisions that will be made to the RDG PPA for Large Projects with a single inverter system such that the PV system and BESS are “DC Coupled.”

“Development Period Security” has the meaning set forth in the RDG PPA and 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 each island in this RFP.

“Evaluation Team” means agents of the Company who evaluate Proposals.

“Facility” has the meaning set forth in the RDG PPA and 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 a 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.

“Hawai‘i Electric Light” means Hawai‘i Electric Light Company, Inc., a Hawai‘i corporation.

“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.

“Large Project” means a project greater than 5 MW on O‘ahu, and, in the LMI RFP only, greater than 2.5 MW on Maui and Hawai‘i Island or any project connecting at the transmission level.

“Levelized Program Capacity Price” means a calculation (\$/MW) used for comparison of Proposals based on information provided in the Proposal submission in this RFP.

“LMI Anchor Tenant” is as defined in Tariff Rule No. 29 in Appendix J.

“LMI Subscriber” means either a LMI Customer or LMI Anchor Tenant as defined in Tariff Rule No. 29 in Appendix J.

“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 RDG PPA or Mid-Tier SFC. 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.

“Maximum Rated Output” has the meaning set forth in the RDG PPA or 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 5 MW, inclusive, on O‘ahu and between 250 kW and 2.5 MW, inclusive, on Maui and Hawai‘i Island.

“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 5 MW, inclusive, on O‘ahu and between 250 kW and 2.5 MW, inclusive, on Maui and Hawai‘i Island, 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 RDG PPA and 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 RDG PPA and 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 RDG PPA or 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 RDG PPA and 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.

“Price for Purchase of Electric Energy” is the amount that the Company will pay the Seller for electric energy delivered to the Company in accordance with the terms and conditions of the RDG PPA on a monthly basis as described in Attachment J. This payment will be calculated in terms of dollars per MWh.

“Priority List” means the group of Proposals for each island selected by each Company as described in Section 4.5 of this RFP.

“Project” means a Facility proposed to the Company by a Proposer pursuant to this RFP.

“Proposal” means a proposal submitted to the Company by a Proposer pursuant to this RFP.

“Proposal Due Date” means the date stated in RFP Schedule for IPP and Affiliate Proposals 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 the Company 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.

“RDG PPA” means the Model PV Renewable Dispatchable Generation Power Purchase Agreement that will be used for projects greater than 5 MW in size on O‘ahu, and, in the LMI RFP only, for projects greater than 2.5 MW on Maui and Hawai‘i Island, attached as Appendix L to this RFP.

“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 2, Section 3.1 of this RFP.

“Round Trip Efficiency” or “RTE” has the meaning set forth in the RDG PPA.

“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 RDG PPA and Mid-Tier SFC.

“Seller-Owned Interconnection Facilities” has the meaning set forth in the RDG PPA and 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.

“System” means the electric system owned and operated by Hawaiian Electric, Maui Electric, or Hawai‘i Electric Light on O‘ahu, Maui, or Hawai‘i Island, respectively, (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.

“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 RDG PPA and Mid-Tier SFC.

Appendix B - Attachment 2 has been modified but does not have a redlined document comparing it to the August 25, 2021 version. Please review the Appendix B - Attachment 2 in its entirety.

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REQUEST FOR PROPOSALS

FOR

COMMUNITY-BASED RENEWABLE ENERGY PROJECTS

FOR

LOW- AND MODERATE-INCOME SUBSCRIBERS

ON O‘AHU, MAUI, AND HAWAI‘I ISLAND

~~AUGUST 25, 2021~~

FEBRUARY 23, 2022

Docket No. 2015-0389

*Appendix B – Proposer’s Response Package /
Project Interconnection Data Request*



Hawaiian Electric

1.0 GENERAL INSTRUCTIONS TO PROPOSERS

The Company has elected to use the services of PowerAdvocate®, a third-party electronic platform provider. 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

There will be three RFP events on Sourcing Intelligence (Electronic Procurement Platform), one each for O'ahu, Maui, and Hawai'i Island. To access an RFP event, the Proposer must register as a "Supplier"¹ on Sourcing Intelligence. One Proposal may be submitted to each RFP event 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 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 for an individual RFP event, the Proposer must register as a new "Supplier" on Sourcing Intelligence for each additional Proposal.

¹ 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).

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 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

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 to an individual RFP event 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).

Contact information for PowerAdvocate Support can also be found on the bottom border of the PowerAdvocate website: www.poweradvocate.com

Once an 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 Proposal Due Date (RFP Section 3.1, Table 2, Item 9).
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.”

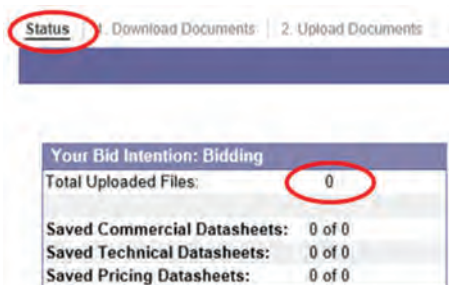
There is no limit to the number or size of files that can be uploaded. Multiple files may be grouped into a .zip archive for upload. (Any zipped files must still adhere to the naming directions in #3 above.) When successfully uploaded, documents will appear under the "Bid Submissions" section on the 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 events. 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 Sections 4.2 of this Appendix, as applicable.

To be filled out in its entirety:

1	Proposer Name (Company Name)	
2	Parent Company/Owner/Sponsor/Business Affiliation/etc.	
3	Project Name	
4	Net nameplate capacity (MW)²	
4a	Installed nameplate capacity: the aggregate sum of the net nameplate active power capabilities of all generator and converter equipment (i.e. storage) installed.	
5	Proposed Facility Location, Street Address if available, or what City/Area on the island is it near	
6	TMK(s) of Facility Location (use 9-digit TMK format)³	
7	Point of Interconnection’s Circuit Name	
8	Coordinates for Point of Interconnection (use decimal degrees)⁴	
9	Net Energy Potential (NEP) Projection for the Facility (MWh)	
10	Lump Sum Payment (\$/Year)	
11	Does Project include an Energy Storage Component? (Yes/No)	
If the Project includes an Energy Storage Component:		
11a	Project Energy Storage Technology	

² 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 distributionspecified 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.

³ 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).

⁴ 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.

11b	AC or DC interconnected with the source energy resource	
11c	Energy Storage Capability for the Facility (MW and MWh)	
11d	Is the Project capable of being 100% charged from the grid after the 5 year ITC recapture period? (Yes/No)	
11e	Is the Project grid-forming and black start capable? (Yes/No)	
12	Proposal Guaranteed Commercial Operations Date (MM/DD/YYYY)	
13	The Proposer hereby certifies that the Project meets all performance attributes identified in Section 2.1 of the RFP? (Yes/No)	
14	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)	
15	The Proposer hereby agrees to provide Development Period Security and Operating Period Security as set forth in the applicable Model RDG PPA or Model Mid-Tier SFC. (Yes/No)	
16	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)	
17	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)	
18	The Proposer hereby certifies that the Project is dedicated to LMI Subscribers with a minimum 60% dedicated to LMI Customers as described in Section 1.2.3 of the RFP? (Yes/No)	
19	(Large Projects only) Does the Proposer accept the contract terms identified in the RDG PPA in its entirety? (Yes/No)	
19a	If the response to #19 is “No,” specify the name of the Microsoft Word red-line file that identifies the proposed modifications to the agreement, provided, however, that such proposed modifications shall be limited to targeted revisions to, and not deletions or waivers of, the agreement’s terms, conditions, covenants, requirements or representations.	
<u>20</u>	<u>Is the proposed Project sited on land deemed to be reclaimed land, such as a Brownfield⁵?</u>	
<u>20a</u>	<u>If yes, what percentage of the proposed Project site is reclaimed land?</u>	

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:

⁵ As defined by the EPA ([Overview of EPA's Brownfields Program | US EPA](#)), “a property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.”

- 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.)
- **Completed Project Interconnection Data Request worksheet** and **project 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 Data Request worksheet ~~shall be submitted within the respective timeframes specified in Section 5.1 of the RFP.~~⁶ (See Section 2.11.1 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)

~~⁶If 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.~~

- 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 Hosting Circuit 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
- Facility SCADA and control systems: Describe the SCADA and control system utilized for facility monitoring and control

For projects that include a paired storage component:

- Technology Type (i.e. lithium ion battery)
- Interconnection type (AC or DC)
- 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
- Operational Limitations, such as but not limited to: grid charging limits (with respect to ITC), energy throughput limits (daily, monthly, annually), State of Charge (“SOC”) restrictions (minimum/maximum SOC while at rest (not charging/discharging)), etc. Proposed Operational Limits cannot be in conflict with the energy discharge requirement in Sections 1.2.12 and 1.2.13 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 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
- 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 PPA, 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 If Proposers elect to propose modifications to the RDG PPA, **provide a Microsoft Word red-line version of the RDG PPA** identifying specific proposed modifications to the model language that the Proposer is agreeable to and a detailed explanation and supporting rationale for each modification. General comments, drafting notes and footnotes such as “parties to discuss” are unacceptable and will be considered non-responsive.

Proposers that do not upload redlines of the applicable RDG PPA with their Proposal submission will be deemed to have accepted the RDG PPA in its entirety. If no modifications are proposed, please state in this section “no modifications to the RDG PPA”.

As set forth in RFP Section 3.8.5.1, proposed modifications to the RDG PPA will be subject to negotiation between the Company and the Final Award Group and should not be assumed to have been accepted either as a result of being selected to the Final Award Group or based on any previously executed PPA.

2.4.2 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
- Existing easements encumbering the parcel on which the site is located.

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.

2.5.7 Indicate whether the Proposal is **intended to partially or fully satisfy a Company identified Non-Wires Alternative** as stated in Appendix I or the Company's Locational Value Map, and which locational need it intends to satisfy.

2.5.8 Provide the following information related to **land use and impervious cover**⁷ of the proposed Project:

- **Land use map including current zoning of the proposed Project site and adjacent properties; indicate percentage of the proposed Project site for each zoning type identified.**
- **Map depicting existing impervious cover of the proposed Project site; include the current percentage of impervious cover of the utilized area for the proposed Project.**
- **Map depicting final impervious cover of the proposed Project site; include the proposed percentage of impervious cover of the utilized area for the proposed Project.**
- **If the proposed Project is on reclaimed land, such as Brownfield, included a complete description of the reclaimed land and any current land use restrictions.**

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

⁷ As defined by the EPA (8 Tools of Watershed Protection in Developing Areas | Watershed Academy Web | US EPA), "the sum total of all hard surfaces within a watershed including rooftops, parking lots, streets, sidewalks, driveways, and surfaces that are impermeable to infiltration of rainfall into underlying soils/groundwater."

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 (including the site's flood zone based on the Hawaii Department of Land and Natural Resources flood map)
 - 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?
- Construction related updates
 - Plan for reporting construction schedules and activities, including resulting impacts (ex. traffic, noise, and dust) and proper mitigation plans beginning at least one month prior to the start of scheduled work
- Local labor and prevailing wage commitment (if any)
- Comprehensive communication strategy with affected communities and the general public regarding the proposed Project:
 - Describe frequency of communication, including monthly Project status updates
 - 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

Proposers are reminded of RFP Section 3.4.2 including the provision of 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 (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>
Environmental Compliance and Permitting Plan		
*	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>
Cultural Resource Impacts		
*	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>
Community Outreach		
*	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.
 - A three-line diagram which shows the Point of Interconnection, potential transformer (PT) and current transformer (CT) ratios, and details of the generating facility configuration, including relays, meters and test switches.

2.10.1.1 Provide the projected **hourly annual energy potential production profile of the Facility⁸ (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.

⁸ For Paired Projects, 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.

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 applicable RDG PPA and 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).

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 RDG PPA or 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 RDG PPA or 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 starting from 250 kW and less than 1 MW in size, provide project single line and three line diagrams~~diagram(s)~~ and an **equipment list** ~~shall be submitted~~ with each Proposal ~~within~~. Note that additional interconnection submittal requirements, to be submitted 30 days after the timeframes specified~~Final Award Group selection, are identified~~ in Section 5.1 of the RFP⁴.

2.11.3 For projects greater than or equal to 1 MW in size, provide the ~~completed~~following with each Proposal

- Completed Project Interconnection Requirement Study Data Request worksheet ~~with the Proposal submission~~. (The worksheet can be found in the “1. Download Documents” tab as Appx B Att 2 with the file name of Project Interconnection Data Request Worksheets (PV Generation) ~~MS Excel~~MS Excel files. ~~Also provide all~~.);
- All project diagram(s) ~~with the Proposal submission~~.);
- Models for equipment and controls, ~~list~~;
- List(s) identifying components and **respective files** (for inverters and power plant controller); and **complete**
- Complete documentation with instructions ~~shall be submitted within the timeframes specified in Section 5.1 of the RFP~~⁴.

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 (for example, by submitting a PPA)
- 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 the 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.

EXPERIENCE:							
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, including the Archaeological Literature Review and Field Inspection Report
 - Community outreach and engagement activities
 - Energy resource assessment
 - Financing
 - Engineering
 - Procurement
 - Facility construction including construction management events
 - Applicable reporting milestone events specified in the RDG PPA or 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 RDG PPA or Mid-Tier SFC and/or other agreements.

2.14.2 Describe the **construction execution strategy** including:

- Identification of contracting/subcontracting plans
- Modular construction

- Safety plans⁹
- 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.

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
 - LMI 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 eligible customers
- Strategies for LMI customer retention and maintaining LMI customer participation levels
- Customer protection provisions
- Estimated benefits to 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

⁹ 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.

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.

Project Name
Proposer Name

1

Project Benefits

- Details

2

Community Benefits

- Details

3

Proposed Facility Location in/near what City/Area

- Map
- Dimensions of proposed project
- Include all project components

4

Project Description

- Details

5

Site Layout Plan

- Project Layout
- Project Visual Simulations
 - Multiple public vantage points

6

Interconnection Route

- Map

7

Required Government Permits and Approvals

- Preliminary Schedule
- Opportunities for public comment

8

Environmental Impacts

- Preliminary environmental assessment of the site (including any pre-existing environmental conditions)

9

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.

10

Construction Related Updates

- Plan for reporting construction schedules and activities
 - Including resulting impacts (ex. traffic, noise, and dust) and mitigation plans
 - Begins at least one month prior to the start of scheduled work
 - To extend throughout the construction and development of the project

11

Local Labor and Prevailing Wage Commitment (if any)

- Detailing Proposer's commitment, if any, that 80% of non-supervisory construction and operations workers' hours associated with the construction or repowering of a Project will be paid at the prevailing wage equivalent under HRS Chapter 104 during all periods of construction.
- Describing commitment, if any, to hire qualified construction, operations, and maintenance works who reside in the county where the Project is being constructed, and the State of Hawaii, in that order, before hiring non-resident labor.

12

Where to Find More Information

- Project website
- Proposer email and contact information

13

How to Provide Comments

14

CBRE Stage 2 Model and Interconnection Requirements Study (IRS) Scope

Island Size	O'ahu, Maui, Hawai'i Island 250kW ≤ Facility < 1MW Primary Metered & Dedicated Transformer Connecting to 4kV, 12kV	O'ahu, Maui, Hawai'i Island 250kW ≤ Facility < 1MW Secondary Metered & Dedicated Transformer Connecting to 4kV, 12kV	O'ahu, Maui, Hawai'i Island ≥ 1MW Connecting to 4kV, 12kV Max Size Allowed – 3MW O'ahu Max Size Allowed – dependent on circuit capacity for Maui and Hawai'i Island	O'ahu, Maui, Hawai'i Island ≥ 1MW Connecting to 4kV, 12kV Max Size Allowed – dependent on circuit capacity for Maui and Hawai'i Island																																																																																												
Models	A PSCAD model will be required for Over-Voltage analysis	A PSCAD model will be required for Over-Voltage analysis	PSS®E generic, PSCAD ASPEN If providing Grid Forming Capability add: • Grid Forming PSCAD and Grid Forming PSS®E	Facilities < 5MW: • PSS®E generic, PSCAD, ASPEN Facilities ≥ 5MW: • PSS®E generic, PSS®E User Defined, PSCAD, and ASPEN If providing Grid Forming Capability add: • Grid Forming PSCAD and Grid Forming PSS®E																																																																																												
Interconnection Requirement Study Scope	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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	<p>Note:</p> <ol style="list-style-type: none"> If Flicker and Unintended Islands checks fail the ITR & SR screening, additional study for these will be required in the IRS <ol style="list-style-type: none"> If the project connects on a 4kV circuit, then Flicker analysis will be required 	<p>Note:</p> <ol style="list-style-type: none"> System Stability analysis for the portfolio may be required to analyze the aggregated impact of the projects. Grid Forming analysis shall be added to projects providing the Grid Forming capability 	<p>Note:</p> <ol style="list-style-type: none"> System Stability analysis for the portfolio may be required to analyze the aggregated impact of the projects. Grid Forming analysis shall be added to projects providing the Grid Forming capability 	<p>Note:</p> <ol style="list-style-type: none"> System Stability analysis for the portfolio may be required to analyze the aggregated impact of the projects. Grid Forming analysis shall be added to projects providing the Grid Forming capability 																																																																																												

	<p>a. 250kW – Analysis not required</p> <p>b. 250KW< Size < 1MW – Analysis dependent on location on the circuit</p>	<p>2. Voltage Transients Analysis not required if there is no breaker on the high side of the transformer (Typical)</p> <p>3. If there is a breaker on the high side - Voltage Transients Analysis depends on transformer size:</p> <p>a. 250kW – Analysis not required</p> <p>b. 250KW< Size < 1MW – Analysis dependent on location on the circuit</p>	<p>3. If an IRS is determined to not be necessary, a technical model checkout will still be required per Section 5.1.1 of the RFP.</p>	<p>If an IRS is determined to not be necessary, a technical model checkout will still be required per Section 5.1.1 of the RFP.</p>
Reference Single Line Diagram (See Appendix H)	<p>Typical Primary Distribution (250kW and larger to less than 1MW) Interconnection Single Line Diagram for CBRE</p>	<p>Typical Secondary Distribution (250kW and larger to less than 1MW) Interconnection Single Line Diagram for CBRE</p>	<p>Typical Distribution Primary Interconnection (1MW and larger) Single Line Diagram for CBRE</p>	<p>Typical 46kV Interconnect Single Line Diagram for RFP</p>

Island Size	<p>O'ahu</p> <p>Connecting to 46kV</p> <p>Max size – limited to circuit capacity</p> <p>NO paired BESS</p>	<p>O'ahu</p> <p>Connecting to 46kV</p> <p>Max size – limited to circuit capacity</p> <p>w/paired BESS</p>
Models	<p>PSS®E Generic, PSS®E User Defined, PSCAD, and ASPEN.</p>	<p>Facilities < 5MW:</p> <ul style="list-style-type: none"> • PSS®E Generic, PSS®E User Defined, PSCAD, and ASPEN. <p>Facilities ≥ 5MW:</p> <ul style="list-style-type: none"> • Grid Forming Models • PSS®E Generic, PSS®E User Defined, PSCAD, and ASPEN.
Interconnection Requirement Study Scope		

	Tasks (Include selected tasks in the IRS. Exclude tasks that are unselected)	Tasks (Include selected tasks in the IRS. Exclude tasks that are unselected)	
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<p>Reference Single Line Diagram (See Appendix H)</p>	<p>Island Size</p> <p><u>Maui, Hawai'i Island</u> Connecting to 69kV w/ paired BESS</p>	<p>Island Size</p> <p><u>O'ahu</u> Connecting to 138kV NO paired BESS</p>	<p>Island Size</p> <p><u>O'ahu,</u> Connecting to 138kV w/paired BESS</p>
<p>Models</p> <p>Grid Forming Models</p> <ul style="list-style-type: none"> PSS®E Generic, PSS®E User Defined, PSCAD, and ASPEN. 	<p>Models</p> <p>Grid Forming Models</p> <ul style="list-style-type: none"> PSS®E Generic, PSS®E User Defined, PSCAD, and ASPEN. 	<p>Models</p> <p>Grid Forming Models</p> <ul style="list-style-type: none"> PSS®E Generic, PSS®E User Defined, PSCAD, and ASPEN. 	<p>Models</p> <p>Grid Forming Models:</p> <ul style="list-style-type: none"> PSS®E Generic, PSS®E User Defined, PSCAD, and ASPEN.
<p>Interconnection Requirement Study Scope</p>			

<p>Reference Single Line Diagram (See Appendix H)</p>	<p>Tasks (Include selected tasks in the IRS. Exclude tasks that are unselected)</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Interconnection One-Line and Equipment List <input checked="" type="checkbox"/> Project Data Requirements and Facility Technical Model Review <input checked="" type="checkbox"/> Review of Existing System Performance (Base-Case) <input checked="" type="checkbox"/> Develop Project Model (IRS Case) <input checked="" type="checkbox"/> Steady-State Power Flows <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Reverse Power Flow <input checked="" type="checkbox"/> Reactive Power Requirements <input checked="" type="checkbox"/> Protection Review <input checked="" type="checkbox"/> Voltage Flicker <input checked="" type="checkbox"/> Voltage Transients (In-Rush Current) <input checked="" type="checkbox"/> System Stability <ul style="list-style-type: none"> <input checked="" type="checkbox"/> PSSE Analyses <input checked="" type="checkbox"/> PSCAD Analyses for Weak Grid Conditions <input checked="" type="checkbox"/> Grid Forming Analyses <input checked="" type="checkbox"/> Ride-Through Requirements <input checked="" type="checkbox"/> Unintended Islands <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Transient Overvoltage (TCOV) <input checked="" type="checkbox"/> Unintended Islands Fault Overvoltage (GFOV) <input type="checkbox"/> Harmonics <ul style="list-style-type: none"> <input type="checkbox"/> Harmonics Model Analysis <input type="checkbox"/> Harmonics Monitoring Assessment 	<p>Tasks (Include selected tasks in the IRS. Exclude tasks that are unselected)</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Interconnection One-Line and Equipment List <input checked="" type="checkbox"/> Project Data Requirements and Facility Technical Model Review <input checked="" type="checkbox"/> Review of Existing System Performance (Base-Case) <input checked="" type="checkbox"/> Develop Project Model (IRS Case) <input checked="" type="checkbox"/> Steady-State Power Flows <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Reverse Power Flow <input checked="" type="checkbox"/> Reactive Power Requirements <input checked="" type="checkbox"/> Protection Review <input checked="" type="checkbox"/> Voltage Flicker <input checked="" type="checkbox"/> Voltage Transients (In-Rush Current) <input checked="" type="checkbox"/> System Stability <ul style="list-style-type: none"> <input checked="" type="checkbox"/> PSSE Analyses <input checked="" type="checkbox"/> PSCAD Analyses for Weak Grid Conditions <input type="checkbox"/> Grid Forming Analyses <input checked="" type="checkbox"/> Ride-Through Requirements <input checked="" type="checkbox"/> Unintended Islands <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Transient Overvoltage (TCOV) <input checked="" type="checkbox"/> Unintended Islands Fault Overvoltage (GFOV) <input type="checkbox"/> Harmonics <ul style="list-style-type: none"> <input type="checkbox"/> Harmonics Model Analysis <input type="checkbox"/> Harmonics Monitoring Assessment 	<p>Tasks (Include selected tasks in the IRS. Exclude tasks that are unselected)</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Interconnection One-Line and Equipment List <input checked="" type="checkbox"/> Project Data Requirements and Facility Technical Model Review <input checked="" type="checkbox"/> Review of Existing System Performance (Base-Case) <input checked="" type="checkbox"/> Develop Project Model (IRS Case) <input checked="" type="checkbox"/> Steady-State Power Flows <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Reverse Power Flow <input checked="" type="checkbox"/> Reactive Power Requirements <input checked="" type="checkbox"/> Protection Review <input checked="" type="checkbox"/> Voltage Flicker <input checked="" type="checkbox"/> Voltage Transients (In-Rush Current) <input checked="" type="checkbox"/> System Stability <ul style="list-style-type: none"> <input checked="" type="checkbox"/> PSSE Analyses <input checked="" type="checkbox"/> PSCAD Analyses for Weak Grid Conditions <input checked="" type="checkbox"/> Grid Forming Analyses <input checked="" type="checkbox"/> Ride-Through Requirements <input checked="" type="checkbox"/> Unintended Islands <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Transient Overvoltage (TCOV) <input checked="" type="checkbox"/> Unintended Islands Fault Overvoltage (GFOV) <input type="checkbox"/> Harmonics <ul style="list-style-type: none"> <input type="checkbox"/> Harmonics Model Analysis <input type="checkbox"/> Harmonics Monitoring Assessment
	<p>Typical 69kV Interconnect Single Line Diagram for RFP</p>	<p>Typical 138kV Interconnect Single Line Diagram for RFP</p>	<p>Typical 138kV Interconnect Single Line Diagram for RFP</p>

The Appendix H Attachments have been substantially modified and therefore a redlining document has not been provided. Please review the Attachments in full.

DRAFT

REQUEST FOR PROPOSALS

FOR

COMMUNITY-BASED RENEWABLE ENERGY PROJECTS

FOR

LOW- AND MODERATE-INCOME SUBSCRIBERS

O‘AHU, MAUI, AND HAWAI‘I ISLAND

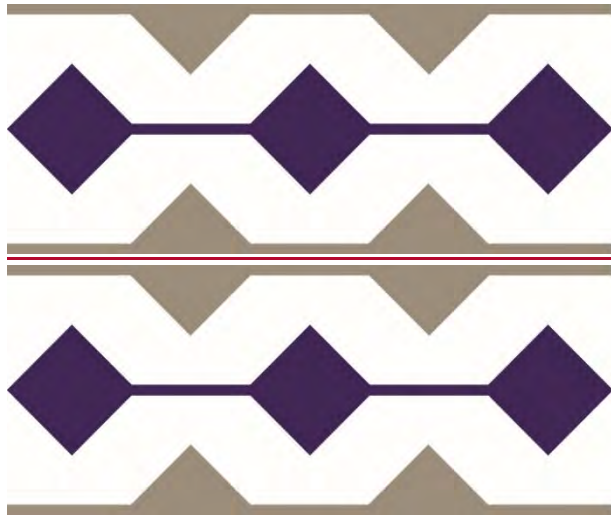
~~AUGUST 25, 2021~~

FEBRUARY 23, 2022

Docket No. 2015-0389

*Appendix H – Interconnection Facilities Cost
and Schedule Information*

Hawaiian Electric Company
APPENDIX H - INTERCONNECTION FACILITIES COST AND SCHEDULE
INFORMATION



**Hawaiian
Electric**

**Hawaiian
Electric**

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To assist Proposers in estimating costs of potential projects, the information provided in this document can be used to approximate the cost for Company-Owned Interconnection Facilities (COIF), including substation, telecommunications, security, transmission and distribution lines, and project management. The Company will develop assumed costs for interconnection based on this information and will use these assumed costs as a proxy in the evaluation process. Section

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~~A.~~

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/>~~)(<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. ~~1919~~ [and applicable RFP requirements](#) 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

For the purposes of the LMI RFP, the Company will be responsible for the costs of Company-Owned Interconnection Facilities (COIF), subject to any limitations, as described in Section 1. Company shall be responsible for building the COIF, except to the extent set forth in this Appendix H. For those portions of the COIF to be constructed by the Selected Proposers, Company shall reimburse the selected Proposers for such work. Selected Proposers shall confirm the scope and cost of work for COIF prior to starting any such work. The Company will not be responsible for reimbursing any costs related to work deemed excessive and/or corrective in nature. The information below will help to clarify the responsibilities of the Company and the Proposer for COIF.

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.,~~2~~ Power Purchase Agreement, Standard Interconnection Agreement, etc.).

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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. CSAT – Control System Acceptance Test
4. CT – Current Transformer
5. DFR – Digital Fault Recorder
6. DTT – Direct Transfer Trip
7. FS – Facility Study
8. GCP – Grid Connection Point
9. HVAC – Heating, Ventilation, and Air Conditioning
10. IRS – Interconnection Requirements Study (includes both SIS and FS)
11. NDA - Non-Disclosure Agreement
12. OPGW- Optical Ground Wire
13. POI – Point of Interconnection
14. PT – Potential Transformer
15. RTU – Remote Terminal Unit
16. SCADA – Supervisory Control and Data Acquisition
17. SIS – System Impact Study
18. UFLS – Under-Frequency Load Shed

1.3 – FACILITIES AT PROPOSER SITE

1. Proposer shall be responsible for obtaining all permitting and land rights.
2. Except for costs agreed to be paid by Company under Items 3, 4, and 5 below, Proposer shall be responsible for the design, procurement, and construction of all facilities at the Proposer’s project site. This may include, but is not limited to:
 - a. Civil infrastructure and site work (grading, trenching, manholes/handholes, conduits, cable trench, concrete pads/foundations, fencing, roadways/driveways, ground grid, lighting, etc.)
 - b. Communications cabinets and infrastructure (poles/towers for antenna/microwave dish, equipment pads, conduits, foundations, HHs, AC power, grounding, etc.)
 - c. Security systems/equipment
 - d. T&D infrastructure drawings showing the route of OH and UG lines and equipment locations at the project site

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- i. Any UG conduits for a T&D line extension that need to extend off the property should stubout at the property line for the Company to connect to
3. Company will reimburse Proposer for construction costs of non-electrical COIF installed by the Proposer, which includes civil infrastructure (ductlines, manholes, handholes, etc.) required for the line extension from the GCP to the Proposer's project. Company will not reimburse for grading/site prep for a new switching station.
4. Company shall be responsible for costs related to the design, procurement, construction, and testing of electrical COIF at the project site. This may include, but is not limited to:
 - a. Equipment (circuit breakers, transformers, relays, switches, arresters, batteries, HVAC, RTU, DFR, DTT, meters, PTs, CTs, etc.)
 - b. Pre-wired control equipment enclosure/cabinet
 - c. Communications equipment
 - d. Electrical work (bussing, wiring, lightning protection, fiber optic cable, etc.)
5. Company is responsible for Betterment costs.

~~1.4 [NOT USED]~~

1.4 – PROPOSER FACILITY SERVICE POWER AND COMPANY SWITCHING STATION POWER

1. For all distribution-level service power, Proposer shall submit an Electrical Service Request Form via www.hawaiianelectric.com. Please refer to the Large Customer New Service Request brochure for milestones and estimated timeline.
2. Proposer shall be responsible for all costs related to providing service power to the Proposer's facility. Facility service power is NOT a part of COIF, but Proposers should account for it in the total costs to build the project.
3. Station power is required if a new Company switching station or substation is built to allow the interconnection of the Proposer's project. Company shall be responsible for all costs related to providing the primary station power source per Item 4a below. Proposer shall be responsible for all costs related to providing the primary station power source per Item 4b below. 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, transformers, etc.)
 - c. Underground electrical facilities (cables, splices, termination, grounding, transformers, switchgears, etc.)
 - d. Step-down transformer

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- 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
- 4. 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
- 5. For 69kV interconnections, Company shall be responsible for all costs related to the backup station power source.
- 6. For 138kV interconnections, Proposer shall be responsible for all costs related to providing a backup station power source.
- 7. Proposer shall be responsible for obtaining all permitting and land rights.

1.5 – REMOTE SUBSTATION FACILITIES

- 1. Company shall be responsible for all costs. This may include, but is not limited to:
 - a. Betterment
 - 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.)
 - h. Telecommunications equipment

1.6 – LINE EXTENSION FROM GRID CONNECTION POINT (GCP) TO PROPOSER SITE

- 1. Company shall be responsible for the design, procurement, and construction of the line extension between the GCP and the Proposer site. This may include, but is not limited to:
 - a. Overhead electrical facilities (poles, conductor, insulators, crossarms, guy wires, etc.)
 - b. Underground electrical facilities (cables, splices, terminations, grounding, transformers, switchgears, etc.)

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- c. Civil/structural work (design, survey, grading, trenching, conduits, manholes/handholes, concrete pads, concrete pier foundations, pole hole excavation, etc.)
 - d. Vegetation trimming and traffic control
 - e. Betterment
2. Proposer shall be responsible for obtaining all permitting and land rights.

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 Company shall be responsible for all costs related to the design, procurement, construction, and testing of the ADSS fiber or OPGW from the nearest existing splice point to the Proposer site. This may include, but is not limited to:
 - a. Company fiber-optic cable (ADSS fiber cable or OPGW shieldwire) and associated equipment/hardware (splice boxes, innerduct, vibration dampers, etc.)
 - b. Splicing and Testing of fiber strands
 - c. Pole replacements and additional equipment if needed for additional capacity
 - d. Civil/structural work outside of Proposer’s project site (design, survey, grading, trenching, conduits, manholes/handholes, concrete pads, concrete pier foundations, pole hole excavation, etc.)
 - e. Vegetation trimming and traffic control
 - f. Betterment
2. Company will provide the location(s) of the existing fiber splice point(s) after the Proposer has signed a Non-Disclosure Agreement (NDA).
- 2.3. Proposer shall be responsible for obtaining all permitting and land rights.

1.9 – TELECOMMUNICATION FACILITIES

1. Company shall be responsible for design, procurement, construction, and testing of Company-owned telecommunication facilities. This may include, but is not limited to:
 - a. Fiber cable to the “meet point” outside of Proposer’s facility and termination at Company’s nearest point of interconnection.

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- b. Microwave radio or wireless radio equipment at the Proposer's facility and at remote site(s) (e.g., microwave dish/equipment, waveguide, cables, antenna system, etc.).
 - c. Telecommunication service equipment required to provide circuits to support various applications at the Proposer's facility.
2. Proposer shall be responsible for all costs related to the following:
- a. A telecommunication cabinet required to accommodate the telecommunication equipment at the Proposer's facility.
 - b. Telecommunication power at the Proposer's facility (e.g., battery racks, banks, fuse panels, and associated power system equipment).
 - c. Ordering and installing a 3rd party leased service at the site. This may include, but is not limited to the initial cost to establish leased line(s) required for the project, monthly recurring leased cost of the service(s), and on-going maintenance of the service(s).
3. Proposer shall be responsible for obtaining all permitting and land rights.

1.10 – CONTROL SYSTEM ACCEPTANCE TEST (CSAT)

1. Proposer shall be responsible for all costs related to the CSAT, including all Company costs in support of the Proposer's CSAT.

1.11 – PROPOSER PAYMENTS

1. Proposer is responsible for payments to the Company related to service contracts for service power.

SECTION 2 – INTERCONNECTION REQUIREMENTS AND COSTS

~~To assist Proposers in assessing the impacts of location on potential projects, the~~ 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. The Company will develop assumed costs for interconnection based on this information and will use these assumed costs as a proxy in the evaluation process.~~ This information is based on typical interconnections as shown in Attachments 1 through 4 of 2-7 to this Appendix H referenced below. 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.

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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-differences. Please see Attachment 51 for examples of how to apply the per-unit costs provided. All costs provided are Company costs only and 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—For the purposes of Section 2, voltages are classified as follows:

- Distribution (12kv And Below)– 12kV and below for O‘ahu, Maui, and Hawai‘i Island.
- Subtransmission – 46kV for O‘ahu.
- Transmission – 138kV for O‘ahu and 69kV for Maui and Hawai‘i Island.

2.1 – SUBSTATION & METER BASELINE COSTS

A. Typical Distribution 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 (Distribution Primary Interconnection for 1 MW and larger) of this Appendix H for single line diagrams depicting the required interconnection to the Company’s system. Please see Attachment 5 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 Projects ≥ 250 kW and < 1 MW (Attachment 1)**~~

**TYPICAL DISTRIBUTION SECONDARY INTERCONNECTION
 FOR PROJECTS ≥ 250 KW AND < 1 MW (ATTACHMENT 1)**

The costs in Section 2.1A are reflective of typical standard interconnections at distribution voltages. Costs provided in this section assume the COIF will be built by the Company.

Item	Description	Cost
<u>Substation & Meter Baseline Costs</u>		

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Item	Description	Cost
1	All components shown in Attachment 1 except for the T&D Baseline2 – Projects ≥ 250 kW and Distribution line extension costs. <ul style="list-style-type: none"> • Includes costs for engineering, materials, construction, and testing. • Distribution line extension—See Items 2, 3, and 4 and Section 2.1D. • Telecommunications requirements—See Section 2.1E. • Security requirements—See Section 2.1F.< 1 MW Secondary Interconnection 	\$390,000
2	Attachment 3 – Projects ≥ 250 kW and < 1 MW Primary Interconnection	\$390,000
3	Attachment 4 – Projects ≥ 1 MW Primary Interconnection	\$476,000
4	Notes: <ul style="list-style-type: none"> a) Applicable to O‘ahu, Maui, Components at Company’s remote substation, including DTT and Hawai‘i Island. b) Assumes construction in 2022. c) Civil infrastructure and space for COIF provided by Proposer. d) Substation relay protection requirements have not been identified so costs are based upon typical line protection relaying requirements. e) Does not include costs for permitting, land rights, or a Relay Coordination Study. – Projects ≥ 1 MW (O‘ahu)	\$270,000 / site
T&D Baseline Costs		
2	Tap to OH (secondary interconnection) <ul style="list-style-type: none"> • 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 	\$273,000
35	Tap to UG Main (secondary interconnection) <ul style="list-style-type: none"> • 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 • Assumes padmount switch is within 10ft of the Company-owned transformer Components at Company’s remote substation, including DTT and relaying requirements – Projects ≥ 1 MW (Maui/Hawai‘i) 	\$350170,000 / site
4	Tap to UG Fused Feeder (secondary interconnection)	\$256,000

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Item	Description	Cost
	<ul style="list-style-type: none"> • 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 	
<p><u>Notes:</u></p> <ul style="list-style-type: none"> a) Applicable to O‘ahu, Maui, and Hawai‘i Island. b)a) Assumes construction Costs provided are in 2022 dollars. c) 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. d) Includes 100ft UG line extension of one feeder. e) OH Line extension — Add applicable costs per Items 30, 31, and/or 32. f) UG Line extension (if > 100ft) — Add costs per Item 33. g) Additional OH/UG transitions — Add costs per Item 37. h) Secondary voltage from Proposer is assumed to be 480Y/277V in these scenarios. i) Maximum of 11 secondary connections is allowed on the Company-owned transformer. j) Assumes Proposer switchgear is within 10ft of the Company-owned transformer. b) OH/UG route and civil<u>Includes Company costs for engineering, materials, construction, and testing of Substation & Meter components shown in the referenced attachment.</u> c) Does NOT include T&D, Project Management, Telecommunications, or Security costs. k)d) Civil infrastructure drawings and space for COIF provided by Proposer. e) Civil infrastructure (pads, MH/HHs, conduits, etc.) at Proposer’s site is designed, procured, and installed by Proposer. Estimated construction<u>Substation relay protection requirements have not been identified so costs are based upon typical line protection relaying requirements.</u> l) Does not include costs are included. m) Includes review of Proposer civil infrastructure designs and materials and inspection of Proposer civil infrastructure construction. n)f) Does not include vegetation clearing, grading, dewatering, for permitting or, land rights, or a Relay Coordination Study. g) Item 4 assumes the substation is not SCADA enabled. h) Item 5 assumes the substation is SCADA enabled. i) For T&D costs (including service power costs) — See Section 2.2. j) For Project Management costs — See Section 2.3. k) For Telecommunications costs — See Section 2.4. l) For Security requirements — See Section 2.5. 		

B. Typical Distribution Primary Subtransmission Interconnection For Projects ≥ 250 kW and < 1 MW (Attachment

~~B.~~ The costs in Section 2).1B are reflective of typical standard interconnections at subtransmission voltages. Costs provided in this section assume the COIF will be built by the Company.

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TYPICAL DISTRIBUTION PRIMARY INTERCONNECTION FOR PROJECTS ≥ 250 KW AND < 1 MW (ATTACHMENT 2)		
Item	Description	Cost
Substation & Meter Baseline Costs		
1015	Components on the Company side of the demarcation as shown in Attachment 2 <ul style="list-style-type: none"> • Includes costs for engineering, materials, construction, and testing. • Distribution line extension—See Items 11, 12, and 13 and Section 2.1D. • Telecommunications requirements—See Section 2.1E. • Security requirements—See Section 2.1F.5 – 46kV Interconnection (O’ahu) 	\$390,796,000
21	Notes: <ul style="list-style-type: none"> a) Applicable to O’ahu, Maui, Components at Company’s 46kV remote substation, including DTT and Hawai’i Island. b) Assumes construction in 2022. c) Civil infrastructure and space for COIF provided by Proposer. d) Substation relay protection requirements have not been identified so costs are based upon typical line protection relaying requirements. 	\$424,000 / site
T&D Baseline Costs		
11	Tap to OH (primary interconnection) <ul style="list-style-type: none"> • 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 	\$164,000
12	Tap to UG Main (primary interconnection) <ul style="list-style-type: none"> • 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 • Assumes padmount switch is within 10ft of the Proposer switchgear 	\$236,000
13	Tap to UG Fused Feeder (primary interconnection) <ul style="list-style-type: none"> • If Project < 100A—Includes costs for engineering, materials, construction for UG tap, 100ft UG line extension (1 feeder), and primary termination to Proposer switchgear • If Project ≥ 100A—Not allowed 	\$139,000

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TYPICAL DISTRIBUTION PRIMARY INTERCONNECTION FOR PROJECTS ≥ 250 KW AND < 1 MW (ATTACHMENT 2)		
Item	Description	Cost
Notes:		
	a) Applicable to O‘ahu, Maui, and Hawai‘i Island. b) a) Assumes construction Costs provided are in 2022 dollars. c) 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. d) Assumes Proposer switchgear is within 100ft of the GCP. e) Includes 100ft UG line extension of one feeder. f) OH Line extension — Add applicable costs per Items 30, 31, and/or 32. g) UG Line extension (if > 100ft) — Add costs per Item 33. h) Additional OH/UG transitions — Add costs per Item 37. b) OH/UG route and civil Includes Company costs for engineering, materials, construction, and testing of Substation & Meter components shown in the referenced attachment. c) Includes Company costs for engineering, materials, construction, and testing for Company-responsible items (See Section 3) related to Substation & Meter components as shown in the referenced attachment. d) Does NOT include T&D, Project Management, Telecommunications, or Security costs. †) e) Civil infrastructure drawings and space for COIF provided by Proposer. j) Civil infrastructure (pads, MH/HHs, conduits, etc.) at Proposer’s project site is designed, procured, and installed by Proposer. Estimated construction costs are included. k) Includes review of Proposer civil infrastructure designs and materials and inspection of Proposer civil infrastructure construction. f) Substation relay protection requirements have not been identified so costs are based upon typical line protection relaying requirements. g) Does not include <u>vegetation clearing, grading, dewatering, costs for permitting or, land rights, or a Relay Coordination Study.</u> h) For T&D costs (including service power costs) – See Section 2.2. i) For Project Management costs – See Section 2.3. j) For Telecommunications costs – See Section 2.4. †) k) For Security requirements – See Section 2.5.	

**C. Typical ~~Distribution Primary~~ Transmission Interconnection ~~For Projects ≥ 1 MW~~
 (Attachment 3)**

**TYPICAL DISTRIBUTION PRIMARY INTERCONNECTION
FOR PROJECTS ≥ 1 MW (ATTACHMENT 3)**

The costs in Section 2.1C are reflective of typical standard interconnections at transmission voltages. Costs provided in this section assume the COIF will be built by the Company.

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Item	Description	Cost
Project Management Costs		
20	Project Management Costs <ul style="list-style-type: none"> Includes facilitation, coordination, and support for Engineering Design, Procurement, Construction (start of construction through back feed energization), and Developer system testing and CSAT 	\$360,000
30	Notes: a) Applicable to O'ahu, Maui, and Hawai'i Island. b) Assumes construction in 2022. c) Assumes 22-month duration. <ul style="list-style-type: none"> 18-month duration to GCOD. 4 months for Closeout. d) Assumes work is done in parallel with Attachment 6 – 69kV Interconnection Project (Maui/Hawai'i Island)	\$9,600,000
32	Attachment 7 – 138kV Interconnection (O'ahu)	\$11,710,000
Remote Substation & Meter Baseline Costs		
34a	69kV line relay upgrades	\$210,000 each
2134b	Components on the Company side of the demarcation as shown in Attachment 3 <ul style="list-style-type: none"> Includes engineering, materials, construction, and testing. Applicable to O'ahu, Maui, and Hawai'i Island. Civil infrastructure and space for COIF provided by Proposer. Distribution line extension—See Items 24, 25, and 26 and Section 2.1D. Telecommunications requirements—See Section 2.1E. Security requirements—See Section 2.1F. 69kV circuit switcher and differential protection per transformer/switchgear 	\$476,270,000 each
34c	69kV circuit breaker replacement	\$340,000 each
2234d	O'ahu remote substation work (at existing Company substation) <ul style="list-style-type: none"> Includes engineering, materials, construction, and testing for DTT and relay requirements Assumes Company substation is not SCADA enabled 69kV 3ph line PTs required for Synch Check 	\$270,110,000 / site each

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Item	Description	Cost
2336	Maui / Hawai'i Island Components at Company's 138kV remote substation work (at existing Company substation) <ul style="list-style-type: none"> • Includes engineering, materials, construction, and testing for, including DTT and relay relaying requirements • Assumes Company substation is already SCADA enabled (O'ahu) 	\$170460,000 / site each
Notes: <ul style="list-style-type: none"> a) Assumes construction in 2022. b) Substation relay protection requirements have not been identified so costs are based upon typical line protection relaying requirements. 		
T&D Baseline Costs		
24	Tap to OH (primary interconnection) <ul style="list-style-type: none"> • 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 	\$164,000
25	Tap to UG Main (primary interconnection) <ul style="list-style-type: none"> • 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 • Assumes padmount switch is within 10ft of the Proposer switchgear 	\$236,000
26	Tap to UG Fused Feeder (primary interconnection) <ul style="list-style-type: none"> • If Project < 100A — Includes costs for engineering, materials, construction for UG tap, 100ft UG line extension (1 feeder), and primary termination to Proposer switchgear • If Project ≥ 100A — Not allowed 	\$139,000

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Item	Description	Cost
<p><u>Notes:</u></p> <p>a) Applicable to O‘ahu, Maui, and Hawai‘i Island.</p> <p>b)a) Assumes construction Costs provided are in 2022 dollars.</p> <p>c) Interconnection will typically require either Item 24, 25, or 26 depending on the existing facilities in the area and the specific route of the line extension.</p> <p>d) Assumes Proposer switchgear is within 100ft of the GCP.</p> <p>e) Includes 100ft UG line extension of one feeder.</p> <p>f) OH Line extension — Add applicable costs per Items 30, 31, and/or 32.</p> <p>b) UG Line extension (if > 100ft) — Add costs per Item 33 for all projects ≤ 200A. For projects > 200A, add costs per Includes Company costs for engineering, materials, construction, and testing of Substation & Meter components shown in the referenced attachment.</p> <p>c) Includes Company costs for engineering, materials, construction, and testing for Company-responsible items (See Section 3) related to Substation & Meter components as shown in the referenced attachment.</p> <p>d) Does NOT include T&D, Project Management, Telecommunications, or Security costs.</p> <p>g) Civil Item 35.</p> <p>h) Additional OH/UG transitions — Add costs per Item 37.</p> <p>i)e) OH/UG route and civil infrastructure drawings and space for COIF provided by Proposer.</p> <p>f) Civil infrastructure (pads, MH/HHs, conduits, etc.) at Proposer’s project site is designed, procured, and installed by Proposer. Estimated construction Substation relay protection requirements have not been identified so costs are based upon typical line protection relaying requirements.</p> <p>j) — Does not include costs are included.</p> <p>k) Includes review of Proposer civil infrastructure designs and materials and inspection of Proposer civil infrastructure construction.</p> <p>l)g) Does not include vegetation clearing, grading, dewatering, for permitting or, land rights, or a Relay Coordination Study.</p> <p>h) For T&D costs (including service power costs) – See Section 2.2.</p> <p>i) For Project Management costs – See Section 2.3.</p> <p>j) For Telecommunications costs – See Section 2.4.</p> <p>k) For Security requirements – See Section 2.5.</p>		

2.2 – T&D BASELINE AND LINE EXTENSION COSTS

A. Typical Distribution Interconnection Baseline

The costs in Section 2.2A are the baseline T&D costs for interconnections at distribution voltages. It includes 100ft of UG line extension. For any extensions > 100ft, please add costs per Section 2.2D. Costs provided in this section assume the COIF will be built by the Company.

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<u>Item</u>	<u>Description</u>	<u>Cost</u>
<u>100</u>	<u>Secondary Interconnect – Tap to OH (Attachment 2)</u> <ul style="list-style-type: none"> <u>Includes 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</u> 	<u>\$283,000</u>
<u>101</u>	<u>Secondary Interconnect – Tap to UG Main (Attachment 2)</u> <ul style="list-style-type: none"> <u>Includes 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.</u> 	<u>\$362,000</u>
<u>102</u>	<u>Secondary Interconnect – Tap to UG Fused Feeder (Attachment 2)</u> <ul style="list-style-type: none"> <u>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</u> 	<u>\$266,000</u>
<u>103</u>	<u>Primary Interconnect – Tap to OH (Attachments 3 and 4)</u> <ul style="list-style-type: none"> <u>Includes 3ph riser fuses (100A max) or disconnects, 1 wood pole, 100ft UG line extension (1 feeder), and primary termination to Proposer switchgear</u> 	<u>\$172,000</u>
<u>104</u>	<u>Primary Interconnect – Tap to UG Main (Attachments 3 and 4)</u> <ul style="list-style-type: none"> <u>Includes UG tap, 100ft UG line extension (1 feeder), padmount switch (fuse 100A max), and primary cables and terminations between switch and Proposer switchgear</u> 	<u>\$245,000</u>
<u>105</u>	<u>Primary Interconnect – Tap to UG Fused Feeder (Attachments 3 and 4)</u> <ul style="list-style-type: none"> <u>If Project < 100A – Includes UG tap, 100ft UG line extension (1 feeder), and primary termination to Proposer switchgear</u> <u>If Project ≥ 100A – Not allowed</u> 	<u>\$147,000</u>
<u>Notes:</u>		
<ul style="list-style-type: none"> <u>a) Costs provided are in 2022 dollars.</u> <u>b) Includes costs for engineering, materials, and construction for Company-responsible items.</u> <u>c) Interconnection will typically require one of these items depending on the existing facilities in the area and/or the type of construction for any line extension.</u> <u>d) Includes 100ft UG line extension of one feeder (minimum requirement).</u> <u>e) OH Line extension – Add applicable costs per Items 140, 141, and/or 142.</u> <u>f) UG Line extension (if > 100ft) – Add costs per Items 143 or 145.</u> <u>g) Additional OH/UG transitions – Add costs per Item 147.</u> <u>h) Secondary voltage from Proposer is assumed to be 480Y/277V in these scenarios.</u> <u>i) Maximum of 11 secondary connections is allowed on the Company-owned transformer.</u> <u>j) Assumes padmount equipment is within 10ft of each other.</u> <u>k) OH/UG route and civil infrastructure drawings provided by Proposer.</u> <u>l) Civil infrastructure (pads, MH/HHs, conduits, etc.) at Proposer’s site is designed, procured, and installed by Proposer.</u> <u>m) Includes review of Proposer civil infrastructure designs and materials and inspection of Proposer civil infrastructure construction.</u> <u>n) Does not include vegetation clearing, grading, dewatering, permitting or land rights.</u> 		

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B. Typical Subtransmission Interconnection Baseline

The costs in Section 2.2B are the baseline T&D costs for interconnections at subtransmission voltages. It includes 100ft of OH or UG line extension. For any extensions > 100ft, please add costs per Section 2.2D. Costs provided in this section assume the COIF will be built by the Company and apply to 46kV (O‘ahu) only.

<u>Item</u>	<u>Description</u>	<u>Cost</u>
<u>120</u>	<u>OH to OH Final Tap by Company (Attachment 5)</u> <ul style="list-style-type: none"> <u>Includes 1 wood pole, 1 span (100ft) OH line extension toward Proposer facility and assumes Proposer designs, procures, and installs the required gang-operated switch</u> 	<u>\$85,000</u>
<u>121</u>	<u>OH to UG Final Tap by Company (Attachment 5)</u> <ul style="list-style-type: none"> <u>Includes 1 wood pole, 1 gang-operated switch, 100ft UG line extension and splice in Proposer-installed manhole</u> 	<u>\$409,000</u>
<u>122</u>	<u>UG to UG Final Tap by Company (Attachment 5)</u> <ul style="list-style-type: none"> <u>Includes cut and splicing in existing Company manhole, a 100ft UG line extension and terminations at a Proposer-installed riser pole for one set of cables, and 100ft UG line extension and splices in a Proposer-installed manhole</u> 	<u>\$542,000</u>

Notes:

- a) Costs provided are in 2022 dollars.
- b) Includes Company costs for engineering, materials, construction, and testing of Company-responsible items.
- c) Interconnection will typically require one of these items depending on the existing facilities in the area and/or the type of construction for any line extension.
- d) Includes a 100ft OH or UG line extension.
- e) OH or UG line extensions (if > 100ft) – Add applicable costs per Section 2.2D.
- f) OH/UG route and civil infrastructure drawings provided by Proposer.
- g) Civil infrastructure (pads, MH/HHs, conduits, etc.) at Proposer’s site is designed, procured, and installed by Proposer. Estimated construction costs are included.
- h) Includes review of Proposer civil infrastructure designs and materials and inspection of Proposer civil infrastructure construction.
- i) Does not include vegetation clearing, grading, dewatering, permitting or land rights.

C. Typical Transmission Interconnection Baseline

The costs in Section 2.2C are the baseline T&D costs for interconnections at transmission voltages. It includes 100ft of OH or UG line extension. For any extensions > 100ft, please add costs per Section 2.2D. Costs provided in this section assume the COIF will be built by the Company.

<u>Item</u>	<u>Description</u>	<u>Cost</u>
<u>69kV – Maui / Hawai‘i Island</u>		

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Item	Description	Cost
<u>130</u>	<u>69kV OH to OH Final Tap by Company (Attachment 6)</u> <ul style="list-style-type: none"> <u>Includes 2 wood poles, 1 span (100ft) OH line extension from each new pole toward Proposer facility and the removal of existing conductors between the new poles</u> 	<u>\$140,000</u>
<u>138kV – O‘ahu</u>		
<u>133</u>	<u>138kV OH to OH Final Tap by Company (Attachment 7)</u> <ul style="list-style-type: none"> <u>Includes 2 steel poles, 1 span (100ft) OH line extension from each new pole toward Proposer facility and the removal of existing conductors between the new poles</u> 	<u>\$1,079,000</u>
Notes: a) <u>Costs provided are in 2022 dollars.</u> b) <u>Includes Company costs for engineering, materials, construction, and testing of Company-responsible items.</u> c) <u>Interconnection will typically require one of these items depending on the existing facilities in the area and/or the type of construction for any line extension.</u> d) <u>OH or UG line extensions (if > 100ft) – Add applicable costs per Section 2.2D.</u> e) <u>OH/UG route and civil infrastructure drawings provided by Proposer.</u> f) <u>Civil infrastructure (pads, MH/HHs, conduits, etc.) at Proposer’s site is designed, procured, and installed by Proposer.</u> g) <u>Includes review of Proposer civil infrastructure designs and materials and inspection of Proposer civil infrastructure construction.</u> h) <u>Does not include vegetation clearing, grading, dewatering, permitting or land rights.</u>		

D. Distribution Line Extension Extensions and Upgrades

∅. The costs in Section 2.2D are typical per unit costs for T&D line extensions using typical assumptions based on the Company’s current standards and practices. Costs provided in this section assume the COIF will be built by the Company.

12kV and Below

<u>Item</u>	<u>DISTRIBUTION LINE EXTENSION COSTS</u>	<u>Description</u>	<u>Cost</u>
<u>145</u>		<u>OH accessible (200ft spans, #1/0 AAC)</u>	<u>\$684,000 / mile</u>
<u>146</u>		<u>OH underbuild accessible (200ft spans, #1/0 AAC)</u>	<u>\$438,000 / mile</u>
<u>147</u>		<u>OH inaccessible (250ft spans, #1/0 AAC)</u>	<u>\$1,443,000 / mile</u>
<u>148</u>		<u>UG feeder ≤ 200A (200ft spans, #4/0 AL PEICN)</u>	<u>\$5,505,000 / mile</u>
<u>150</u>		<u>UG feeder > 200A (200ft spans, 1000KCM AL PEICN)</u>	<u>\$6,881,000 / mile</u>

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<u>Item</u> DISTRIBUTION LINE EXTENSION COSTS	<u>Description</u>	<u>Cost</u>
<u>152</u>	<u>3ph riser w/ disconnects (including pole/anchor)</u>	<u>\$39,000 each</u>
<u>153</u>	<u>Upgrade existing OH lines (200ft. accessible)</u>	<u>\$719,000 / mile</u>

Notes:

- a) Costs provided are in 2022 dollars.
- b) OH/UG route drawings provided by Proposer.
- c) Civil infrastructure (pads, MH/HHs, conduits, etc.) at Proposer's site is designed, procured, and installed by Proposer. Civil infrastructure outside of Proposer's site is designed, procured, and installed by Company. Estimated construction costs are included.
- d) Does not include vegetation clearing, grading, dewatering, permitting or land rights.
- e) Includes engineering, materials, construction labor and contractor costs.
- f) OH assumes wood poles and 3ph overhead conductor with neutral underbuild.
- g) Accessible assumes vehicles can be used during construction.
- h) Inaccessible assumes helicopters are needed during construction.
- i) Item 146 assumes no poles need to be replaced.

46kV (O'ahu) and 69kV (Maui/Hawai'i)

<u>Item</u>	<u>Description</u>	<u>Cost</u>
30 <u>163</u>	OH accessible (200ft <u>250ft spans, #1/0556.5 AAC)</u>	\$663 <u>964,000 / mile</u>
<u>164</u>	<u>OH inaccessible (250ft spans, 556.5 AAC)</u>	<u>\$1,808,000 / mile</u>
31 <u>165</u>	OH underbuild <u>Overbuild on existing accessible 12kV (200ft spans, #1/0556.5 AAC)</u>	\$422 <u>1,327,000 / mile</u>
32 <u>166</u>	OH <u>Overbuild on existing inaccessible 12kV (250ft spans, #1/0556.5 AAC)</u>	\$1,410 <u>2,261,000 / mile</u>
33 <u>167</u>	UG feeder ≤ 200A (200ft <u>400' avg spans, #4/01500KCM AL PEICN)</u>	\$5,174 <u>7,243,000 / mile</u>
35	UG feeder > 200A (200ft spans, 1000KCM AL PEICN)	\$6,474,000 / mile
37 <u>168</u>	3ph riser w/ disconnects <u>(including pole/anchor)</u>	\$387 <u>1,000 each</u>
<u>169</u>	<u>OH switch</u>	<u>\$47,000 each</u>
<u>170</u>	<u>Upgrade existing OH lines (250ft spans, accessible)</u>	<u>\$754,000 / mile</u>

Notes:

- ~~a) Applicable to O'ahu, Maui, and Hawai'i Island.~~
- ~~b) Assumes construction~~Costs provided are in 2022.
- ~~c) OH assumes wood poles and 3ph overhead conductor with neutral underbuild.~~
- ~~d) Accessible assumes vehicles can be used during construction.~~
- ~~e) Inaccessible assumes helicopters are needed during construction.~~
- ~~f) Item 31 assumes no poles need to be replaced.~~
- ~~g) Includes engineering, materials, construction labor for electrical work, inspection for UG civil infrastructure, and contractor costs for pole/anchor digging dollars.~~

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Item	Description	Cost
	<u>h)b) OH/UG route drawings provided by Proposer.</u> <u>i)c) Civil infrastructure (pads, MH/HHs, conduits, etc.) at Proposer’s site is designed, procured, and installed by Proposer. Civil infrastructure outside of Proposer’s project site is designed, procured, and installed by Company. Estimated construction costs are included.</u> <u>j)d) Does not include vegetation clearing, grading, dewatering, permitting or land rights.</u> <u>e) Includes engineering, materials, construction labor and contractor costs.</u> <u>f) OH assumes wood poles.</u> <u>g) Accessible assumes vehicles can be used during construction.</u> <u>h) Inaccessible assumes helicopters are needed during construction.</u> <u>i) Items 165 and 166 assume all poles need to be replaced.</u> <u>j) Item 170 assumes no poles need to be replaced.</u>	

138kV (O’ahu)

Item	Description	Cost
178	<u>OH accessible (400ft spans, 2-556.5 AAC)</u>	<u>\$6,800,000 / mile</u>
179	<u>OH inaccessible (600ft spans, 2-556.5 AAC)</u>	<u>\$10,515,000 / mile</u>
180	<u>Overbuild on existing accessible 46kV (400ft spans, 2-556.5 AAC)</u>	<u>\$6,960,000 / mile</u>
181	<u>UG feeder (1,000ft spans, 2-1500KCM CU XLPE)</u>	<u>\$14,111,000 / mile</u>
182	<u>3ph riser (including pole/foundation)</u>	<u>\$824,000 each</u>
183	<u>Upgrade existing OH lines (400ft spans, accessible)</u>	<u>\$1,764,000 / mile</u>
<u>Notes:</u> <u>a) Costs provided are in 2022 dollars.</u> <u>b) OH/UG route drawings provided by Proposer.</u> <u>c) Civil infrastructure (pads, MH/HHs, conduits, etc.) at Proposer’s site is designed, procured, and installed by Proposer. Civil infrastructure outside of Proposer’s site is designed, procured, and installed by Company. Estimated construction costs are included.</u> <u>d) Does not include vegetation clearing, grading, dewatering, permitting or land rights.</u> <u>e) Includes engineering, materials, construction labor and contractor costs.</u> <u>f) OH assumes steel poles with drilled pier anchor bolt foundations.</u> <u>g) Accessible assumes vehicles can be used during construction.</u> <u>h) Inaccessible assumes helicopters are needed during construction.</u> <u>i) Item 180 assumes all poles need to be replaced.</u> <u>j) Item 183 assumes no poles need to be replaced.</u>		

E. Service Power

Section 2.2E provides typical requirements and costs for distribution-level service power to the Proposer’s facility and/or the proposed Company switching station. Execution of a proposal letter provided by Company in response to Proposer’s electrical service request, and separate from the Interconnection Agreement, will be required for service power.

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Service power to the Proposer’s facility shall emanate from an existing distribution line via new Company overhead and/or underground facilities to the Proposer’s service connection point.

For 138kV interconnections, primary station service power requires a line extension and a separate padmount transformer at the proposed Company switching station. Proposer is responsible for providing a backup station power source.

<u>Item</u>	<u>Description</u>	<u>Cost</u>
<u>188</u>	<u>Facility or Station Service Power</u> <ul style="list-style-type: none"> • <u>Includes 100ft UG 12kV line extension of two (2) feeders and one (1) padmount transformer and assumes no switchgear is required</u> 	<u>\$81,000 each</u>
<u>189</u>	<u>Distribution OH accessible (200ft spans, #1/0 AAC)</u>	<u>\$655,000 / mile</u>
<u>190</u>	<u>Distribution OH underbuild accessible (200ft spans, #1/0 AAC)</u>	<u>\$420,000 / mile</u>
<u>191</u>	<u>Distribution OH inaccessible (250ft spans, #1/0 AAC)</u>	<u>\$1,382,000 / mile</u>
<u>192</u>	<u>Distribution UG double feeder (electrical only)</u>	<u>\$1,014,000 / mile</u>
<u>193</u>	<u>Distribution 3ph double riser w/ fuses (including pole/anchor)</u>	<u>\$38,000 each</u>

Notes:

- a) Costs provided are in 2022 dollars.
- b) OH/UG route and civil infrastructure drawings provided by Proposer.
- c) Civil infrastructure (pads, MH/HHs, conduits, etc.) is designed, procured, and installed by Proposer.
- d) Does not include vegetation clearing, grading, dewatering, permitting or land rights.
- e) Includes engineering, materials, construction labor for electrical work, and inspection of UG civil infrastructure.
- f) OH line extension – Add applicable costs per Items 189-191.
- g) UG line extension costs (if > 100ft) – Add costs per Item 192.
- h) Additional OH/UG transitions – Add costs per Item 193.
- i) OH assumes wood poles and 3ph overhead conductor with neutral underbuild.
- j) Item 190 assumes no poles need to be replaced.
- k) Accessible assumes vehicles can be used during construction.
- l) Inaccessible assumes helicopters are needed during construction.

For 69kV interconnections, the cost for primary and backup station power is included in the Substation baseline costs in Section 2.1C.

2.3 – PROJECT MANAGEMENT BASELINE COSTS

Section 2.3 provides typical Project Management costs for interconnection projects which require a dedicated project manager. The total costs will be dependent on the Proposer’s schedule and durations for engineering, construction, and testing/closeout.

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A. Distribution Projects ≥ 1 MW (O‘ahu / Maui / Hawai‘i Island)

<u>Item</u>	<u>Description</u>	<u>Cost</u>
<u>195</u>	<u>Project Management Costs</u> <ul style="list-style-type: none"> • <u>Includes facilitation, coordination, and support for Engineering Design, Procurement, Construction (start of construction through back feed energization), and Developer system testing and CSAT</u> 	<u>\$360,000</u>
<u>Notes:</u> a) <u>Costs provided are in 2022 dollars.</u> b) <u>Assumes 22-month duration.</u> o <u>18-month duration to GCOD.</u> o <u>4 months for Closeout.</u> c) <u>Assumes work is done in parallel with Interconnection Project.</u>		

B. Subtransmission 46kV Projects (O‘ahu)

<u>Item</u>	<u>Description</u>	<u>Cost</u>
<u>196</u>	<u>Project Management Costs</u> <ul style="list-style-type: none"> • <u>Includes facilitation, coordination, and support for Engineering Design, Procurement, Construction (start of construction through back feed energization), and Developer system testing and CSAT</u> 	<u>\$503,000</u>
<u>Notes:</u> a) <u>Costs provided are in 2022 dollars.</u> b) <u>Assumes 28-month duration.</u> o <u>24-month duration to GCOD.</u> o <u>4 months for Closeout.</u> c) <u>Assumes work is done in parallel with Interconnection Project.</u>		

C. Transmission Projects (O‘ahu / Maui / Hawai‘i Island)

<u>Item</u>	<u>Description</u>	<u>Cost</u>
<u>197</u>	<u>Project Management Costs</u> <ul style="list-style-type: none"> • <u>Includes facilitation, coordination, and support for Engineering Design, Procurement, Construction (start of construction through back feed energization), and Developer system testing and CSAT</u> 	<u>\$503,000</u>
<u>Notes:</u> a) <u>Costs provided are in 2022 dollars.</u> b) <u>Assumes 28-month duration.</u> o <u>24-month duration to GCOD.</u> o <u>4 months for Closeout.</u> c) <u>Assumes work is done in parallel with Interconnection Project.</u>		

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E. 2.4 – TYPICAL TELECOMMUNICATIONS REQUIREMENTS FOR DISTRIBUTION INTERCONNECTIONS AND COSTS

Section 2.4 provides typical telecommunications requirements and costs for interconnection projects. The communications equipment will require a communications channel(s). Some options include cellular, lease line, licensed radio, fiber, or microwave. The number of communications circuits (primary/backup) and type of communication circuits required will vary depending on the type/size of the project. Requirements are subject to change based on project specific evaluations, technical reviews, or the IRS.

1.A. Distribution Projects \geq 250 KW and $<$ 1 MW—See Section 2.4 for costs

- ~~a.1. Primary communications links can consist of cellular, lease line, licensed radio, fiber, or microwave.~~
- ~~b.2. Back-up communications links not required.~~
- ~~e.3. Additional analog leased telephone lines communications links are required to support revenue meters and can consist of LTE, AMI meter, or analog leased telephone lines (Proposer shall do their own due diligence for costs on this).~~
- 4. Requirements are subject to change based on project specific evaluations, technical reviews, or IRS.

~~2.—Projects \geq 1 MW —See Section 2.4 for costs~~

- ~~a.—Primary communications links can consist of lease line, licensed radio, fiber, or microwave.~~
- ~~b.—Licensed radio is permitted for projects 3MW or smaller in size only.~~
- ~~e.—Back up communications links are optional for projects up to 3MW (can consist of lease line, licensed radio, fiber, or microwave).~~
- ~~d.—Back up communications links are required for projects greater than 3MW.~~
- ~~e.—Back up communications links must be transport diverse until the “last mile” for projects greater than 10MW.~~
- ~~f.—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.1. 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.~~

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~~2. See Section 2.5 for more information on Security Requirements.~~

~~2.2 — SUBTRANSMISSION INTERCONNECTION~~

~~Please refer to Attachment 4 (for Subtransmission Projects) of this Appendix H for a single line diagram depicting the required interconnection to the Company’s system. Please see Attachment 5 for examples of how to apply the per unit costs provided. All costs provided in Section 2.2 assume the COIF will be built by the Company.~~

~~A. Typical 46kV (O’ahu) Interconnection (Attachment 4)~~

TYPICAL 46KV (O’AHU) INTERCONNECTION (ATTACHMENT 4)		
and ≤ 3 Item	Description	Cost
Project Management Costs		
40	Project Management Costs <ul style="list-style-type: none"> • Includes facilitation, coordination, and support for Engineering Design, Procurement, Construction (start of construction through back feed energization), and Developer system testing and CSAT 	\$503,000
Notes:		
a) Applicable to O’ahu.		
b) Assumes construction in 2023.		
c) Assumes 28-month duration.		
 ○ 24-month duration to GCOD.		
 ○ 4 months for Closeout.		
d) Assumes work is done in parallel with Interconnection Project		
Substation & Meter Baseline Costs		
41	Components on the Company side of the demarcation as shown in Attachment 4 <ul style="list-style-type: none"> • Includes engineering, materials, construction, and testing. • Civil infrastructure and space for COIF provided by Proposer. • 46kV line extension and final tap — See Items 43-51. • Telecommunications requirements — See Section 2.2B. • Security requirements — See Section 2.2C. 	\$753,000
42	Remote substation work (at existing Company substation) <ul style="list-style-type: none"> • Includes engineering, materials, construction, and testing for DTT and relay requirements • Assumes Company substation is SCADA enabled 	\$424,000 / site

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TYPICAL 46KV (O'AHU) INTERCONNECTION (ATTACHMENT 4)		
and < 3 Item	Description	Cost
<p><u>Notes:</u></p> <p>a) Assumes construction in 2023.</p> <p>b) Substation relay protection requirements have not been identified so costs are based upon typical line protection relaying requirements.</p>		
T&D Baseline Costs		
43	OH to OH Final Tap (by Company) <ul style="list-style-type: none"> • Includes 1 wood pole, 1 span (100ft) OH line extension to Proposer facility • Does not include gang-operated switch as shown on Attachment 4 	\$79,000
44	OH to UG Final Tap (by Company) <ul style="list-style-type: none"> • Includes 1 wood pole, 1 gang-operated switch, 100ft UG line extension and splice in Proposer manhole 	\$385,000
45	UG to UG Final Tap (by Company) <ul style="list-style-type: none"> • Includes 100ft UG line extension and terminations to Proposer riser pole, 100ft UG line extension and splice in Proposer manhole, splices in existing Company manhole 	\$514,000
<p><u>Notes:</u></p> <p>a) Assumes construction in 2023.</p> <p>b) Interconnection will typically require either Item 43, 44, or 45 depending on the existing facilities at the GCP. These are the base costs for an extension up to 100ft.</p> <p>c) Includes Company costs for engineering, materials, and construction of Company responsible items—See Section 3.</p> <p>d) OH or UG Line extensions (if > 100ft)—Add applicable costs per Items 46 through 51.</p> <p>e) 4-5" conduits and 6'x14' manholes required for the 46kV UG.</p> <p>f) Civil infrastructure (pads, MH/HHs, conduits, etc.) at Proposer's project site is designed, procured, and installed by Proposer.</p> <p>g) OH/UG route and civil infrastructure drawings provided by Proposer.</p> <p>h) Civil infrastructure (pads, MH/HHs, conduits, etc.) at Proposer's site is designed, procured, and installed by Proposer. Estimated construction costs are included.</p> <p>i) Includes review of Proposer civil infrastructure designs and materials and inspection of Proposer civil infrastructure construction.</p> <p>j) Does not include vegetation clearing, grading, dewatering, permitting or land rights.</p>		
46kV Line Extension Costs		
46	OH accessible (250ft spans)	\$908,000/ mile

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TYPICAL 46KV (O'AHU) INTERCONNECTION (ATTACHMENT 4)		
and ≤ 3 Item	Description	Cost
47	OH inaccessible (250ft spans)	\$1,719,000/ mile
48	OH overbuild on existing distribution accessible (200ft spans)	\$1,250,000/ mile
49	OH overbuild on existing distribution inaccessible (250ft spans)	\$2,148,000/ mile
50	UG (400ft spans, 1500KCM)	\$6,808,000/ mile
51	Riser (including pole/anchor, 1500KCM)	\$68,000 each
52	OH switch	\$45,000 each
<p><u>Notes:</u></p> <ul style="list-style-type: none"> a) Assumes construction in 2023. b) Includes engineering, materials, construction labor for electrical work, contractor costs and inspection for UG civil infrastructure, and contractor costs for pole/anchor digging. c) Assumes wood poles. d) Accessible assumes vehicles can be used during construction. e) Inaccessible assumes helicopters are needed during construction. f) Items 48 and 49 assume all poles need to be replaced. g) 4-5" conduits and 6'x14' manholes required for the 46kV UG. h) OH/UG route drawings provided by Proposer. i) Civil infrastructure (pads, MH/HHs, conduits, etc.) at Proposer's site is designed, procured, and installed by Proposer. Estimated construction costs are included. j) Civil infrastructure (pads, MH/HHs, conduits, etc.) outside of Proposer's project site is designed, procured, and installed by Company. k) Does not include vegetation clearing, grading, dewatering, permitting or land rights. 		

~~B. Typical Telecommunications Requirements For Subtransmission Interconnections~~

~~1.B. Projects ≥ 1 MW — See Section 2.4 for Telecommunications costs~~

- ~~a.1. Primary communications links can consist of lease line, licensed radio, fiber, or microwave.~~
 - ~~b. — Licensed radio is permitted for projects 3MW or smaller in size only.~~
- ~~e.2. Back-up communications links are optional for projects up to 3MW. (can consist of lease line, licensed radio, fiber, or microwave).~~
- ~~d.3. Back-up Additional communications links are required to support revenue meters and can consist of LTE, AMI meter, or analog leased telephone lines (Proposer shall do their own due diligence for projects greater than 3MW. costs on this).~~

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~~Back-up~~

C. Projects > 3 MW

- ~~e.1. Primary~~ communications links can consist of lease line, ~~licensed radio~~, fiber, or microwave.
- ~~2. Back-up communications links are required (can consist of lease line, licensed radio, fiber, or microwave).~~
- ~~f.3. Back-up~~ communications links must be transport diverse until the “last mile” for projects greater than 10MW.
- ~~g.4. Additional analog leased telephone lines are required to support revenue meters (Proposer shall do their own due diligence for costs on this).~~
- ~~2.1. Requirements are subject to change based on project specific evaluations, technical reviews, or IRS.~~

D. Transmission Projects

- 1. If Proposer’s substation is not adjacent to the proposed Company switching station, then Proposer is responsible for providing a communications link between the two (2) sites.
 - a. If Proposer chooses to run fiber between the sites, Proposer will own the fiber from their site up to a splice box immediately outside of the Company switching station (“meet point”). Company will own fiber from the meet point to the termination into the Company switching station – See Item 220.
 - b. For other communications options, a communications cabinet will be required at both sites – See Item 202.
- 2. If Proposer’s substation is adjacent to the proposed Company switching station, no additional Company costs are anticipated to be required for the Proposer’s substation.

E. Telecommunications Baseline Costs

The costs below are high level per unit costs for communications requirements in support of the Project. Sections 2.4A through 2.4D above provide typical scenarios of when these options may be utilized.

Communications Cabinet or Enclosure

<u>Item</u>	<u>Description</u>	<u>Cost</u>
<u>200</u>	<u>Communications Enclosure with circuits to support SCADA (Projects < 1 MW)</u> <ul style="list-style-type: none"> <u>• Only applicable to Cellular, Lease Line, or Company-owned fiber options</u> 	<u>\$43,000 / site</u>
<u>201</u>	<u>Communications Cabinet with circuits to support SCADA (Projects ≥ 1 MW and ≤ 3 MW)</u>	<u>\$164,000 / site</u>

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<u>Item</u>	<u>Description</u>	<u>Cost</u>
	<ul style="list-style-type: none"> Projects with SCADA and DTT but no diverse communication circuits 	
<u>202</u>	<u>Communications Cabinet with circuits to support SCADA and Relay Protection (Projects > 3 MW or Subtransmission)</u> <ul style="list-style-type: none"> Projects with SCADA, DTT, and diverse communication circuits 	<u>\$192,000 / site</u>
<u>Notes:</u> <ol style="list-style-type: none"> Costs provided are in 2022 dollars. All projects that require communications will require facilities to store the communications equipment. The examples above are provided but other alternatives may be available upon request. Cabinet is used to support Company equipment and capable of providing communications circuit for SCADA. Communications cabinet cost does not include fiber, microwave, radio equipment or lease circuits. Proposer will provide all conduits, foundations, HHs, AC power, grounding as required per Company standards. 		

Cellular or Lease Line Options

<u>Item</u>	<u>Description</u>	<u>Cost</u>
<u>203</u>	<u>Cellular or Lease Line one-time and recurring costs</u>	<u>Will vary based on 3rd party provider</u>
<u>Notes:</u> <ol style="list-style-type: none"> Add cost of Communications Cabinet – See Items 200-202. Check with Company to understand the current cellular or lease line requirements. Communication circuit requirements will be based on applications needed for the project. Company can provide communication circuit interconnection requirements and assist with review of circuit order from the 3rd party provider as needed. Proposer to work directly with 3rd party provider if a cellular or lease line circuit is needed. Cost will be the responsibility of the Proposer and is to be negotiated with the 3rd party provider. 		

Licensed 900 MHz Radio Option

<u>Item</u>	<u>Description</u>	<u>Cost</u>
<u>204</u>	<u>Licensed 900 MHz Radio Equipment</u> <ul style="list-style-type: none"> Incudes 2 each antenna equipment to create a radio link 	<u>\$140,000 / link</u>
<u>Notes:</u> <ol style="list-style-type: none"> Costs provided are in 2022 dollars. Add cost of Communications Cabinet – See Items 201-202. The radio equipment will be installed within the Communication Cabinet. Assumes there is radio line-of-sight clearance between the communication endpoints. Assumes FCC licensed 900MHz Frequencies are available. 		

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<u>Item</u>	<u>Description</u>	<u>Cost</u>
	<u>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.</u> <u>f) Assumes Telecommunications grounding standards are up to date at both sites.</u> <u>g) Assumes 48 V DC power with 12-hour battery backup is available.</u> <u>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.</u> <u>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.</u>	

Fiber-Optic Cable Option

<u>Item</u>	<u>Description</u>	<u>Cost</u>
<u>205</u>	<u>New Fiber-only pole line (200' avg spans, 60-strand ADSS)</u> <ul style="list-style-type: none"> • <u>Includes new wood poles</u> 	<u>\$386,000 / mile</u>
<u>206</u>	<u>Fiber underbuild on new or existing pole line (200' avg spans, 60-strand ADSS)</u> <ul style="list-style-type: none"> • <u>Assumes no replacements of existing poles are needed</u> 	<u>\$179,000 / mile</u>
<u>Notes:</u> <u>a) Costs provided are in 2022 dollars.</u> <u>b) Add cost of Communications Cabinet – See Items 200-202.</u> <u>c) Assumes no splices are needed along the route.</u>		

Microwave Option

<u>Item</u>	<u>Description</u>	<u>Cost</u>
<u>207</u>	<u>Point-to-Point Microwave Link</u> <ul style="list-style-type: none"> • <u>Includes 2 each antenna equipment to create a radio link</u> 	<u>\$697,000 / link</u>
<u>208</u>	<u>50ft Microwave Tower</u>	<u>\$612,000 each</u>
<u>209</u>	<u>100ft Microwave Tower</u>	<u>\$888,000 each</u>
<u>Notes:</u> <u>a) Costs provided are in 2022 dollars.</u> <u>b) Add cost of Communications Cabinet – See Items 201-202.</u> <u>c) Assumes there is radio line-of-site clearance between the communication endpoints.</u> <u>d) Assumes FCC licensed microwave frequencies are available.</u> <u>e) Assumes there are existing structures/buildings with space available on both ends to house the radio equipment.</u> <u>f) Assumes Telecommunications grounding standards are up to date at both sites.</u> <u>g) Assumes 48 V DC power with 12-hour battery backup is available.</u> <u>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</u>		

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Item	Description	Cost
	<p><u>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.</u></p> <p>i) <u>Assumes space is available at both ends to construct antenna towers or structures that are rated to survive a Saffir-Simpson category 4 hurricane.</u></p> <p>j) <u>Other options for Microwave Towers of varying heights may be available.</u></p>	

Transmission Projects Only

Item	Description	Cost
220	Fiber from “meet point” to termination in Company switching station	\$31,000
	<p>Notes:</p> <p>a) <u>Costs provided are in 2022 dollars.</u></p> <p>b) <u>Includes splicing, termination, and testing work.</u></p> <p>c) <u>Required if the Proposer’s substation is not adjacent to the Company switching station per Section 2.4D1a.</u></p> <p>d) <u>Assumes the “meet point” is within 500ft of the termination in the Company switching station.</u></p> <p>e) <u>Assumes 24-strand fiber cable.</u></p> <p>f) <u>Civil infrastructure (HHs, conduits, etc.) is designed, procured, and installed by Proposer.</u></p>	

2.5 – TYPICAL SECURITY REQUIREMENTS FOR SUBTRANSMISSION INTERCONNECTIONS

Section 2.5 provides typical security requirements for new facilities installed as a part of the interconnection. Security requirements can vary based on many factors including, but not limited to, location, crime rate, environment, aspects of the surrounding area, terrain, accessibility, layout of the facility, etc. The specific requirements for each facility will be subject to final review during the design and engineering phase. Additional information, including the Company’s Physical Security Strategy, is available upon request after execution of an NDA with the Company.

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 below.

† For Company-owned facilities within ~~Proposer’s~~ the Proposer’s Facility, Company requires:

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1. Standard 8ft high security fence with 3-strand barbed wire V-top.
 - ~~a. Standard 8ft high security fence with 3-strand barbed wire V-top.~~
 - ~~b. Interior mounted 4'4" 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.~~

~~2.3 [NOT USED]~~

~~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), Attachment 3 (Distribution Primary Interconnection for 1 MW and larger), or Attachment 4 (for Subtransmission Projects) of this Appendix H for single line diagrams depicting the required interconnection to the Company's system. Please see Attachment 5 for examples of how to apply the per-unit costs provided.~~

B. New Company-Owned Substations

Transmission substations (69kV and above) typically require high levels of security due to the critical role they play in the Company's system including, but not limited to:

1. Camera Monitoring – Company to procure and install all camera mounts and cameras, terminate cables, and adjust and optimize system as needed.
2. Electronic Card Access System – For control & microwave houses, Company procures/mounts card access devices and installs/terminates cables, and programs and tests devices and peripherals.
3. Infrastructure – Conduits and associated electrical and junction boxes shall be installed by the Proposer as a part of the substation site development. Conduits shall be rigid PVC, dedicated for Security systems purposes only, and sealed properly from the origin to the termination point.
4. Cabling – Cabling shall be installed and terminated by the Company.
5. Integrator – Company's Security Integrator will procure the server and necessary switches, terminate all ends, program the server, and set all fields of view for all camera shots.
6. Fencing – Schedule 40 galvanized fence post and fence fabric is required for fencing. The fencing shall be 8 feet high with heavy gauge support wire along the length of the

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- bottom. 3-strand barbed wire shall be mounted atop the fence at a 45-degree angle on the inside and outside for the entire length of fence and gates.
7. Locks – All gates shall be secured using a proprietary padlock system. Company will provide physical padlocks for gates and electrical equipment.
 8. Lighting – Motion and static lighting are necessary for additional safety and security deterrent measures and to enhance camera viewing at night. Company shall procure and install all lighting as a part of the substation site development. Motion LED lighting arrays shall be placed on all corners and entrances. Static LED lighting arrays shall be placed on the control house and throughout the yard to meet required lighting levels. Lighting shall be Dark Sky compliant.
 9. Perimeter Intrusion Detection (138kV only) - Company shall procure and install devices and cables using a contractor that is trained and qualified to install the specified system. Company’s Security Integrator will terminate cables, program, and test system. The specific models for the system will be provided to Proposer after execution of an NDA with the Company.

~~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.

TELECOMMUNICATIONS BASELINE COSTS		
Item	Description	Cost
Communications Cabinet or Enclosure		
70	Communications Enclosure with circuits to support SCADA (Projects < 1 MW) <ul style="list-style-type: none"> • Only applicable to Cellular, Lease Line, or Company-owned fiber options 	\$43,000 / site
71	Communications Cabinet with circuits to support SCADA (Projects ≥ 1 MW and ≤ 3 MW) <ul style="list-style-type: none"> • Projects with SCADA and DTT but no diverse communication circuits 	\$164,000 / site
72	Communications Cabinet with circuits to support SCADA and Relay Protection (Projects > 3 MW or Subtransmission) <ul style="list-style-type: none"> • Projects with SCADA, DTT, and diverse communication circuits 	\$192,000 / site
Notes:		
a) Assumes construction in 2022.		

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TELECOMMUNICATIONS BASELINE COSTS		
Item	Description	Cost
<p>b) All projects that require communications will require facilities to store the communications equipment. The examples above are provided but other alternatives may be available upon request.</p> <p>e) Cabinet is used to support Company equipment and capable of providing communications circuit for SCADA.</p> <p>d) Communications cabinet cost does not include fiber, microwave, radio equipment or lease circuits.</p> <p>e) Proposer will provide all conduits, foundations, HHS, AC power, grounding as required per Company standards.</p>		
Cellular or Lease Line Options		
73	Cellular or Lease Line one-time and recurring costs	Will vary based on 3rd party provider
<p><u>Notes:</u></p> <p>a) Add cost of Communications Cabinet — See Items 70-72.</p> <p>b) Check with Company to understand the current cellular or lease line requirements.</p> <p>c) Communication circuit requirements will be based on applications needed for the project.</p> <p>d) Company can provide communication circuit interconnection requirements and assist with review of circuit order from the 3rd party provider as needed.</p> <p>e) Proposer to work directly with 3rd party provider if a cellular or lease line circuit is needed.</p> <p>f) Cost will be the responsibility of the Proposer and is to be negotiated with the 3rd party provider.</p>		
Licensed 900 MHz Radio Option		
74	Licensed 900 MHz Radio Equipment • Includes 2 each antenna equipment to create a radio link	\$140,000 / link
<p><u>Notes:</u></p> <p>a) Assumes construction in 2022.</p> <p>b) Add cost of Communications Cabinet — See Items 71-72. The radio equipment will be installed within the Communication Cabinet.</p> <p>c) Assumes there is radio line-of-sight clearance between the communication endpoints.</p> <p>d) Assumes FCC licensed 900MHz Frequencies are available.</p> <p>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.</p> <p>f) Assumes Telecommunications grounding standards are up to date at both sites.</p> <p>g) Assumes 48 V DC power with 12-hour battery backup is available.</p>		

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TELECOMMUNICATIONS BASELINE COSTS		
Item	Description	Cost
<p>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.</p> <p>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.</p>		
Fiber-Optic Cable Option		
75	New Fiber-only pole line (200' avg spans, 60-strand ADSS) • Includes new wood poles	\$394,000/ mile
76	Fiber underbuild on new or existing pole line (200' avg spans, 60-strand ADSS) • Assumes no replacements of existing poles are needed	\$182,000/ mile
<p><u>Notes:</u></p> <p>a) Assumes construction in 2022.</p> <p>b) Add cost of Communications Cabinet—See Items 70-72.</p> <p>c) Assumes no splices are needed along the route.</p>		
Microwave Option		
77	Point-to-Point Microwave Link • Includes 2 each antenna equipment to create a radio link	\$697,000 /link
78	50ft Microwave Tower	\$612,000 each
79	100ft Microwave Tower	\$888,000 each
<p><u>Notes:</u></p> <p>a) Assumes construction in 2022.</p> <p>b) Add cost of Communications Cabinet—See Items 70-72.</p> <p>c) Assumes there is radio line-of-site clearance between the communication endpoints.</p> <p>d) Assumes FCC licensed microwave frequencies are available.</p> <p>e) Assumes there are existing structures/buildings with space available on both ends to house the radio equipment.</p> <p>f) Assumes Telecommunications grounding standards are up to date at both sites.</p> <p>g) Assumes 48 V DC power with 12-hour battery backup is available.</p> <p>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</p>		

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TELECOMMUNICATIONS BASELINE COSTS		
Item	Description	Cost
	(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 and 2.2C.~~

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 an overall project 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.

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4.1 – DISTRIBUTION PROJECTS ~~(COMPANY-BUILD)~~

Hawaiian Electric Durations to be Considered in Schedules (12kV and Below) General Guidelines for Planning Purposes Only Hawaiian Electric Build ≥ 1MW		
Milestone	Company-Build Duration	Notes
IRS Phase		
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
Engineering Phase		
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
Issued for Construction (IFC) Design & Review	30 business days	Designs & Reviews for COIF & review of SOIF supporting/impacting COIF. Following 90% Design acceptance.
Procurement Phase		
Procurement	9 months	Procurement of materials typically happens at 60% design completion
Construction Phase		
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 ≥ 1 MW

Hawaiian Electric Company
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4.2 — DISTRIBUTION PROJECTS (PROPOSER BUILD)

Hawaiian Electric Durations to be Considered in Schedules (12kV and Below) General Guidelines for Planning Purposes Only Proposer Build ≥ 1MW		
Milestone	Duration	Notes
IRS Phase		
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
Engineering Phase		
30% Design & Review	2040 business days	Design Reviews for COIF & review of SOIF supporting/impacting COIF
60% Design & Review	2050 business days	Design Reviews for COIF & review of SOIF supporting/impacting COIF. Following 30% Design acceptance.
90% Design & Review	2050 business days	Design Reviews for COIF & review of SOIF supporting/impacting COIF. Following 60% Design acceptance.
Issued for Construction (IFC) Design & Review	2030 business days	Design Reviews for COIF & review of SOIF supporting/impacting COIF. Following 90% Design acceptance.
Procurement Phase		
<u>Procurement</u>	<u>9 months</u>	<u>Procurement of materials typically happens at 60% design completion</u>
Construction Phase		
<u>Construction</u>	<u>7-8 months</u>	<u>Based on scope/complexity of work. Construction Phase to begin after procurement completion. For Mid-Tier projects ≥ 1 MW, construction can begin 3 months after completion of IFC.</u>
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 <u>projects</u> ≥ 1 MW.

4.32 – SUBTRANSMISSION 46KV (O‘AHU) PROJECTS (COMPANY BUILD)

Hawaiian Electric Company
APPENDIX H — INTERCONNECTION FACILITIES COST AND SCHEDULE
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Hawaiian Electric Durations to be Considered in Schedules (46kV) General Guidelines for Planning Purposes Only Hawaiian Electric Build O'ahu Only		
Milestone	<u>Company- Build Duration</u>	Notes
IRS Phase		
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
Engineering Phase		
30% Design & Review	40 business days	Designs & Reviews for COIF & review of 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.
Issued for Construction (IFC) Design & Review	30 business days	Designs & Reviews for COIF & review of SOIF supporting/impacting COIF. Following 90% Design acceptance.
Procurement Phase		
Procurement	9 months	Procurement of materials typically happens at 60% design completion
Construction Phase		
Construction	10-12 months	Based on scope/complexity of work. <u>Construction to begin after procurement completion.</u>
Acceptance Testing	30 business days	Approximately 3 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.

**4.4 — SUBTRANSMISSION 46KV (O'AHU)3 — TRANSMISSION PROJECTS
(PROPOSER-BUILD)**

Hawaiian Electric Durations to be Considered in Schedules (46kV) General Guidelines for Planning Purposes Only Proposer Build: O'ahu Only		
Milestone	<u>Company-Build Duration</u>	Notes
IRS Phase		

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Hawaiian Electric Durations to be Considered in Schedules (46kV) General Guidelines for Planning Purposes Only Proposer Build: O'ahu Only		
Milestone	<u>Company-Build</u> Duration	Notes
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
Engineering Phase		
30% Design & Review	2040 business days	Design Reviews for COIF & review of SOIF supporting/impacting COIF
60% Design & Review	2050 business days	Design Reviews for COIF & review of SOIF supporting/impacting COIF. Following 30% Design acceptance.
90% Design & Review	2050 business days	Design Reviews for COIF & review of SOIF supporting/impacting COIF. Following 60% Design acceptance.
Issued for Construction (IFC) Design & Review	2030 business days	Design Reviews for COIF & review of SOIF supporting/impacting COIF. Following 90% Design acceptance.
Procurement Phase		
<u>Procurement</u>	<u>9 months</u>	<u>Procurement of materials typically happens at 60% design completion</u>
Construction Phase		
<u>Construction</u>	<u>10-12 months</u>	<u>Based on scope/complexity of work. Construction Phase to begin after procurement completion.</u>
Acceptance Testing	2530 business days	Approximately 3 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.

DRAFT

REQUEST FOR PROPOSALS

FOR

COMMUNITY-BASED RENEWABLE ENERGY PROJECTS

FOR

LOW- AND MODERATE-INCOME SUBSCRIBERS

O‘AHU, MAUI, AND HAWAI‘I ISLAND

~~AUGUST 25, 2021~~

FEBRUARY 23, 2022

Docket No. 2015-0389

Appendix I – ~~Grid Needs Assessment~~ Reserved



Hawaiian Electric

~~Appendix I-1 Non-Wire Alternatives Grid Needs Assessment for O‘ahu~~

~~This Appendix provides the definitions and Non-Wire Alternatives (NWA) Grid Needs considered in the Locational Value non-price criteria in the CBRE RFPs.~~

~~NWA Grid Service Definitions~~

~~Table 1 NWA Grid Service Definitions~~

Grid Service	Definition
Distribution Capacity	A supply and/or a load modifying service that DERs provide as required via the dispatch of power output for generators and electric storage, and/or reduction in load that is capable of reliably and consistently reducing net loading on desired distribution infrastructure in response to Company Dispatch
Distribution Reliability	A load-modifying or supply service capable of improving local distribution reliability under abnormal conditions in response to Company Dispatch

~~For NWA needs, a certainty rating of “1” means that there is an existing need; need identified within 3 years (could be due to “natural” load growth or specific new service requests); or a need identified within 4-5 years due to a new service request.[†] A certainty rating of “0” means all other situations where a need may be identified. A geographic map of these needs can be found on the Company’s LVM (locational value map). The following table provides the NWA grid needs as of August 2021. Refer to the Company’s LVM for the most up to date list and information.~~

[†]~~New service request is defined as a request made to the Company by an electrical contractor or electrical consultant that includes drawings, plans, electrical loading, and in-service information~~

Need or Distribution Service	Year of Need	Location	MW Need	Time of Day	Certainty Rating	LVM Grid Need Name
Distribution Capacity or Distribution Reliability (back-tie)	202X	Circuits/Transformer	Size of overload (or load increase that caused voltage issue)	Daytime or Evening	1 or 0	Grid Need Name
Both	2022: Contingency 2023: Normal	CEIP 46 46 kV Circuit ^(a)	27.8	Evening	1	Grid Need Oahu—A
Both	2022: Normal 2023: Contingency	Waipio Tsf 1 ^(b)	2	Evening	1	Grid Need Oahu—F
Distribution Reliability	2023	Waiiau Steel Mill 46 kV Circuit ^(c)	10	Evening	1	Grid Need Oahu—B
Distribution Reliability	2023	Waiiau Mililani 46 kV Circuit ^(d)	10	Evening	1	Grid Need Oahu—C
Distribution Reliability	2023	Ewa Beach 2—Ewa Beach 3 12 kV Circuit Ocean Pointe 1—Ocean Pointe 1 12 kV Circuit	3	Evening	1	Grid Need Oahu—G
Distribution Capacity	2024	Ewa Nui A Transformer ^(e)	2.7	Evening	1	Grid Need Oahu—D
Distribution Reliability	2026	Kamoku 2—Kewalo 10 25 kV Circuit Kewalo 3—Kewalo 6 25 kV Circuit	2.3	Both	0	Grid Need Oahu—E
Both	2025	Ho’opili ^(f)	10	Both	0	Grid Need Oahu—Area H

^(a)Distribution Substations/Circuits: Kamokila 3—Kamokila 5 circuit, Kamokila 3—Kamokila 6 circuit, Kapolei 1—Kapolei 1 circuit, Kapolei 1—Kapolei 2 circuit, Kaloii 1—Kaloii 1 circuit, Kaloii 1—Kaloii 2 circuit, Kaloii 2—Kaloii 3 circuit, Kaloii 2—Kaloii 4 circuit, Fort Weaver 2—Fort Weaver 3 circuit, Fort Weaver 2—

~~Fort Weaver 4 circuit, Ewa Beach 1-Ewa Beach 1 circuit, Ewa Beach 1-Ewa Beach 2 circuit, Ocean Pointe 2-Ocean Pointe 3 circuit, Ocean Pointe 2-Ocean Pointe 4 circuit, West Loch-Westloch 1 circuit~~

~~^(b)Distribution Substation/Circuits: Waipio 1—Waipio 1 circuit, Waipio 1—Waipio 2 circuit~~

~~^(c)Distribution Substations/Circuits: Kapolei 2—Kapolei 3 circuit, Kapolei 2—Kapolei 4 circuit, Fort Weaver 1—Fort Weaver 1 circuit, Fort Weaver 1—Fort Weaver 2 circuit~~

~~^(d)Distribution Substations/Circuits: Waimalu 2-Waimalu 3 circuit, Waimalu 2-Waimalu 4 circuit, Upper Kipapa 1—Kuahelani 1 circuit, Upper Kipapa 1—Kuahelani 4 circuit, Kunia—Kunia circuit~~

~~^(e)Distribution Substations/Circuits: Makakilo 2-Makakilo 2 circuit, Makakilo 2-Makakilo 4 circuit, Ewa Nui 1—Ewa Nui 1 circuit, Ewa Nui 2—Ewa Nui 2 circuit, Kunia Makai 1-Kunia Makai 1 circuit, Kunia Makai 1-Kunia Makai 2 circuit, Kunia Makai 2-Kunia Makai 3 circuit, Kunia Makai 2-Kunia Makai 4 circuit, Ewa Beach 2-Ewa Beach 3 circuit, Ewa Beach 2-Ewa Beach 4 circuit, Ocean Pointe 1-Ocean Pointe 1 circuit, Ocean Pointe 1-Ocean Pointe 2 circuit, Iroquois Pt—Iroquois circuit, Hoaeae 1-Leole circuit, Hoaeae 1-Hoaeae 1 circuit, Waipahu 2-Wailani circuit, Waipahu 2-Mokuola circuit~~

~~^(f)Distribution Substation/Circuits: Ewa Nui 2—Ewa Nui 2 circuit, Kaloi 1—Kaloi 2 circuit, Kamokila 2-Kamokila 4 circuit~~

~~Appendix I 2 Non-Wire Alternatives Grid Needs Assessment for Maui~~

~~This Appendix provides the definitions and Non-Wire Alternatives (NWA) Grid Needs considered in the Locational Value non-price criteria in the CBRE RFPs.~~

~~NWA Grid Service Definitions~~

~~The following grid services are used to identify the grid needs. The projected hourly annual energy potential production profile of the Facility for the provided RFP NEP Projection will be used to inform the capability of the project to provide each of the grid services.~~

~~Table 1 NWA Grid Service Definitions~~

Grid Service	Definition
Distribution Capacity	A supply and/or a load-modifying service that DERs provide as required via the dispatch of power output for generators and electric storage, and/or reduction in load that is capable of reliably and consistently reducing net loading on desired distribution infrastructure in response to Company Dispatch
Distribution Reliability	A load-modifying or supply service capable of improving local distribution reliability under abnormal conditions in response to Company Dispatch

~~For NWA needs, a certainty rating of “1” means that there is an existing need; need identified within 3 years (could be due to “natural” load growth or specific new service requests); or a need identified within 4-5 years due to a new service request.⁺ A certainty rating of “0” means all other situations where a need may be identified. A geographic map of these needs can be found on the Company’s LVM (locational value map). The following table provides the NWA grid needs as of August 2021. Refer to the Company’s LVM for the most up-to-date list and information.~~

⁺~~New service request is defined as a request made to the Company by an electrical contractor or electrical consultant that includes drawings, plans, electrical loading, and in-service information~~

Need or Distribution Service	Year of Need	Location	MW Need	Time of Day	Certainty Rating	LVM Grid Need Name
Distribution Capacity or Distribution Reliability (back-tie)	202X	Circuits/Transformer	Size of overload (or load increase that caused voltage issue)	Daytime or evening	1 or 0	Grid Need Name
Distribution Reliability	2023	Waiinu 69-23kV Tie Tsf ^(a)	10	Evening	1	Grid Need Maui-A

^(a)Wailuku Tsf 1-4 distribution circuits: 4035, 4031, 1289, 1290, 1447, 1446

Waiehu Tsf distribution circuits: 1378, 1379

Waiinu Tsf 1 distribution circuits: 2030

Kahului Sub-8 Tsf 3-6 distribution circuits: 1264, 1265, 4048, 4049, 4050

~~*Appendix I-3 Non-Wire Alternatives Grid Needs Assessment for Hawai‘i Island*~~

~~This Appendix provides the definitions and Non-Wire Alternatives (NWA) Grid Needs considered in the Locational Value non-price criteria in the CBRE RFPs~~

~~NWA Grid Service Definitions~~

~~The following grid services are used to identify the grid needs. The projected hourly annual energy potential production profile of the Facility for the provided RFP NEP Projection will be used to inform the capability of the project to provide each of the grid services.~~

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¹~~New service request is defined as a request made to the Company by an electrical contractor or electrical consultant that includes drawings, plans, electrical loading, and in-service information~~

Need or Distribution Service	Year of Need	Location	MW Need	Time of Day	Certainty Rating	LVM Grid Need Name
Distribution Capacity or Distribution Reliability (back-tie)	202X	Circuits/Transformer	Size of overload (or load increase that caused voltage issue)	Daytime or Evening	1 or 0	Grid Need Name
Distribution Capacity	2020	Halaula 1 Circuit	0.3	Both	1	Grid Need Hawaii -A

EXHIBIT 11

Redlines of Changed Sections of the Tranche 1 CBRE RFP
from August 25, 2021 version



Hawaiian Electric

DRAFT

REQUEST FOR PROPOSALS

FOR

COMMUNITY-BASED RENEWABLE ENERGY TRANCHE 1

O‘AHU, MAUI, AND HAWAI‘I ISLAND

~~AUGUST 25, 2021~~

FEBRUARY 23, 2022

Docket No. 2015-0389

This Request for Proposals (“RFP”) is a DRAFT only. Hawaiian Electric Company, Inc. (“Hawaiian Electric”), Maui Electric Company, Limited (“Maui Electric”), and Hawai‘i Electric Light Company, Inc. (“Hawai‘i Electric Light”) (each a “Company” and collectively, the “Companies”) 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, the Companies filed initial drafts of the RFP with the PUC. This proposed final RFP is being submitted to the PUC for approval and is subject to further revision based upon direction received from the PUC. A final RFP will be submitted to the PUC for approval and will be the final RFP.

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Coupled Storage

Appendix L Model-~~PV~~ Large Power Purchase Agreement for Renewable Dispatchable
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Appendix L-1 Project Specific Addendum for RDG PPA, Projects Located on O'ahu

Appendix L-2 RESERVED

Appendix L-3 RESERVED

Appendix L-4 Attachment DCC to the Project Specific Addendum for RDG PPA: DC
Coupled Storage

Chapter 1: Introduction and General Information

Hawaiian Electric Company, Inc. (“Hawaiian Electric”), Maui Electric Company, Limited (“Maui Electric”), and Hawai‘i Electric Light Company, Inc. (“Hawai‘i Electric Light”) (each a “Company” and collectively, the “Companies”) seek proposals for Community-Based Renewable Energy (“CBRE”) projects, also referred to as shared solar,¹ in this Tranche 1 for the Hawaiian Electric System, Maui Electric System, and Hawai‘i Electric Light System, on the islands of O‘ahu, Maui, and Hawai‘i, respectively (each a “System”), in accordance with this Request for Proposals (“RFP”).

The Company or its Affiliates may submit a Proposal in response to this RFP subject to the requirements of this RFP. Proposers may submit separate Proposals for any single island or any combination thereof.

In this RFP, the Company seeks new dispatchable photovoltaic (“PV”) generation projects (with or without a Battery Energy Storage System (“BESS”)) of at least 250 kW as shown in Table 1 below. Mid-Tier Projects will utilize a pre-approved standard form contract in the form of Appendix K (“Mid-Tier SFC”). Each Mid-Tier Project will be limited to a maximum of 5 MW on **O‘ahu** and 2.5 MW on **Maui** and **Hawai‘i Island**.

Large Projects, which include any Project exceeding 5 MW (no maximum), will only be considered on **O‘ahu** and will utilize the Company’s Model Renewable Dispatchable Generation Power Purchase Agreement (“RDG PPA”) which can be found in Appendix L.

**Table 1
Project Size and Contract Options by Island**

	Large Projects / Contract	Mid-Tier Projects / Contract
Oahu	>5 MW / RDG PPA	250 kW – 5 MW / Mid-Tier SFC
Maui & Hawai‘i Island	n/a	250 kW – 2.5 MW / Mid-Tier SFC

Each successful Proposer will provide dispatchable PV generation and optionally a BESS to the Company pursuant to the terms of an RDG PPA or Mid-Tier SFC. RDG PPAs for Large Projects will be subject to review and approval by the State of Hawai‘i Public Utilities

¹ 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.

Commission (“PUC”), while the Mid-Tier Projects selected in this RFP will not be subject to further PUC review and approval.

The Company’s RDG PPA and Mid-Tier SFC employ an innovative contracting mechanism which is very different than traditional PPA structures. Proposers are instructed to thoroughly review the RDG PPA attached as Appendix L and the Mid-Tier SFC attached as Appendix K based on the size of their project. The structure of the RDG PPA and 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 RDG PPA and 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 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, in the RDG PPA and Mid-Tier SFC attached as Appendix L, and K, respectively, and if applicable, the DC Coupled Term Sheet, attached as Appendix M.

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.

Unless identified for a specific island, the requirements in this RFP apply to all projects proposed for the islands of O‘ahu, Maui, and Hawai‘i.

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, and Order No. 37879 issued on July 27, 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 that utilize PV technology as the source energy, which may be paired with storage. No other generation technologies may be proposed. Proposals may be submitted as: (1) Generation only Projects; or (2) Generation paired with a 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 Article 2 of the RDG PPA or Attachment C of the 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 O‘ahu, Maui, or Hawai‘i Island.
- 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)², are not located within a Tsunami

² 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

Evacuation Zone³, and are not located within ~~a Tsunami Evacuation Zone~~.⁴ ~~the Hawaii Department of Land and Natural Resources flood map's flood zones A, AE, AEF, AH, AO, VE based on the Federal Emergency Management Agency's Digital Flood Insurance Rate Maps.~~⁵ 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 on **Maui** and **Hawai'i Island** must interconnect to the Company's System at the distribution level (12 kV or lower) and must not exceed 2.5 MW. ~~Projects on Maui interconnecting at the site offered by the Company at Waena must interconnect as described in Appendix H.~~ Projects on **O'ahu** must interconnect to the Company's System at the sub-transmission (46 kV) or distribution level (12 kV or lower). Projects on **O'ahu** interconnecting at the distribution level (12 kV or lower) must not exceed 3 MW.
- 1.2.10 Projects submitted in response to this RFP must be 250 kW or larger. Proposers for CBRE projects smaller than 250 kW should refer to the Company's CBRE website for instructions on how to submit proposals at www.hawaiianelectric.com/sharedsolar.
- 1.2.11 Contracts for Projects selected through this RFP must use the RDG PPA or Mid-Tier SFC, as described in Section 3.8. Under the RDG PPA and 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 RDG PPA or 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 RDG PPA or Mid-Tier SFC.
- 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 Grid-charging is not required for Paired Projects. However, if grid-charging capability is included, the Paired Project must be able to be charged from the grid at the direction of

³ 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").

⁴ 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").

⁵ See Hawaii Department of Land and Natural Resources Flood Hazard Assessment Tool at <http://gis.hawaiiinfip.org/FHAT/>.

the Company after the 5-year Investment Tax Credit (“ITC”) recapture period has lapsed. Paired Projects electing to include grid-charging capability 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 ~~November 30, 2026~~ May 31, 2027. 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 RDG PPA or 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 RDG PPA or Mid-Tier SFC, including but not limited to Project development, completion of an Interconnection Requirements Study (“IRS”), the cost of conducting a greenhouse gas analysis, 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 PPA, as described in Attachment G, Section 7 of the RDG PPA or 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 PPA 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 RDG PPA or the Mid-Tier SFC. The applicable PPA 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
 - Monitor contract negotiations with Proposers
 - 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 2, ~~Items 9 and 10~~). 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 contacts for this RFP are:

For O‘ahu	For Maui	For Hawai‘i Island
Jasmine Wong <u>Shawn Uehira</u> Energy Contract Manager Hawaiian Electric Company, Inc.	Isaac Kawahara Energy Contract Manager Hawaiian Electric Company, Inc.	Michael Ito Energy Contract Manager Hawaiian Electric Company, Inc.

RFP Email Address: cbrerfp@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 2, ~~Item 9 and 10.~~ 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. Each Energy Contract Manager, in consultation with the Independent Observer, will confirm that the Self-Build Proposals were submitted by the Self-Build Proposal Due Date shown in Section 3.1, Table 2, ~~Item 9,~~ and IPP and Affiliate Proposals were submitted by the IPP and Affiliate Proposal Due Date shown in Section 3.1, Table 2, ~~Item 10.~~ The Electronic Procurement Platform automatically closes to further submissions after the IPP and Affiliate Proposal Due Date shown in Section 3.1, Table 2, ~~Item 10.~~

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.

Project Size	Proposal Fee
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250 kW and larger, up to and including 2.5 MW	\$2,000
Larger than 2.5 MW, up to and including 10 MW (O‘ahu only)	\$5,000
Larger than 10 MW (O‘ahu only)	\$10,000

- 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, Facility size or with/without storage 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 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 2, ~~Item 10~~. 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:

For O‘ahu	For Maui	For Hawai‘i Island
Payable to: Hawaiian Electric Company, Inc.	Payable to: Maui Electric Company, Ltd.	Payable to: Hawai‘i Electric Light Company, Inc.
Jasmine Wong Shawn Uehira Energy Contract Manager Hawaiian Electric Company, Inc. Mail Code CP2+AL12 -IU PO Box 2750 Honolulu, Hawai‘i 96840	Isaac Kawahara Energy Contract Manager Hawaiian Electric Company, Inc. Mail Code CP2+AL12 -IU PO Box 2750 Honolulu, Hawai‘i 96840	Michael Ito Energy Contract Manager Hawaiian Electric Company, Inc. Mail Code CP2+AL12 -IU PO Box 2750 Honolulu, Hawai‘i 96840

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

For O‘ahu	For Maui	For Hawai‘i Island
Hawaiian Electric Company, Inc. Ward Receiving Attention: Jasmine WongShawn Uehira , Energy Contract Manager Mail Code CP2+AL12-IU 799 S. King St. Honolulu, Hawai‘i 96813	Hawaiian Electric Company, Inc. Ward Receiving Attention: Isaac Kawahara, Energy Contract Manager Mail Code CP2+AL12-IU 799 S. King St. Honolulu, Hawai‘i 96813	Hawaiian Electric Company, Inc. Ward Receiving Attention: Michael Ito, Energy Contract Manager Mail Code CP2+AL12-IU 799 S. King St. Honolulu, Hawai‘i 96813

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

1.9 Procedures for the Self-Build or Affiliate Proposals

- 1.9.1 Order No. 37070 states that the CBRE RFPs will be open to all bidders, including the Company. The Competitive Bidding Framework allows the Company the option to offer a Proposal(s) in response to this RFP (“Self-Build Option” or “SBO”). Accordingly, the Company must follow certain requirements and procedures designed to safeguard against and address concerns associated with: (1) preferential treatment of the SBO or members, agents, or consultants of the Company formulating the SBO (the “Self-Build Team”); and (2) preferential access to proprietary information by the Self-Build Team. These requirements 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 October 9, 2020. The CBRE Code of Conduct will apply to all CBRE Phase 2 RFPs, regardless of whether the Company submits an SBO Proposal. A copy of the Procedures Manual is attached as Appendix C.

The Competitive Bidding Framework also allows Affiliates of the Company to submit Proposals⁶ to RFPs issued by the Company. All Self-Build and Affiliate Proposals are subject to the Company’s Code of Conduct and the Procedures Manual. 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 Proposals. 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, Item 10.

⁶ A Proposal will also be treated as an Affiliate Proposal if the Affiliate is a partner for the Proposal.

- 1.9.2 The Company will require that the Proposal for the SBO(s) and Affiliate Proposals be submitted electronically through the Electronic Procurement Platform. The Company will allow the Self-Build Team to submit one Proposal for each of O‘ahu, Maui and Hawai‘i Island. The Self-Build Team may submit up to two (2) variations in their Proposal, one of which is the base variation of the Proposal as described in Section 1.8.3. SBO Proposals will be due a minimum of one (1) Day before other Proposals are due. A Proposal for the SBO will be uploaded into the Electronic Procurement Platform in the same manner Proposals from other Proposers are uploaded. The Energy Contract Manager, in consultation with the Independent Observer, will confirm that the Self-Build Proposals are timestamped by the Self-Build Proposal Due Date found in RFP Section 3.1, Table 2, Item 9.
- 1.9.3 Detailed requirements for an SBO Proposal can be found in Appendix G. These requirements are intended to provide a level playing field between SBO Proposals and third-party Proposals. Except where specifically noted, an SBO Proposal must adhere to the same price and non-price Proposal requirements as required of all Proposers, as well as certain RDG PPA or Mid-Tier SFC requirements, such as milestones and liquidated damages, as described in Appendix G. The non-negotiability of the Performance Standards shall apply to any SBO to the same extent it would for any other Proposal. Notwithstanding the fact that it will not be required to enter into an RDG PPA or Mid-Tier SFC with the Company, a Self-Build Proposer will be required to note its exceptions, if any, to the RDG PPA for Large Projects in the same manner required of other Proposers, and will be held to such modified parameters if selected. In addition to its Proposal, the Self-Build Team will be required to submit Appendix G Attachment 1, Self-Build Option Team Certification Form, acknowledging it has followed the rules and requirements of the RFP to the best of its ability and has not engaged in any collusive actions or received any preferential treatment or information providing an impermissible competitive advantage to the Self-Build Team over other Proposers responding to this RFP, as well as adherence to RDG PPA or Mid-Tier SFC terms and milestones required of all Proposers and the SBO’s proposed cost protection measures.

The cost recovery methods between a regulated utility SBO Proposal and IPP Proposals are fundamentally different due to the business environments they operate in. As a result, the Company has instituted a process to compare the two types of proposals for the initial evaluation of the price related criteria on a ‘like’ basis through comparative analysis.

At the core of an SBO Proposal are its total project capital cost and any associated annual operations and maintenance (“O&M”) costs. During the RFP’s initial pricing evaluation step, these capital costs⁷ and O&M costs will be used in a revenue requirement calculation to determine the estimated revenues needed from customers which would allow the Company to recover the total cost of the project. The SBO revenue

⁷ SBO Proposals will be required to provide a table identifying project costs by year. These capital costs should be all inclusive, including but not limited to costs associated with equipment, Engineering, Procurement, and Construction (“EPC”), interconnection, overhead, and Allowance for Funds Used During Construction (“AFUDC”).

requirements are then used to calculate a Levelized Program Capacity Price (\$/MW) for comparison to IPP and any Affiliate Proposals.

The Company, in conjunction with the Independent Observer, may also conduct a risk assessment of the SBO Proposal to ensure an appropriate level of customer cost protection measures are included in such Proposal.

If the SBO is not included in any shared savings mechanism for this RFP pre-approved by the Commission, the SBO will be permitted to submit a shared savings mechanism with its Proposal to share in any cost savings between the amount of cost bid in the SBO Proposal and the actual cost to construct the Project. If the SBO Proposal is selected to the Final Award Group, the proposed shared savings mechanism will need to be approved by the PUC. Submission of a shared savings mechanism is not required and will not be considered in the evaluation of the SBO Proposal.

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.⁸ 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 an RDG PPA or 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 or negotiation 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, and either the requirements of the RDG PPA or Mid-Tier SFC. This RFP and either the RDG PPA or Mid-Tier SFC set forth the minimum requirements that all Proposals must satisfy to be eligible for

⁸ 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.

consideration in this RFP. Additional Performance Standards may be required based on the results of the IRS.

- 2.1.1 For Paired Projects, the functionality and characteristics of the BESS must be maintained throughout the term of the RDG PPA or Mid-Tier SFC. To be clear, Proposers may not propose any degradation for either capacity or efficiency in their Proposals.
- 2.1.2 Grid forming and black start capability⁹ are preferred but not required. These capabilities are given preference as part of the non-price criteria, Locational Value: Non-Wires Alternative and Community Resilience, in Section 4.4.2 in this RFP.

2.2 System Information

- 2.2.1 For Projects intending to interconnect to the Company System at the distribution level (12 kV or lower on **O‘ahu, Maui and Hawai‘i Island**), 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~~ available circuit capacity for a Project at a specific location. Direct questions to the RFP Email Address in Section 1.6.
- 2.2.2 For Projects on **O‘ahu** interconnecting to 46 kV circuits, Company information regarding an initial assessment of potential MW capacity of 46 kV circuits will be made available to Proposers only after execution of the CBRE NDA.¹⁰ Proposers should perform their own evaluation of project locations, and the Company does not guarantee any project output or ability to connect based on such information. Prior to submitting a proposal, Proposers are encouraged to inquire about the ~~viability of interconnecting a proposed~~ available MW capacity for a Project at a specific location. Direct questions to the RFP Email Address in Section 1.6.

⁹ The ability to start itself and provide power to ~~the Company's grid a designated set of loads within an established microgrid area~~ 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 grid during start-up (if the Project remains connected) or while connecting~~ provide backup power to the loads the Project established microgrid area if the grid connection is picking up (not the start-up and connecting of the deenergized. This is a Facility itself) and site specific design requiring Company review and depending on the design may be required to apply in the appropriate Microgrid Services Tariff accordingly.

¹⁰ Appendix E contains the Mutual Confidentiality and Non-Disclosure Agreement for this RFP.

- 2.2.3 For Projects on O‘ahu interconnecting to 46 kV circuits, the proposed Project output cannot exceed the available hosting capacity limit during the daytime hours of 8am to 5pm.¹¹ The proposed Project output at all other hours (5pm to 8am) cannot exceed the identified conductor limit (less any existing or expected generation sources available during those hours prior to the GCOD). For example, a solar resource paired with a BESS may interconnect to a circuit with a stated hosting capacity of zero provided that no energy is exported during the hours of 8am and 5pm and the export of power does not exceed the conductor limit after 5pm. Specifically, as it pertains to interconnection to the O‘ahu 46 kV system, Proposers may inquire regarding the viability of upgrading 46 kV conductors to increase available capacity based on a specific location (direct questions to the RFP Email Address in Section 1.6). Prior to the RFP, developers may inquire as to viability of proposed real project locations for interconnection.
- 2.2.4 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.

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.

~~In addition to the Performance Standards For Projects starting from 250 kW and findings of the IRS, the design of the less than 1 MW in size, Project single line and three line diagrams, and an equipment list shall be submitted with the Proposal. For Projects greater than or equal to 1 MW in size, a completed Project Interconnection Facilities, including power rating, Point(s) of Interconnection (“POI”) with the Company System, and scheme of Requirement Study Data Request worksheet, which can be found in Appendix B, Attachment 2, all project diagram(s), models for equipment and controls (see Appendix B, Attachments 3 and 6), list(s) identifying components and respective files (for inverters and power plant controller), and complete documentation with instructions must be submitted with their Proposal submission.~~

- 2.3.1.1 ~~The Company will also make available typical drawings to Proposers to familiarize you with the Company’s engineering expectations for the Proposer’s interconnection, must~~

¹¹ The available hosting capacity is not a final determination whether it is feasible to interconnect a Proposed Facility. The available hosting capacity provided in response to inquiries to the Company represents the power system’s conditions at the time the analysis is conducted. This analysis will examine steady-state thermal capacity and voltage issues during daytime minimum loading conditions only.

~~meet Company standards. The Company will provide its construction standards and procedures to facilities. The drawings may not reflect the exact requirements of your project but should provide useful guidance to assist with your Proposal. The most updated Engineering Standards will be provided to Projects who are selected to the final award group and continue through negotiations. To request the Proposer (Engineer, Procure, Construct Specifications for Hawaiian Electric Power Lines and Substations) if requested typical drawings, submit a request 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 Hawaiian Electric, Maui Electric, or Hawai'i Electric Light 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 Each Company's 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/>. 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. For Projects interconnecting to distribution circuits (12 kV or lower on **O'ahu, Maui and Hawai'i Island**), the Company will be responsible for building all Company-Owned Interconnection Facilities. For Projects on **O'ahu** interconnecting to sub-transmission circuits (46 kV) ~~and Projects on Maui located on the Company-Owned Waena site~~, Proposers will be responsible for building the Company-Owned Interconnection Facilities, including the switching station and line work, except for any work in the Company's existing energized facilities and the final tap. Construction of Company-Owned Interconnection Facilities by the Proposer must comply with industry standards, laws, rules, and licensing requirements, as well as the Company's specific construction standards and procedures that the Company will provide upon request (see Section 2.3.1).
- 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~~connection 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 5.1.2. 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 RDG PPA or Mid-Tier SFC.

Chapter 3: Instructions to Proposers

3.1 Schedule for the Proposal Process

Table 2 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 2
Proposed RFP Schedule**

Milestone	Schedule Dates
(1) Draft RFP filed	October 9, 2020
(2) Technical Status Conference	October 28, 2020
(3) Parties and Participants file Comments by	November 13, 2020
(4) Proposed Final RFP filed	December 1, 2020
(5) Updated RFP Draft filed per Order 37592	March 30, 2021
(6) Parties and Participants file Comments by	April 14, 2021
(7) Proposed Final RFP filed per Order 37879	August 25, 2021 ¹²
(8) Proposed Final RFP filed per Order 38217	February 23, 2022 ¹³
(8) (9) Final RFP is Issued	September 16, 2021 ¹⁴ April 14, 2022 ¹⁵
(9) (10) Self-Build Proposal Due Date	February 3 August 16 , 2022 at 2:00 pm HST
(10) (11) IPP and Affiliate Proposal Due Date	February 4 August 17 , 2022 at 2:00 pm HST
(11) (12) Selection of Priority List	April 12 October 25 , 2022
(12) (13) BAFOs Due	April 20 November 1 , 2022
(13) (14) Selection of Final Award Group	August 3, 2022 February 22, 2023
(14) (15) Contract Negotiations Start	August 10, 2022 March 1, 2023

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:

www.hawaiianelectric.com/competitivebidding
www.hawaiianelectric.com/Tranche1CBRE RFP

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.

¹² All subsequent dates in the proposed schedule may be modified based on further guidance provided by the PUC.

¹³ All subsequent dates in the proposed schedule may be modified based on further guidance provided by the PUC.

¹⁴ Per Order 37879, page 69, "RFPs shall be approved automatically 15 days after their filing, unless the Commission orders otherwise." The schedule reflects the RFP being issued one week after its anticipated approval date.

¹⁵ Per Order 38217, page 17-18, "Hawaiian Electric's final CBRE Phase 2 Tranche 1 and LMI RFPs and Rule 29 tariffs for Hawaii Island, Maui, and Oahu shall be approved automatically 15 days after they are filed, unless the Commission orders otherwise." The dedicated LMI RFP will be issued one week after its after its anticipated approval date. The Tranche 1 RFP timing has been staggered, and as a result will be open 28 days after the LMI RFP.

“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.

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 October 28, 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 Tranche 1 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 RDG PPA or 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 agent¹⁶ 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

¹⁶ 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.

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.
- 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 (O‘ahu only) The Power Purchase Agreement for proposals selected under this RFP for Large Projects will be in the form of the RDG PPA, attached as Appendix L. Appendix L-1 is a Project Specific Addendum for Large Projects located on O‘ahu. In addition, Appendix L-4 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 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-1 and Appendix K-2 are Project Specific Addenda for Mid-Tier Projects located on O‘ahu or Maui/Hawai‘i Island, respectively. In addition, Appendix K-4 (Maui Only) 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.”

- 3.8.3 If selected, any Affiliate Proposers will be required to enter into an RDG PPA or Mid-Tier SFC with the Company.
- 3.8.4 If selected, a Self-Build Proposer will not be required to enter into an RDG PPA or Mid-Tier SFC with the Company. However, the Self-Build Proposer will be held to the proposed modifications to the RDG PPA, if any, it submits as part of the SBO in accordance with Section 3.8.6. Moreover, the SBO will be held to the same performance metrics and milestones set forth in the RDG PPA or Mid-Tier SFC to the same extent as all Proposers, as attested to in the SBO’s Appendix G Attachment 1, Self-Build Option Certification submittal. If liquidated damages are assessed, they will be paid from shareholder funds and returned to customers through the Purchased Power Adjustment Clause (“PPAC”) or other appropriate rate adjustment mechanisms.

To retain the benefits of operational flexibility for a Company-owned facility, the SBO Proposal will be permitted to adjust operational requirements and performance metrics with the approval of the PUC. The process for adjustment would be similar to a negotiated amendment to a PPA with PUC approval.

- 3.8.5 In general, under the RDG PPA and 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 (if applicable) 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.
- 3.8.6 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 by a Self-Build Proposer or any other Proposer. Proposers may propose modifications to other sections of the RDG PPA but are encouraged to accept such terms as written in order to expedite the overall RFP process and potential contract negotiations. As a component of their respective Proposals, a Self-Build Proposer or any other Proposer who elects to propose modifications shall provide a Microsoft Word red-line version of the relevant document identifying specific proposed modifications to the model language that the Proposer is agreeable to, as well as a detailed explanation and supporting rationale for each modification.

- 3.8.6.1 (O‘ahu only) General comments, drafting notes and footnotes such as “parties to discuss,” and reservation of rights to propose modifications at a later time, are unacceptable and will be considered non-responsive. Proposed modifications to the RDG PPA shall be limited to targeted revisions to, and not deletions or waivers of, the agreement’s terms, conditions, covenants, requirements or representations. Proposed modifications will also be evaluated as a non-price evaluation criterion as further described in Section 4.4.2. In order to facilitate this process, the Company will make available electronic versions of the model agreements on the RFP website and through the Electronic Procurement Platform for the RFP. Any proposed modifications to the RDG PPA will be subject to negotiation between the Company and the Final Award Group and should not be assumed to have been accepted either as a result of being selected to the Final Award Group or based on any previously executed PPA. As stated above, since general comments, drafting notes, and footnotes without accompanying specific proposed language modifications are unacceptable and non-responsive, the Company will not negotiate provisions simply marked by such general comments, drafting notes, and footnotes.
- 3.8.6.2 (O‘ahu only) The Company has an interest in maintaining consistency for certain provisions of the RDG PPAs, such as the calculation of availability and payment terms. Therefore, for such provisions, the Company will endeavor to negotiate similar and consistent language across PPAs for the Final Award Group.
- 3.8.7 (O‘ahu only) Proposals that do not include specific proposed modifications to the attached RDG PPAs will be deemed to have accepted the RDG PPA in its entirety.

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 RDG PPA or 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 RDG PPA or 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):

For IPP or Affiliate proposals:

- **Lump Sum Payment (\$/year):** Payment amount for full dispatchability of the Facility. Payment will be made in monthly increments.

For Self-Build Proposals:

- **Total Project Capital Costs (\$/year):** Total capital costs for the project (identified by year).
- **Annual O&M Costs (\$/year):** Initial year operations and maintenance costs, annual escalation rate.
- **Annual Revenue Requirement (\$/year):** Annual revenue requirements (ARR) calculated for each year.

See [Appendix G](#) for descriptions and detail on the Total Project Capital Costs, Annual O&M Costs, and Annual Revenue Requirement for the Self-Build Proposals.

- 3.9.5 As identified in the Schedule of Defined Terms in the PPA 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 PPA.

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.¹⁷

- 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 RDG PPA or 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 RDG PPA or Mid-Tier SFC. Please review the model PPA 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. Upon selection, the Final Award Group may be requested to provide further detailed cost information if requested by the PUC or the Consumer Advocate as part of the PPA approval process. If requested, such information would be provided to the PUC, Consumer Advocate, and Company pursuant to a protective order in the docket.
- 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 Proposal. Land RFI information is available to interested parties who sign the CBRE NDA. The Land RFI is further described in Appendix F.

¹⁷ If a Proposal is selected to the Final Award Group and an RDG PPA or 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 RDG PPA or 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 RDG PPA or 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 RDG PPA or Mid-Tier SFC. See Article 2 and Attachment U of the RDG PPA or the Mid-Tier SFC.

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 (Maui only) Additionally, a Company-owned Site is being offered to Proposers for their consideration. An approximately 8.65 acre area within the Company's Waena property in central Maui, referred to as the Waena Site, is further described in Appendix F to site a potential 2 MW PV project. Additional details regarding the specific interconnection requirements for a project sited at the Waena Site are described in Appendix H. Viability of this project option depends on the approvals of the proposed Waena BESS and Switchyard applications that are currently with the PUC (see Docket 2020-0167). Any Proposal utilizing this site must take the estimated completion date of the aforementioned switchyard into account in determining the Facility's GCOD. The estimated completion date for the switchyard is currently December 31, 2022.~~

~~Proposers proposing to use the Waena Site shall be required to agree to specific terms and conditions for such use as provided for in Attachment K 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 PPA to reflect changes in Company policies or to remain in compliance with current applicable laws, rules, or regulations.~~

~~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. 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 applicable Proposal Due Date specified in the RFP Schedule in Section 3.1, Table 2, Item 10. 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 and facilitating potential contract negotiations.

- 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 an RDG PPA or 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 RDG PPA or 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 RDG PPA or the Mid-Tier SFC are minimum requirements. Proposers shall not propose an amount lower than that set forth in the RDG PPA or the Mid-Tier SFC.
- 3.13.3 Each Proposer for a Large Project shall be required to provide a satisfactory irrevocable standby letter of credit in favor of the Company from a bank chartered in the United States to guarantee Proposer's payment of interconnection costs for all Company-Owned Interconnection Facilities in excess of the Total Estimated Interconnection Costs and/or all relocations costs in excess of Total Estimated Relocation Costs that are payable to Company as required and set forth in Attachment G to the RDG PPA.
- 3.13.4 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 RDG PPA or Mid-Tier SFC.

Chapter 4: Evaluation Process and Evaluation Criteria

4.1 Proposal Evaluation and Selection Process

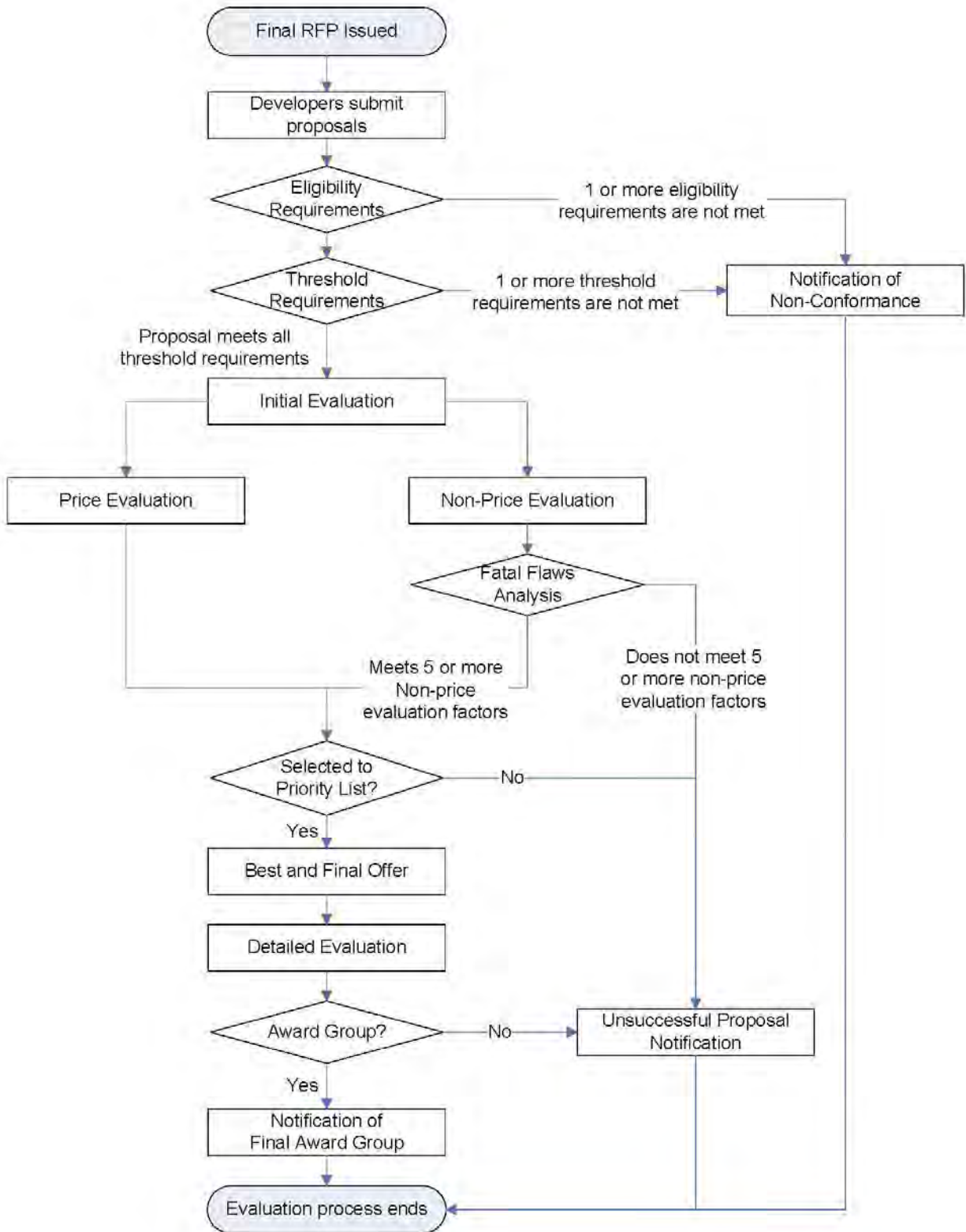
The Company will evaluate the Proposals of each island via separate island-specific evaluations. The Company will employ a multi-step evaluation process for each island. This Chapter provides a description of each step of the process, along with the requirements of Proposers at each step. Figure 1 sets forth the flowchart for the proposal evaluation and selection process for each island.

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.¹⁸ 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.¹⁹ 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.

¹⁸ 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.

¹⁹ 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.²⁰
- 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 O‘ahu, Maui, or Hawai‘i Island.
- The Proposal must be for a PV project.
- The proposed project must be 250 kW or larger.
- The proposed Projects PPA term length must be twenty (20) years.
- **(Maui or Hawai‘i Island)** Projects must interconnect to a distribution circuit (12 kV or lower) and must not exceed 2.5 MW.
- **(O‘ahu only)** Projects must interconnect to the Company’s System at the sub-transmission (46 kV) or distribution level (12 kV or lower). Projects interconnecting to a distribution circuit (12 kV or lower) must not exceed 3 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.
- Project infrastructure and point of interconnection must be located outside the 3.2 foot 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~~ not located within a Tsunami Evacuation Zone, and not located within the Hawaii Department of Land and Natural Resources flood map’s flood

²⁰ Proposal Fees will not be required for SBO Proposals.

zones A, AE, AEF, AH, AO, VE based on the Federal Emergency Management Agency's Digital Flood Insurance Rate Maps.

- The Proposal must specify a GCOD no later than ~~November 30, 2026~~May 31, 2027.
- 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 RDG PPA or Mid-Tier SFC ("Site Control") as specified in the Proposer's Proposal (taking into account the timelines set forth in this RFP for selection, negotiation, and execution of an RDG PPA or 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 RDG PPA or 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 PPA negotiations. 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), and a comprehensive communications plan plan for reporting construction schedules and activities which include resulting impacts (ex. traffic, noise, and dust) and mitigation plans beginning at least one month prior to the start of scheduled work, and a comprehensive communications plan which factors in monthly Project status updates. Hawaiian Electric will carefully review the Community Outreach Plans to ensure that outreach to area elected officials and known community leaders and organizations is documented and that the plan is tailored by community and includes the outreach schedule, communication plans and required project information that will be shared in each engagement.

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.
8. **Available Circuit Capacity** (This criterion will only be applied to proposed Projects that intend to interconnect to Company's 46 kV system on O'ahu): The output capacity of the proposed Project must not exceed the available capacity of the 46 kV circuit to which it will interconnect, except in cases where the Proposer will bear the cost of 46 kV transmission conductor upgrade as noted in Section 2.2.3.

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. For each island, 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 (November 30, 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 33 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 $50 \times (1 - (9/33)) = 36$ points.

The eligible Proposal with the lowest Levelized Program Capacity Price 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 ~~twelve~~ (13) non-price criteria categories set forth below:

1. Community Outreach
2. State of Project Development and Schedule
3. Performance Standards
4. Locational Value: Non-Wires Alternative (NWA) and 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. RDG PPA Contract Proposed Modifications
11. Guaranteed Commercial Operations Date
12. Cultural Resource Impacts
13. Impacts Land Use and Impervious Cover

Each of the first six criteria – Community Outreach, State of Project Development and Schedule, Performance Standards, Locational Value: NWA and 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, 11, and 113 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 more robust and customized the stakeholder list, meeting frequency, and commitments are defined in the plan, the higher the rating the Proposer will receive as part of the scoring and evaluation process. 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. 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) Local labor and prevailing wage commitment. Proposers will be scored more favorably if their plan commits to at least 80% of non-supervisory construction and operations workers' hours associated with the construction or repowering of a Project will be paid at the prevailing wage equivalent under HRS Chapter 104 during all periods of construction. Proposers are also highly encouraged to hire qualified construction, operations, and maintenance works who reside in the county where the Project is being constructed, and the State of Hawaii, in that order, before hiring non-resident labor.
- 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, including monthly Project status updates.

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 RDG PPA or 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 RDG PPA or 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: Non-Wires Alternative and Community Resilience** – The Company has identified areas on the grid where the siting of a CBRE Project would support grid needs, non-wires alternatives and/or community resilience. Non-wires alternatives have been identified for areas with grid needs. For Projects that support non-wires alternatives, the capability to grid charge is needed to reliably meet distribution capacity needs. For Projects to support community resilience, a BESS with grid-forming and black start capability is needed for the purposes of being able to energize any proposed community or “island” as a microgrid from a de-energized state. The black start capability is not needed to energize the entire grid. 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. Proposers are encouraged to and will be scored more favorably for locating projects in the following:

- Areas ~~where the grid needs that are identified in Appendix I have a higher certainty rating with~~ Distribution Grid Needs can ~~also~~ be found ~~on~~ in the the Company's Locational Value Map:
~~<https://www.hawaiianelectric.com/clean-energy-hawaii/integration-tools-and-resources/locational-value-maps/>~~ Maps:
~~<https://www.hawaiianelectric.com/clean-energy-hawaii/integration-tools-and-resources/locational-value-maps/>~~
 - Grid Service Definitions:
 - Distribution Capacity: A supply and/or a load modifying service that DERs provide as required via the dispatch of power output for generators and electric storage, and/or reduction in load that is capable of reliably and consistently reducing net loading on desired distribution infrastructure in response to Company Dispatch
 - Distribution Reliability: A load modifying or supply service capable of improving local distribution reliability under abnormal conditions in response to Company Dispatch
 - Areas with identified community resilience that are more vulnerable to extended outages are:
 - **Maui:** Hana
 - **O'ahu:** Ko'olaupoko moku
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. **(O'ahu only) RDG PPA Contract Proposed Modifications** – Proposers are encouraged to accept the contract terms identified in the RDG PPA in its entirety in order to expedite the overall RFP process and potential contract negotiations. Proposers who accept the RDG PPA without edits or utilize the Mid-Tier SFC, which is non-negotiable and cannot be marked up as part of their Proposal, will receive a higher score and will be the only proposals that can achieve the highest scoring for this non-price evaluation criterion. Technology-specific or operating

characteristic-required modifications, with adequate explanation as to the necessity of such modifications, will not jeopardize a project's ability to achieve the highest score. Proposers who elect to propose modifications to the model agreements shall provide a Microsoft Word red-line version of the applicable document identifying specific proposed modifications to the model agreement language, as well as a detailed explanation and supporting rationale for each modification. General comments without proposed alternate language, drafting notes without explanation or alternate language, footnotes such as "parties to discuss," or a reservation of rights to make additional modifications to the model agreements at a later time are unacceptable, will be considered unresponsive, and will result in a lower score (see also Section 3.8). The Company and Independent Observer will evaluate the impact that the proposed modifications will have on the overall risk assessment associated with the evaluation of each Proposal.

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 RDG PPA or 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.

13. Land Use and Impervious Cover - The Company encourages Proposers to site Projects on developed lands and to preserve open spaces and agricultural lands. Proposers will be scored more favorably for locating Projects on:

- Land with greater existing impervious cover;²¹
- Land zoned industrial or industrial mixed use, commercial or business mixed use or apartment mixed use under the State Land Use Classification with a preference in that order; or
- Land deemed as reclaimed, such as Brownfield.²²

In addition, projects that minimize the net increase of impervious cover of a Project site will be scored more favorably.

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. For each island, 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 for each island 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 a Priority List does not assure an eligible Project's inclusion in the selection of a 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 Lists. If the SBO is selected to the Priority Lists, the SBO will not be eligible to provide a Best and Final Offer and the original pricing submitted in its Self-Build Proposal will be used in the Detailed Evaluation. All other Proposers selected to the Priority List will have the opportunity to update (downward only)²³ the pricing elements in their Proposal in order to improve the competitiveness of their Proposal prior to being further assessed

²¹ As defined by the EPA (8 Tools of Watershed Protection in Developing Areas | Watershed Academy Web | US EPA), "the sum total of all hard surfaces within a watershed including rooftops, parking lots, streets, sidewalks, driveways, and surfaces that are impermeable to infiltration of rainfall into underlying soils/groundwater."

²² As defined by the EPA (Overview of EPA's Brownfields Program | US EPA), "a property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant."

²³ 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.).

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

Proposers will not be allowed to increase their price²⁴ 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.²⁵

4.7 Detailed Evaluation

The Best and Final Offers of the Priority List Proposals as well as any original Self-Build Proposals, if advanced to the Priority List, will be further assessed in the Detailed Evaluation to identify the Proposals selected to the Final Award Group.

For each island, the detailed evaluation process will consist of an assessment of combinations of Proposals from the respective island's Priority List. Using the current forecast and planning assumptions developed for the Company's Integrated Grid Planning process in Docket No. ~~20192018-0165-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 portfolio and the energy under the RDG PPA or 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

²⁴ 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.

²⁵ 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.

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;
4. The cost of imputed debt, if applicable.

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 for each island, 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 a 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 for each island. Mid-Tier Projects selected to a Final Award Group will execute a Mid-Tier SFC with the Company in the form of Appendix K. Large Projects selected to a Final Award Group will enter into RDG PPA (in the form of Appendix L) negotiations. All Proposers will be notified at this stage of the evaluation process whether their Proposal is included in a Final Award Group.

Selection to a Final Award Group and/or entering into contract negotiations does not guarantee execution of an RDG PPA or 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 a Priority List or a Final Award Group, the Company reserves the right, at any time prior to submission of the PPA Application with the PUC, in consultation with the Independent Observer, to disqualify the Proposer from the RFP. If discovery of the incorrect or misrepresented information is made after the Company has filed its PUC application for approval of the PPA with the Proposer, the Company will disclose the incorrect or misrepresented information to the PUC for evaluation and decision as to whether such Proposer should be disqualified and the Company's application dismissed.

Following any removal of a proposal from a 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 PPA, 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 a Priority List to determine (1) if another proposal should be added to a Final Award Group; or (2) if the remaining proposals in a 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 all projects starting from 250 kW and less than 1 MW in size, ~~Project single line and three line diagrams and an equipment list shall be submitted for each Proposal. For all projects greater than or equal to 1 MW in size (regardless of whether an IRS is required), a complete package of a completed~~ Project Interconnection Requirement Study Data Request worksheets, Project single line and three line diagrams, worksheet, which can be found in Appendix B, Attachment 2, all project diagram(s), models for equipment and

controls; ~~(see Appendix B, Attachments 3 and 6), list(s) to clearly identify the identifying~~ components and respective files (for inverters and power plant controller), and complete documentation with instructions ~~shall~~ must be submitted ~~for each Proposal. The submittal shall be done~~ within 30 days after selection to the Final Award Group ~~(see~~.

For all Projects 1 MW or larger, within 30 days after selection to the Final Award Group, final submissions, to incorporate any updates to the information submitted in response to Section 2.11 of Appendix B)-3.1, shall be made, and shall be in compliance with the Project data and modeling requirements described below.

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 greater than or equal to 1 MW in size, 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 a 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 that will require an IRS, 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 within 30 days after selection to a Final Award Group, 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 RDG PPA (see RDG PPA [Section 12.4](#)) or 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 Negotiation Process

Within five (5) business days of being notified by the Company of its intent to enter into RDG PPA contract negotiations or execute a Mid-Tier SFC, Proposers selected for a 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 a Final Award Group will be required to keep their Proposal valid through the award period. RDG PPA contract negotiations will take place in parallel with the IRS process.

The Company intends to execute and file the RDG PPA with the PUC for approval and later amend the RDG PPA 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 29.21 of the RDG PPA (Community Outreach Plan) 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 Groups no more than five (5) business days after the notification is given to Proposers who are selected to a Final Award Group. Selected Proposers shall not disclose their selection to the public before the Company publicly announces the Final Award Group selections.

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 selections. 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 a 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, plan for reporting construction related updates, labor and prevailing wage commitment, and a comprehensive communications plan which factors in monthly Project status updates. The Proposer's Community Outreach Plan shall be a public document identified on the Proposer's Project website for the term of the PPA 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. DetailsFurther information and instructions regarding expectations for on the Community Outreach Plan can be found in Appendix B, Attachments 4 and 5.

Prior to the execution date of the PPA, 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; (ii) an opportunity to engage in a dialogue about concerns, mitigation measures, and potential community benefits of the proposed Project; (iii) an update regarding the Proposer's cultural impact plan, including any findings made and mitigations identified to-date as part of the Archaeological Literature Review and Field Inspection Report discussed in Section 5.7; and (iv) for Large Projects, information concerning the process and/or intent for the public's input and engagement, including advising attendees that they will have thirty (30) calendar days from the date of said public meeting to submit written comments to Company and/or Proposer for inclusion in the Company's submission to the PUC of its application for a satisfactory PUC Approval Order and for inclusion on the Proposer's website. The Proposer shall collect all public comments, and then provide the Company copies of all comments received in their original, unedited form. If an RDG PPA is executed by the Proposer and the Company, the Company may submit any and all public comments (presented in its original, unedited form) as part of its PUC application for this Project. 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 Groups (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 RDG PPA or Mid-Tier SFC relating to Community Outreach.

Following the submission of the PUC application for the Project, and prior to the date when the Parties' statements of position are to be filed in the docketed PUC proceeding for the Project, the Proposer shall provide another opportunity for the public to comment on the proposed Project.

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 (O'ahu only) Greenhouse Gas Emissions Analysis

Proposers whose Proposal(s) for Large Projects are selected for a Final Award Group shall cooperate with and promptly provide to the Company and/or Company's consultant(s) upon request all information necessary, in the Company's sole and exclusive discretion, for such consultant to prepare a greenhouse gas ("GHG") emissions analysis and report in support of a PUC application for approval of the RDG PPA for the Project (the "GHG Review"). Proposers shall be responsible for the full cost of the GHG Review associated with their Project under a Greenhouse Gas Analysis Letter Agreement between the Proposer and the Company. The GHG Review is anticipated to address whether the GHG emissions that would result from approval of the RDG PPA and subsequent to addition of the Project to the Company's System are greater than the GHG

emissions that would result from the operations of the Company's System without the addition of the Project, whether the cost for renewable, dispatchable generation, and/or energy storage services as applicable under the RDG PPA is reasonable in light of the potential for GHG emissions, and whether the terms of the RDG PPA are prudent and in the public interest in light of its potential hidden and long-term consequences.

5.5 PUC Approval

Any signed RDG PPA for Large Projects resulting from this RFP is subject to PUC approval as described in the RDG PPA, including Article 12 and Section 29.20 thereof. Selected Mid-Tier Projects will execute a Mid-Tier SFC with the Company which will not be subject to further regulatory review and approval. Selected SBO Large Projects are required to file an application pursuant to General Order No. 7 if the requirements for such filing are met. However, selected SBO Mid-Tier Projects will also not be required 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 an independent power producer.

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 RDG PPA or 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 RDG PPA or Mid-Tier SFC.

5.7 Archaeological Literature Review and Field Inspection Report

All Projects selected to a Final Award Group must, within five (5) months of selection, complete and submit to the Company an Archaeological Literature Review of existing cultural documentation filed with the State Historic Preservation Division and a Field Inspection Report. For any archaeological and/or historical sites identified in the project area, the Proposer must provide a plan for mitigation from an archaeologist licensed in

the State of Hawai'i. This mitigation plan must be posted on the Project website for transparency.

Any results available at the time of the Community Outreach meeting required prior to PPA execution discussed in Section 5.3, must be presented at that time, along with an update regarding the developer's cultural impact plan.

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REQUEST FOR PROPOSALS

FOR

COMMUNITY-BASED RENEWABLE ENERGY TRANCHE 1

O‘AHU, MAUI AND HAWAI‘I ISLAND

~~AUGUST 25, 2021~~

FEBRUARY 23, 2022

Docket No. 2015-0389

Appendix A – Definitions



Hawaiian 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 RDG PPA and Mid-Tier SFC.

“Battery Energy Storage System” or “BESS” has the meaning set forth in the RDG PPA and Mid-Tier SFC.

“BESS Contract Capacity” has the meaning set forth in the RDG PPA and 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 RDG PPA and 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.

“Companies” means Hawaiian Electric Company, Inc., Maui Electric Company, Ltd., and Hawai‘i Electric Light Company, Inc., collectively.

“Company” means Hawaiian Electric Company, Inc., Maui Electric Company, Ltd., or Hawai‘i Electric Light Company, Inc., each a Hawai‘i corporation.

“Company-Owned Interconnection Facilities” has the meaning set forth in Section 1.a of Attachment G of the RDG PPA and 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.

“DC Coupled Term Sheet” means the Term Sheet for Large CBRE DC Coupled Projects (PV+BESS) which is attached as Appendix L-4, and summarizes the revisions that will be made to the RDG PPA for Large Projects with a single inverter system such that the PV system and BESS are “DC Coupled.”

“Development Period Security” has the meaning set forth in the RDG PPA and 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 each island in this RFP.

“Evaluation Team” means agents of the Company who evaluate Proposals.

“Facility” has the meaning set forth in the RDG PPA and 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 a 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.

“Hawai‘i Electric Light” means Hawai‘i Electric Light Company, Inc., a Hawai‘i corporation.

“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.

“Large Project” means a project greater than 5 MW on O‘ahu, and, in the LMI RFP only, greater than 2.5 MW on Maui and Hawai‘i Island or any project connecting at the transmission level.

“Levelized Program Capacity Price” means a calculation (\$/MW) used for comparison of Proposals based on information provided in the Proposal submission in this RFP.

“LMI Anchor Tenant” is as defined in Tariff Rule No. 29 in Appendix J.

“LMI Subscriber” means either a LMI Customer or LMI Anchor Tenant as defined in Tariff Rule No. 29 in Appendix J.

“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 RDG PPA or Mid-Tier SFC. 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.

“Maximum Rated Output” has the meaning set forth in the RDG PPA or 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 5 MW, inclusive, on O‘ahu and between 250 kW and 2.5 MW, inclusive, on Maui and Hawai‘i Island.

“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 5 MW, inclusive, on O‘ahu and between 250 kW and 2.5 MW, inclusive, on Maui and Hawai‘i Island, 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 RDG PPA and 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 RDG PPA and 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 RDG PPA or 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 RDG PPA and 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.

“Price for Purchase of Electric Energy” is the amount that the Company will pay the Seller for electric energy delivered to the Company in accordance with the terms and conditions of the RDG PPA on a monthly basis as described in Attachment J. This payment will be calculated in terms of dollars per MWh.

“Priority List” means the group of Proposals for each island selected by each Company as described in Section 4.5 of this RFP.

“Project” means a Facility proposed to the Company by a Proposer pursuant to this RFP.

“Proposal” means a proposal submitted to the Company by a Proposer pursuant to this RFP.

“Proposal Due Date” means the date stated in RFP Schedule for IPP and Affiliate Proposals 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 the Company 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.

“RDG PPA” means the Model PV Renewable Dispatchable Generation Power Purchase Agreement that will be used for projects greater than 5 MW in size on O‘ahu, and, in the LMI RFP only, for projects greater than 2.5 MW on Maui and Hawai‘i Island, attached as Appendix L to this RFP.

“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 2, Section 3.1 of this RFP.

“Round Trip Efficiency” or “RTE” has the meaning set forth in the RDG PPA.

“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 RDG PPA and Mid-Tier SFC.

“Seller-Owned Interconnection Facilities” has the meaning set forth in the RDG PPA and 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.

“System” means the electric system owned and operated by Hawaiian Electric, Maui Electric, or Hawai‘i Electric Light on O‘ahu, Maui, or Hawai‘i Island, respectively, (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.

“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 RDG PPA and Mid-Tier SFC.

Appendix B - Attachment 2 has been modified but does not have a redlined document comparing it to the August 25, 2021 version. Please review the Appendix B - Attachment 2 in its entirety.

DRAFT

REQUEST FOR PROPOSALS

FOR

COMMUNITY-BASED RENEWABLE ENERGY TRANCHE 1

O‘AHU, MAUI, AND HAWAI‘I ISLAND

~~AUGUST 25, 2021~~

FEBRUARY 23, 2022

Docket No. 2015-0389

*Appendix B – Proposer’s Response Package /
Project Interconnection Data Request*



Hawaiian 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

There will be three RFP events on Sourcing Intelligence (Electronic Procurement Platform), one each for O'ahu, Maui, and Hawai'i Island. To access an RFP event, the Proposer must register as a "Supplier"¹ on Sourcing Intelligence. In each RFP event, one Proposal may be submitted for 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 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 for an individual RFP event, 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

¹ 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).

the Company name and Proposal number (ex: CompanyNameP1). Proposers may use shorthand or clear 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

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 to an individual RFP event 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).

Contact information for PowerAdvocate Support can also be found on the bottom border of the PowerAdvocate website: www.poweradvocate.com

Once an 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 2, 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

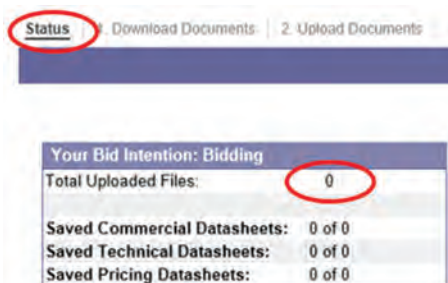
successfully uploaded, documents will appear under the "Bid Submissions" section on the bottom of the tab's page, organized within the "Technical Information" Document Type. Repeat steps a, b, and c, as required for each file upload.

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 Sections 4.2 of this Appendix, as applicable.

To be filled out in its entirety by IPP or Affiliate Proposers:

1	Proposer Name (Company Name)	
2	Parent Company/Owner/Sponsor/Business Affiliation/etc.	
3	Project Name	
4	Net nameplate capacity (MW)²	
4a	Installed nameplate capacity: the aggregate sum of the net nameplate active power capabilities of all generator and converter equipment (i.e. storage) installed.	
5	Proposed Facility Location, Street Address if available, or what City/Area on the island is it near	
6	TMK(s) of Facility Location (use 9-digit TMK format)³	
7	Point of Interconnection’s Circuit Name	
8	Coordinates for Point of Interconnection (use decimal degrees)⁴	
9	Net Energy Potential (NEP) Projection for the Facility (MWh)	
10	Lump Sum Payment (\$/Year)	
11	Does Project include an Energy Storage Component? (Yes/No)	
If the Project includes an Energy Storage Component:		
11a	Project Energy Storage Technology	
11b	AC or DC interconnected with the source energy resource	
11c	Energy Storage Capability for the Facility (MW and MWh)	

² 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.

³ 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).

⁴ 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.

11d	Is the Project capable of being 100% charged from the grid after the 5 year ITC recapture period? (Yes/No)	
11e	Is the Project grid-forming and black start capable? (Yes/No)	
12	Proposal Guaranteed Commercial Operations Date (MM/DD/YYYY)	
13	The Proposer hereby certifies that the Project meets all performance attributes identified in Section 2.1 of the RFP? (Yes/No)	
14	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)	
15	The Proposer hereby agrees to provide Development Period Security and Operating Period Security as set forth in the applicable Model RDG PPA or Model Mid-Tier SFC. (Yes/No)	
16	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)	
17	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)	
18	The Proposer hereby certifies that the Project is dedicated to LMI Subscribers with a minimum 60% dedicated to LMI Customers as described in Section 1.2.3 of the RFP? (Yes/No)	
19	(O’ahu Large Projects only) Does the Proposer accept the contract terms identified in the RDG PPA in its entirety? (Yes/No)	
19a	If the response to #19 is “No,” specify the name of the Microsoft Word red-line file that identifies the proposed modifications to the agreement, provided, however, that such proposed modifications shall be limited to targeted revisions to, and not deletions or waivers of, the agreement’s terms, conditions, covenants, requirements or representations.	
<u>20</u>	<u>Is the proposed Project sited on land deemed to be reclaimed land, such as a Brownfield⁵?</u>	
<u>20a</u>	<u>If yes, what percentage of the proposed Project site is reclaimed land?</u>	

To be filled out in its entirety by Self-Build Proposers:

1	Proposer Name (Company Name)	
2	Parent Company/Owner/Sponsor/Business Affiliation/etc.	
3	Project Name	
4	Project net nameplate capacity (MW)	

⁵ As defined by the EPA (Overview of EPA's Brownfields Program | US EPA), “a property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.”

4a	Installed nameplate capacity: the aggregate sum of the net nameplate active power capabilities of all generator and converter equipment (i.e. storage) installed.	
5	Proposed Facility Location, Street Address if available, or what City/Area on the island is it near	
6	TMK(s) of Facility Location (use 9-digit TMK format)⁶	
7	Point of Interconnection's Circuit Name	
8	Coordinates for Point of Interconnection (use decimal degrees)⁷	
9	Net Energy Potential (NEP) Projection for the Facility (MWh)	
10	Does Project include an Energy Storage Component? (Yes/No)	
	If the Project includes an Energy Storage Component:	
10a	Project Energy Storage Technology	
10b	AC or DC interconnected with the source energy resource	
10c	Energy Storage Capability for the Facility (MW and MWh)	
10d	Is the Project capable of being 100% charged from the grid after the 5 year ITC recapture period? (Yes/No)	
10e	Is the Project grid-forming and black start capable? (Yes/No)	
11	Proposal Guaranteed Commercial Operations Date (MM/DD/YYYY)	
12	The Proposer hereby certifies that the Project meets all performance attributes identified in Section 2.1 of the RFP? (Yes/No)	
13	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)	
14	The Proposer hereby agrees to provide Development Period Security and Operating Period Security as set forth in the applicable RDG PPA or Mid-Tier SFC. (Yes/No)	
15	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)	
16	The Proposer hereby certifies that the Project is dedicated to LMI Subscribers with a minimum 60% dedicated to LMI Customers as described in Section 1.2.3 of the RFP? (Yes/No)	
17	Year (YYYY)	Project Capital Cost (\$)
18	Year (YYYY)	O&M Cost (\$)
19	Year (YYYY)	Annual Revenue Requirement (\$)

⁶ 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).

⁷ 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.

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.)
- Completed applicable **Project Interconnection Data Request worksheet** and **project 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 Data Request worksheet ~~shall be submitted within the respective timeframes specified in Section 5.1 of the RFP.⁸~~ (See Section 2.11.1 below)
- [For Self-Build Only] **Self-Build Option Team Certification Form**. See Appendix G Attachment 1.
- [For Self-Build Only] **Revenue Requirements Worksheets** that support the annual revenue requirements estimates shall be submitted. A starter revenue requirements template file can be requested by the Self-Build Team via email to the RFP Email Address once the RFP event opens. The revenue requirements worksheets submitted will be modified to reflect the details of the Project’s Proposal. All assumptions used will be reflected in an assumptions input tab.

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

~~⁸If 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.~~

- 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

For projects that include a storage component:

- Technology Type (i.e. lithium ion battery)
- Interconnection type (AC or DC)
- 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 PPA, as those provisions reflect the benefit the Company seeks from the Project's storage functionality.

[For Self-Build Only] Identify all **estimated development and capital costs** for, at a minimum:

- Facility (including any generation and storage components)
- Outside Services
- Interconnection
- Overhead Costs
- Allowance for Funds Used During Construction
- Annual O&M
- Specify the percentage of the total cost associated with the storage component of the Facility
- (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 PPA, 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 (O'ahu only) If Proposers elect to propose modifications to the RDG PPA, **provide a Microsoft Word red-line version of the RDG PPA** identifying specific proposed modifications to the model language that the Proposer is agreeable to and a detailed explanation and supporting rationale for each modification. General comments, drafting notes and footnotes such as "parties to discuss" are unacceptable and will be considered non-responsive.

Proposers that do not upload redlines of the applicable RDG PPA with their Proposal submission will be deemed to have accepted the RDG PPA in its entirety. If no modifications are proposed, please state in this section “no modifications to the RDG PPA”.

As set forth in RFP Section 3.8.6.1, proposed modifications to the RDG PPA will be subject to negotiation between the Company and the Final Award Group and should not be assumed to have been accepted either as a result of being selected to the Final Award Group or based on any previously executed PPA.

2.4.2 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
- Existing easements encumbering the parcel on which the site is located.

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.

2.5.7 Indicate whether the Proposal is **intended to partially or fully satisfy a Company identified Non-Wire Alternative** as stated in Appendix I or the Company’s Locational Value Map, and which locational need it intends to satisfy.

2.5.8 Provide the following information related to **land use and impervious cover**⁹ of the proposed Project:

- **Land use map including current zoning of the proposed Project site and adjacent properties; indicate percentage of the proposed Project site for each zoning type identified.**
- **Map depicting existing impervious cover of the proposed Project site; include the current percentage of impervious cover of the utilized area for the proposed Project.**
- **Map depicting final impervious cover of the proposed Project site; include the proposed percentage of impervious cover of the utilized area for the proposed Project.**
- **If the proposed Project is on reclaimed land, such as Brownfield, included a complete description of the reclaimed land and any current land use restrictions.**

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.

⁹ As defined by the EPA (8 Tools of Watershed Protection in Developing Areas | Watershed Academy Web | US EPA), “the sum total of all hard surfaces within a watershed including rooftops, parking lots, streets, sidewalks, driveways, and surfaces that are impermeable to infiltration of rainfall into underlying soils/groundwater.”

- 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 ([including the site’s flood zone based on the Hawaii Department of Land and Natural Resources flood map](#))
 - 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?
- Construction related updates
 - Plan for reporting construction schedules and activities, including resulting impacts (ex. traffic, noise, and dust) and proper mitigation plans beginning at least one month prior to the start of scheduled work
- Local labor and prevailing wage commitment (if any)
 - Comprehensive communication strategy with affected communities and the general public regarding the proposed Project:
 - Describe frequency of communication, including monthly Project status updates
 - 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

Proposers are reminded of RFP Section 3.4.2 including the provision of 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 (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>
Environmental Compliance and Permitting Plan		
*	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>
Cultural Resource Impacts		
*	Proposer's updated Community Outreach Plan must include a plan that (1) identifies any cultural, historic or natural resources that will be	<i>(provide information in level of detail as provided in Section 2.7)</i>

	impacted by the Project (2) describes the potential impacts on these resources and (3) identifies measures to mitigate such impacts.	
Community Outreach		
*	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.
 - A three-line diagram which shows the Point of Interconnection, potential transformer (PT) and current transformer (CT) ratios, and details of the generating facility configuration, including relays, meters and test switches.

2.10.1.1 Provide the projected **hourly annual energy potential production profile of the Facility¹⁰ (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 applicable RDG PPA and 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).

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

¹⁰ For Paired Projects, 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.

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 RDG PPA or 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 RDG PPA or 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 starting from 250 kW and less than 1 MW in size, provide project single line and three line diagrams(diagram(s)) and an equipment list shall be submitted with each Proposal within Note that additional interconnection submittal requirements, to be submitted 30 days after the timeframes specified Final Award Group selection, are identified in Section 5.1 of the RFP:⁶

2.11.3 For projects greater than or equal to 1 MW in size, provide the ~~completed~~following with each Proposal:

- ~~Completed Project Interconnection Requirement Study Data Request worksheet with the Proposal submission.~~ (The worksheet can be found in the “1. Download Documents” tab as Appx B Att 2 with the file name of Project Interconnection Data Request Worksheets (PV Generation) MSExcels files. ~~Also provide all~~);
- ~~All project diagram(s) with the Proposal submission.~~
- ~~Models for equipment and controls, list;~~
- ~~List(s) identifying components and respective files (for inverters and power plant controller);~~ and ~~complete~~
- ~~Complete documentation with instructions shall be submitted within the timeframes specified in Section 5.1 of the RFP.~~⁶

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 (for example, by submitting a PPA)
- 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.

Participant Name:	EXPERIENCE:						
	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, including the Archaeological Literature Review and Field Inspection Report
- Community outreach and engagement activities
- Energy resource assessment
- Financing
- Engineering
- Procurement
- Facility construction including construction management events
- Applicable reporting milestone events specified in the RDG PPA or 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 RDG PPA or Mid-Tier SFC and/or other agreements.

2.14.2 Describe the **construction execution strategy** including:

- Identification of contracting/subcontracting plans
- Modular construction
- Safety plans¹¹
- 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.

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
 - LMI Subscriber fees and payments

¹¹ 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.

- 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 eligible customers
- Strategies for LMI customer retention and maintaining LMI customer participation levels
- Customer protection provisions
- Estimated benefits to 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.

Project Name
Proposer Name

1

Project Benefits

- Details

2

Community Benefits

- Details

3

Proposed Facility Location in/near what City/Area

- Map
- Dimensions of proposed project
- Include all project components

4

Project Description

- Details

5

Site Layout Plan

- Project Layout
- Project Visual Simulations
 - Multiple public vantage points

6

Interconnection Route

- Map

7

Required Government Permits and Approvals

- Preliminary Schedule
- Opportunities for public comment

8

Environmental Impacts

- Preliminary environmental assessment of the site (including any pre-existing environmental conditions)

9

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.

10

Construction Related Updates

- Plan for reporting construction schedules and activities
 - Including resulting impacts (ex. traffic, noise, and dust) and mitigation plans
 - Begins at least one month prior to the start of scheduled work
 - To extend throughout the construction and development of the project

11

Local Labor and Prevailing Wage Commitment (if any)

- Detailing Proposer's commitment, if any, that 80% of non-supervisory construction and operations workers' hours associated with the construction or repowering of a Project will be paid at the prevailing wage equivalent under HRS Chapter 104 during all periods of construction.
- Describing commitment, if any, to hire qualified construction, operations, and maintenance works who reside in the county where the Project is being constructed, and the State of Hawaii, in that order, before hiring non-resident labor.

12

Where to Find More Information

- Project website
- Proposer email and contact information

13

How to Provide Comments

14

	<p>a. 250kW – Analysis not required</p> <p>b. 250KW< Size < 1MW – Analysis dependent on location on the circuit</p>	<p>2. Voltage Transients Analysis not required if there is no breaker on the high side of the transformer (Typical)</p> <p>3. If there is a breaker on the high side - Voltage Transients Analysis depends on transformer size:</p> <p>a. 250kW – Analysis not required</p> <p>b. 250KW< Size < 1MW – Analysis dependent on location on the circuit</p>	<p>3. If an IRS is determined to not be necessary, a technical model checkout will still be required per Section 5.1.1 of the RFP.</p>	<p>If an IRS is determined to not be necessary, a technical model checkout will still be required per Section 5.1.1 of the RFP.</p>
Reference Single Line Diagram (See Appendix H)	<p>Typical Primary Distribution (250kW and larger to less than 1MW) Interconnection Single Line Diagram for CBRE</p>	<p>Typical Secondary Distribution (250kW and larger to less than 1MW) Interconnection Single Line Diagram for CBRE</p>	<p>Typical Distribution Primary Interconnection (1MW and larger) Single Line Diagram for CBRE</p>	<p>Typical 46kV Interconnect Single Line Diagram for RFP</p>

Island Size	<p>O'ahu Connecting to 46kV Max size – limited to circuit capacity NO paired BESS</p>	<p>O'ahu, Connecting to 46kV Max size – limited to circuit capacity w/paired BESS</p>
Models	<p>PSS® E Generic, PSS® E User Defined, PSCAD, and ASPEN.</p>	<p>Facilities < 5MW: • PSS® E Generic, PSS® E User Defined, PSCAD, and ASPEN. Facilities ≥ 5MW: • Grid Forming Models o PSS® E Generic, PSS® E User Defined, PSCAD, and ASPEN.</p>
Interconnection Requirement Study Scope		

	<p>Tasks (Include selected tasks in the IRS. Exclude tasks that are unselected)</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Interconnection One-Line, Three-Line, and Equipment List <input checked="" type="checkbox"/> Project Data Requirements and Facility Technical Model Review <input checked="" type="checkbox"/> Review of Existing System Performance (Base-Case) <input checked="" type="checkbox"/> Develop Project Model (IRS Case) <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Steady-State Power Flows <input checked="" type="checkbox"/> Reverse Power Flow <input checked="" type="checkbox"/> Reactive Power Requirements <input checked="" type="checkbox"/> Protection Review <input checked="" type="checkbox"/> Voltage Flicker <input checked="" type="checkbox"/> Voltage Transients (In-Rush Current) <input type="checkbox"/> System Stability <ul style="list-style-type: none"> <input type="checkbox"/> PSSE Analyses <input type="checkbox"/> PSCAD Analyses for Weak Grid Conditions <input type="checkbox"/> Grid Forming Analyses <input checked="" type="checkbox"/> Ride-Through Requirements <input checked="" type="checkbox"/> Unintended Islands <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Transient Overvoltage (TOV) <input checked="" type="checkbox"/> Unintended Islands Fault Overvoltage (GFOV) <input type="checkbox"/> Harmonics <ul style="list-style-type: none"> <input type="checkbox"/> Harmonics Model Analysis <input type="checkbox"/> Harmonics Monitoring Assessment 	<p>Tasks (Include selected tasks in the IRS. Exclude tasks that are unselected)</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Interconnection One-Line, Three-Line, and Equipment List <input checked="" type="checkbox"/> Project Data Requirements and Facility Technical Model Review <input checked="" type="checkbox"/> Review of Existing System Performance (Base-Case) <input checked="" type="checkbox"/> Develop Project Model (IRS Case) <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Steady-State Power Flows <input checked="" type="checkbox"/> Reverse Power Flow <input checked="" type="checkbox"/> Reactive Power Requirements <input checked="" type="checkbox"/> Protection Review <input checked="" type="checkbox"/> Voltage Flicker <input checked="" type="checkbox"/> Voltage Transients (In-Rush Current) <input type="checkbox"/> System Stability <ul style="list-style-type: none"> <input type="checkbox"/> PSSE Analyses <input type="checkbox"/> PSCAD Analyses for Weak Grid Conditions <input type="checkbox"/> Grid Forming Analyses <input checked="" type="checkbox"/> Ride-Through Requirements <input checked="" type="checkbox"/> Unintended Islands <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Transient Overvoltage (TOV) <input checked="" type="checkbox"/> Unintended Islands Fault Overvoltage (GFOV) <input type="checkbox"/> Harmonics <ul style="list-style-type: none"> <input type="checkbox"/> Harmonics Model Analysis <input type="checkbox"/> Harmonics Monitoring Assessment
<p>Reference Single Line Diagram (See Appendix H)</p>	<p>Note:</p> <ol style="list-style-type: none"> 1. System Stability analysis for the portfolio may be required to analyze the aggregated impact of the projects. 	<p>Note:</p> <ol style="list-style-type: none"> 1. System Stability analysis for the portfolio may be required to analyze the aggregated impact of the projects. 2. Grid Forming analyses will be performed for facilities ≥ 5MW.
	<p>Typical 46kV Interconnect Single Line Diagram for RFP</p>	<p>Typical 46kV Interconnect Single Line Diagram for RFP</p>

DRAFT

REQUEST FOR PROPOSALS

FOR

COMMUNITY-BASED RENEWABLE ENERGY TRANCHE 1

O‘AHU, MAUI, AND HAWAI‘I ISLAND

~~AUGUST 25, 2021~~

FEBRUARY 23, 2022

Docket No. 2015-0389

Appendix F – Description of Available Sites



Hawaiian Electric

**HAWAIIAN ELECTRIC COMPANIES
COMMUNITY-BASED RENEWABLE ENERGY PROJECTS RFP
DESCRIPTION OF AVAILABLE SITES**

Land Request for Information

On June 15, 2020, Hawaiian Electric 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 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. The Hawaiian Electric Companies also make 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 (Maui Only)~~

~~—————A Company owned Site, referred to as the Waena site is being offered to Proposers for their consideration. The Waena site consists of 65.7 acres located along Pulehu and Waiko roads in central Maui (TMK 3-8-03:23 and 3-8-03:24). See Exhibits A & B to this Appendix F. The site is zoned Heavy Industrial.~~

~~The Company Site is currently vacant land owned by the Company. Up to 8.65 acres have been allocated for the variable dispatchable Facility and the location at Waena is shown in Exhibit C to this Appendix F, with the boundaries for the site being approximately 1,150 ft at its widest (on the sides running parallel to Waiko Road), and approximately 340 feet deep (toward the interior of the property, away from Waiko Road). Proposer shall only be permitted to lease as much acreage as is necessary for its project. Additional acreage shall not be available and Proposers may only use the available land for its project and for no other uses. The current plan anticipates that the Company Site will be subdivided and any Proposer proposing to use a subdivided lot shall be required to execute a ground lease for the site coterminous with the term of the PPA. An access easement for access to the subdivided lot from Pulehu Road shall be provided. Proposer shall be required to pay for all expenses to subdivide the lot and ongoing~~

~~prorata maintenance and other charges for such access road and any other services provided as part of the ground lease. Proposer shall be responsible, at its sole cost and expense, for all other site improvements, utilities, permits and other required infrastructure and regulatory requirements necessary for use of the site for Proposer's project (see Appendix K).~~

~~A conceptual layout of the Company's Waena Switchyard is shown in Exhibit C to this Appendix F. The Company is willing to share certain geotechnical and drainage reports concerning the Waena Site with interested Proposers. Requests for copies of these reports must be sent to the RFP email address, and the reports will be made available to Proposers only after execution of a Non-Disclosure Agreement. Any drawings, geotechnical reports, drainage reports or any other information or data relating to the Site ("Site Information") are 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 guaranty, 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. Proposer must satisfy itself through its own investigation as to conditions to be encountered at the Site.~~

~~———— All underground water, gas, oil, telephone, electric, storm drain, sewer, and other pipes or conduits that may be shown on the Site Information are only approximate in their locations. The Proposer shall make a personal investigation and inspection of the records and drawings possessed by owners of the utilities. The Proposer shall make satisfactory arrangements with the owners of the utilities for the relocation, maintenance and protection of existing utilities, if any.~~

Additional Information

Additionally, the following links to a few publicly available resources relating to renewable energy project siting and development from the Hawai'i 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.

Hawai'i 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.

Hawai'i Statewide GIS Program

<http://planning.hawaii.gov/gis/>

Provides Hawai'i 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

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 Hawai'i.

Appendix H, Attachments 4-5 have also been updated since the 8/25/21 filing. No redlines for those documents are provided.

DRAFT

REQUEST FOR PROPOSALS

FOR

COMMUNITY-BASED RENEWABLE ENERGY TRANCHE 1

O‘AHU, MAUI, AND HAWAI‘I ISLAND

~~AUGUST 25, 2021~~

FEBRUARY 23, 2022

Docket No. 2015-0389

*Appendix H – Interconnection Facilities Cost
and Schedule Information*



**Hawaiian
Electric**

Hawaiian Electric Company
APPENDIX H - INTERCONNECTION FACILITIES COST AND SCHEDULE
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APPENDIX H - INTERCONNECTION FACILITIES COST AND SCHEDULE
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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
4. DFR – Digital Fault Recorder

Hawaiian Electric Company
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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
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- 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 for work at remote substations caused by the interconnection of Proposer's project. 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
2. Company shall be responsible for all other costs. This may include, but is not limited to:
 - a. Betterment
 - b. Changes to the Under-Frequency Load Shed (UFLS) scheme

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.)

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- 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

1.7 – T&D SYSTEM UPGRADES

1. Proposer shall be responsible for all costs related to system upgrades or changes required to accommodate the Proposer's project (e.g. reconductoring 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 ~~a map~~ the location(s) of the ~~existing~~ nearest fiber ~~and the existing~~ 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

Hawaiian Electric Company
APPENDIX H - INTERCONNECTION FACILITIES COST AND SCHEDULE
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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.
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 3rd 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

Hawaiian Electric Company
APPENDIX H - INTERCONNECTION FACILITIES COST AND SCHEDULE
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- 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

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 5 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 65 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

Hawaiian Electric Company
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less than 1 MW), or Attachment 3 (Distribution Primary Interconnection for 1 MW and larger) of this Appendix H for single line diagrams depicting the required interconnection to the Company’s system. Please see Attachment 65 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 PROJECTS ≥ 250 KW AND < 1 MW (ATTACHMENT 1)

TYPICAL DISTRIBUTION SECONDARY INTERCONNECTION FOR PROJECTS ≥ 250 KW AND < 1 MW (<u>ATTACHMENT 1</u>)		
Item	Description	Cost
Substation & Meter Baseline Costs		
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"> Includes costs for engineering, materials, construction, and testing. Distribution line extension – See Items 2, 3, and 4 and Section 2.1D. Telecommunications requirements – See Section 2.1E. Security requirements – See Section 2.1F. 	\$390,000
<u>Notes:</u>		
a) Applicable to O’ahu, Maui, and Hawai’i Island. b) Assumes construction <u>Costs provided are</u> in 2022 <u>dollars</u> . c) Civil infrastructure and space for COIF provided by Proposer. d) Substation relay protection requirements have not been identified so costs are based upon typical line protection relaying requirements. e) Does not include costs for permitting, land rights, or a Relay Coordination Study.		
T&D Baseline Costs		
2	Tap to OH (secondary interconnection) <ul style="list-style-type: none"> 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 	\$193 <u>189</u> ,000
3	Tap to UG Main (secondary interconnection) <ul style="list-style-type: none"> 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 Assumes padmount switch is within 10ft of the Company-owned transformer 	\$238 <u>231</u> ,000

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TYPICAL DISTRIBUTION SECONDARY INTERCONNECTION FOR PROJECTS ≥ 250 KW AND < 1 MW (ATTACHMENT 1)		
Item	Description	Cost
4	Tap to UG Fused Feeder (secondary interconnection) <ul style="list-style-type: none"> 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 	\$ 176 <u>172</u> ,000
Notes: <ol style="list-style-type: none"> Applicable to O‘ahu, Maui, and Hawai‘i Island. Assumes construction <u>Costs provided are</u> in 2022 <u>dollars</u>. 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. Includes 100ft UG line extension of one feeder (minimum requirement). 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. OH Line extension – Add applicable costs per Items 30, 31, and/or 32. UG Line extension (if > 100ft) – Add costs per Item 33. Additional OH/UG transitions – Add costs per Item 37. Secondary voltage from Proposer is assumed to be 480Y/277V in these scenarios. Maximum of 11 secondary connections is allowed on the Company-owned transformer. Assumes Proposer switchgear is within 10ft of the Company-owned transformer. OH/UG route and civil infrastructure drawings provided by Proposer. Civil infrastructure (pads, MH/HHs, conduits, etc.) is designed, procured, and installed by Proposer. Includes review of Proposer civil infrastructure designs and materials and inspection of Proposer civil infrastructure construction. Does not include vegetation clearing, grading, dewatering, permitting or land rights. 		

B. TYPICAL DISTRIBUTION PRIMARY INTERCONNECTION FOR PROJECTS ≥ 250 KW AND < 1 MW (ATTACHMENT 2)

TYPICAL DISTRIBUTION PRIMARY INTERCONNECTION FOR PROJECTS ≥ 250 KW AND < 1 MW (ATTACHMENT 2)		
Item	Description	Cost
Substation & Meter Baseline Costs		
10	Components on the Company side of the demarcation as shown in <u>Attachment 2</u> <ul style="list-style-type: none"> Includes costs for engineering, materials, construction, and testing. 	\$390,000

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TYPICAL DISTRIBUTION PRIMARY INTERCONNECTION FOR PROJECTS ≥ 250 KW AND < 1 MW (ATTACHMENT 2)		
Item	Description	Cost
	<ul style="list-style-type: none"> • Distribution line extension – See Items 11, 12, and 13 and Section 2.1D. • Telecommunications requirements – See Section 2.1E. • Security requirements – See Section 2.1F. 	
Notes: <ol style="list-style-type: none"> Applicable to O‘ahu, Maui, and Hawai‘i Island. Assumes construction Costs provided are in 2022 dollars. Civil infrastructure and space for COIF provided by Proposer. Substation relay protection requirements have not been identified so costs are based upon typical line protection relaying requirements. Does not include costs for permitting, land rights, or a Relay Coordination Study. 		
T&D Baseline Costs		
11	Tap to OH (primary interconnection) <ul style="list-style-type: none"> • 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 	\$9 291,000
12	Tap to UG Main (primary interconnection) <ul style="list-style-type: none"> • 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 • Assumes padmount switch is within 10ft of the Proposer switchgear 	\$131 128,000
13	Tap to UG Fused Feeder (primary interconnection) <ul style="list-style-type: none"> • If Project < 100A – Includes costs for engineering, materials, construction for UG tap, 100ft UG line extension (1 feeder), and primary termination to Proposer switchgear • If Project ≥ 100A – Not allowed 	\$6 766,000
Notes: <ol style="list-style-type: none"> Applicable to O‘ahu, Maui, and Hawai‘i Island. Assumes construction Costs provided are in 2022 dollars. 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. Assumes Proposer switchgear is within 100ft of the GCP. Includes 100ft UG line extension of one feeder (minimum requirement). 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. 		

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TYPICAL DISTRIBUTION PRIMARY INTERCONNECTION FOR PROJECTS ≥ 250 KW AND < 1 MW (ATTACHMENT 2)		
Item	Description	Cost
	<ul style="list-style-type: none"> g) OH Line extension – Add applicable costs per Items 30, 31, and/or 32. h) UG Line extension (if > 100ft) – Add costs per Item 33. i) Additional OH/UG transitions – Add costs per Item 37. j) OH/UG route and civil infrastructure drawings provided by Proposer. k) Civil infrastructure (pads, MH/HHs, conduits, etc.) designed, procured, and installed by Proposer. l) Includes review of Proposer civil infrastructure designs and materials and inspection of Proposer civil infrastructure construction. m) Does not include vegetation clearing, grading, dewatering, permitting or land rights. 	

C. TYPICAL DISTRIBUTION PRIMARY INTERCONNECTION FOR PROJECTS ≥ 1 MW (ATTACHMENT 3)

TYPICAL DISTRIBUTION PRIMARY INTERCONNECTION FOR PROJECTS ≥ 1 MW (ATTACHMENT 3)		
Item	Description	Cost
Project Management Costs		
20	Engineering Phase <ul style="list-style-type: none"> • Includes facilitation, coordination, and support for Engineering Design and Procurement periods 	\$15,400 / month
	Construction Phase <ul style="list-style-type: none"> • Includes facilitation, coordination, and support from the start of construction through back feed (energization) 	\$18,100 / month
	Testing/Closeout Phase <ul style="list-style-type: none"> • Includes facilitation, coordination, and support for Developer system testing and CSAT 	\$9,300 / month
<u>Notes:</u>		
<ul style="list-style-type: none"> a) Applicable to O‘ahu, Maui, and Hawai‘i Island. b) Costs derived using 2022 rates. c) Total costs are tied to schedule and duration of entire project d) Closeout Phase extends 4 months past GCOD 		
Substation & Meter Baseline Costs		
21	Components on the Company side of the demarcation as shown in <u>Attachment 3</u> <ul style="list-style-type: none"> • Includes engineering, materials, construction, and testing. 	\$476,000

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TYPICAL DISTRIBUTION PRIMARY INTERCONNECTION FOR PROJECTS ≥ 1 MW (ATTACHMENT 3)		
Item	Description	Cost
	<ul style="list-style-type: none"> • Distribution line extension – See Items 24, 25, and 26 and Section 2.1D. • Telecommunications requirements – See Section 2.1E. • Security requirements – See Section 2.1F. 	
22	Components at Company’s substation, including DTT and relaying requirements <ul style="list-style-type: none"> • Includes engineering, materials, construction, and testing. • Assumes Company substation is not SCADA enabled on O’ahu. • Assumes Company substation is SCADA enabled on Maui/Hawai’i. 	\$270,000 / site (O’ahu) \$170,000 / site (Maui/Hawai’i)
Notes: <ol style="list-style-type: none"> Applicable to O’ahu, Maui, and Hawai’i Island. Assumes construction <u>Costs provided are</u> in 2022 <u>dollars</u>. Civil infrastructure and space for COIF provided by Proposer. Substation relay protection requirements have not been identified so costs are based upon typical line protection relaying requirements. Does not include costs for permitting, land rights, or a Relay Coordination Study. 		
T&D Baseline Costs		
24	Tap to OH (primary interconnection) <ul style="list-style-type: none"> • 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 	\$9 <u>291</u> ,000
25	Tap to UG Main (primary interconnection) <ul style="list-style-type: none"> • 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 • Assumes padmount switch is within 10ft of the Proposer switchgear 	\$13 <u>128</u> ,000
26	Tap to UG Fused Feeder (primary interconnection) <ul style="list-style-type: none"> • If Project < 100A – Includes costs for engineering, materials, construction for UG tap, 100ft UG line extension (1 feeder), and primary termination to Proposer switchgear 	\$6 <u>766</u> ,000

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TYPICAL DISTRIBUTION PRIMARY INTERCONNECTION FOR PROJECTS ≥ 1 MW (<u>ATTACHMENT 3</u>)		
Item	Description	Cost
	<ul style="list-style-type: none"> If Project ≥ 100A – Not allowed 	
Notes:		
<ul style="list-style-type: none"> a) Applicable to O‘ahu, Maui, and Hawai‘i Island. b) Assumes construction Costs provided are in 2022 dollars. c) Interconnection will typically require either Item 24, 25, or 26 depending on the existing facilities in the area and the specific route of the line extension. d) Assumes Proposer switchgear is within 100ft of the GCP. e) Includes 100ft UG line extension of one feeder (minimum requirement). f) Proposer can request an additional backup feeder for quicker restoration if a fault occurs. For projects ≤ 200A, add costs for the additional feeder per Item 34. For projects > 200A, add costs per Item 36. g) OH Line extension – Add applicable costs per Items 30, 31, and/or 32. h) UG Line extension (if > 100ft) – Add costs per Item 33 for all projects ≤ 200A. For projects > 200A, add costs per Item 35. i) Additional OH/UG transitions – Add costs per Item 37. j) Upgrade of existing OH conductors – Add costs per Item 38. k) OH/UG route and civil infrastructure drawings provided by Proposer. l) Civil infrastructure (pads, MH/HHs, conduits, etc.) designed, procured, and installed by Proposer. m) Includes review of Proposer civil infrastructure designs and materials and inspection of Proposer civil infrastructure construction. n) Does not include vegetation clearing, grading, dewatering, permitting or land rights. 		

D. DISTRIBUTION LINE EXTENSION COSTS

DISTRIBUTION LINE EXTENSION COSTS		
Item	Description	Cost
30	OH accessible (200ft spans, #1/0 AAC)	\$ 663 655,000 / mile
31	OH underbuild accessible (200ft spans, #1/0 AAC)	\$ 422 420,000 / mile
32	OH inaccessible (250ft spans, #1/0 AAC)	\$1,410 382 ,000 / mile
33	UG feeder ≤ 200A (200ft spans, #4/0 AL PEICN)	\$ 696 675,000 / mile
34	UG add'l feeder ≤ 200A (200ft spans, #4/0 AL PEICN)	\$418 389 ,000 / mile

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DISTRIBUTION LINE EXTENSION COSTS		
Item	Description	Cost
35	UG feeder > 200A (200ft spans, 1000KCM AL PEICN)	\$ 1,008,979 ,000 / mile
36	UG add'l feeder > 200A (200ft spans, 1000KCM AL PEICN)	\$ 714,684 ,000 / mile
37	3ph riser w/ disconnects (including pole/anchor)	\$38,000 each
38	Upgrade existing OH accessible (200ft spans, 336 AAC)	\$ 704,697 ,000 / mile
<p>Notes:</p> <ul style="list-style-type: none"> a) Applicable to O'ahu, Maui, and Hawai'i Island. b) Assumes construction <u>Costs provided are in 2022 dollars.</u> c) OH assumes wood poles and 3ph overhead conductor with neutral underbuild. d) Accessible assumes vehicles can be used during construction. e) Inaccessible assumes helicopters are needed during construction. f) Items 31 and 38 assume no poles need to be replaced. g) Item 50 should be added to the project cost if the project is interconnecting to existing 12kV conductors that do not have enough capacity. h) Includes engineering, materials, construction labor for electrical work, inspection for UG civil infrastructure, and contractor costs for pole/anchor digging. i) OH/UG route and civil infrastructure drawings provided by Proposer. j) Civil infrastructure (pads, MH/HHs, conduits, etc.) designed, procured, and installed by Proposer. k) Does not include vegetation clearing, grading, dewatering, permitting or land rights. 		

E. TYPICAL TELECOMMUNICATIONS REQUIREMENTS FOR DISTRIBUTION INTERCONNECTIONS

1. Projects \geq 250 KW and $<$ 1 MW – 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~~ communications links are required to support revenue meters, and can consist of LTE, AMI meter, or analog leased telephone lines (Proposer shall do their own due diligence for costs on this).
2. Projects \geq 1 MW – See Section 2.4 for costs
 - a. Primary communications links can consist of lease line, licensed radio, fiber, or microwave.
 - b. Licensed radio is permitted for projects 3MW or smaller in size only.
 - c. Back-up communications links are optional for projects up to 3MW (can consist of lease line, licensed radio, fiber, or microwave)
 - d. Back-up communications links are required for projects greater than 3MW.

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- e. Back-up communications links must be transport diverse until the “last mile” for projects greater than 10MW.
 - f. Additional ~~analog leased telephone lines~~ communications links are required to support revenue meters ~~(. For projects up to 3MW, these links can consist of LTE, AMI meter, or analog leased telephone lines. For projects greater than 3MW, these links must be analog leased telephone lines.~~ 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 – SUBTRANSMISSION INTERCONNECTION

Please refer to Attachment 4 (for Subtransmission Projects) of this Appendix H for a single line diagram depicting the required interconnection to the Company’s system. Please see Attachment 65 for examples of how to apply the per-unit costs provided. All costs provided in Section 2.2 assume the COIF will be built by the Proposer, with the exception of Company responsible items – See Section 3.

A. TYPICAL 46KV (O’AHU) INTERCONNECTION (ATTACHMENT 4)

TYPICAL 46KV (O’AHU) INTERCONNECTION (<u>ATTACHMENT 4</u>)		
Item	Description	Cost
Project Management Costs		
40	Engineering Phase <ul style="list-style-type: none"> • Includes facilitation, coordination, and support during Engineering Design and Procurement periods 	\$18,400 / month
	Construction Phase <ul style="list-style-type: none"> • Includes facilitation, coordination, and support from start of construction through back feed (energization) 	\$21,100 / month

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TYPICAL 46KV (O‘AHU) INTERCONNECTION (ATTACHMENT 4)		
Item	Description	Cost
	Testing/Closeout Phase <ul style="list-style-type: none"> Includes facilitation, coordination, and support for Developer system testing and CSAT 	\$10,500 / month
Notes: <ol style="list-style-type: none"> Applicable to O‘ahu. Costs derived using 2022 rates. Total costs are tied to schedule and duration of entire project Closeout Phase extends 4 months past GCOD 		
Substation & Meter Baseline Costs		
41	Components on the Company side of the demarcation as shown in <u>Attachment 4</u> <ul style="list-style-type: none"> Includes review of Proposer designs and materials purchased and inspection of Proposer construction. Includes Company costs for engineering, materials, construction, and testing of Company-responsible items – See Section 3. 46kV line extension and final tap – See Items 43-49. Telecommunications requirements – See Section 2.2B. Security requirements – See Section 2.2C. 	\$ 403 <u>432</u> ,000
42	Components at Company’s substation, including DTT and relaying requirements <ul style="list-style-type: none"> Includes engineering, materials, construction, and testing. Assumes Company substation is SCADA enabled. 	\$424,000 / site
Notes: <ol style="list-style-type: none"> Assumes construction <u>Costs provided are</u> in 2023 <u>dollars</u>. Civil infrastructure and space for COIF provided by Proposer. Substation relay protection requirements have not been identified so costs are based upon typical line protection relaying requirements. Does not include costs for permitting and land rights or a Relay Coordination Study. 		
T&D Baseline Costs		
43	OH to OH Final Tap (by Company) <ul style="list-style-type: none"> Includes 1 wood pole, 1 span (100ft) OH line extension to Proposer facility Assumes Proposer to design, procure and install gang-operated switch as shown on <u>Attachment 4</u> 	\$ 79 <u>78</u> ,000
44	OH to UG Final Tap (by Company)	\$ 206 <u>202</u> ,000

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TYPICAL 46KV (O'AHU) INTERCONNECTION (ATTACHMENT 4)		
Item	Description	Cost
	<ul style="list-style-type: none"> Includes 1 wood pole, 1 gang-operated switch, 100ft UG line extension and splice in Proposer manhole 	
45	UG to UG Final Tap (by Company) <ul style="list-style-type: none"> Includes 100ft UG line extension and terminations to Proposer riser pole, 100ft UG line extension and splice in Proposer manhole, splices in existing Company manhole 	\$ 257 247,000
Notes: <ol style="list-style-type: none"> Assumes construction Costs provided are in 20232022 dollars. Interconnection will typically require either Item 43, 44, or 45 depending on the existing facilities at the GCP. These are the base costs for an extension up to 100ft. Includes Company costs for engineering, materials, and construction of Company-responsible items – See Section 3. OH or UG Line extensions (if > 100ft) – Add applicable costs per Items 46 through 49. Upgrade of existing OH conductors – Add costs per Item 50. 4-5” conduits and 6’x14’ manholes required for the 46kV UG. Civil infrastructure (pads, MH/HHs, conduits, etc.) designed, procured, and installed by Proposer. OH/UG route and civil infrastructure drawings provided by Proposer. Civil infrastructure (pads, MH/HHs, conduits, etc.) designed, procured, and installed by Proposer. Includes review of Proposer civil infrastructure designs and materials and inspection of Proposer civil infrastructure construction. Does not include vegetation clearing, grading, dewatering, permitting or land rights. 		
46kV Line Extension Costs		
46	Additional 100ft OH Line Extension <ul style="list-style-type: none"> Includes review of Proposer designs and materials and inspection of Proposer construction Assumes Proposer to design, procure and install additional OH line extension 	\$6,000 each
47	Additional 100ft UG Line Extension <ul style="list-style-type: none"> Includes review of Proposer designs and materials and inspection of Proposer construction Assumes Proposer to design, procure and install additional UG line extension (electrical and civil infrastructure) 	\$9,000 each
48	OH overbuild on existing distribution accessible (200ft spans)	\$1, 250 227,000 / mile

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TYPICAL 46KV (O'AHU) INTERCONNECTION (ATTACHMENT 4)		
Item	Description	Cost
	<ul style="list-style-type: none"> Includes replacement of existing poles with new wood poles, new 46kV OH conductor, and changeover of existing distribution conductors Assumes vehicles can be used during construction 	
49	OH overbuild on existing distribution inaccessible (250ft spans) <ul style="list-style-type: none"> Includes replacement of existing poles with new wood poles, new 46kV OH conductor, and changeover of existing distribution conductors Assumes helicopters are needed during construction 	\$2, 148 090,000 / mile
50	Upgrade existing OH accessible (250ft spans, 556 AAC) <ul style="list-style-type: none"> Assumes no poles need to be replaced as a part of the reconductoring Add this cost if the project is interconnecting to existing 46kV conductors that do not have enough capacity 	\$ 731 715,000 / mile
<u>Notes:</u> <ol style="list-style-type: none"> Assumes construction Costs provided are in 20232022 dollars. Includes Company costs for engineering, materials, and construction of Company-responsible items – See Section 3. Items 46 and 47 should be added to the T&D baseline costs for each additional 100ft of Proposer-build OH or UG line. Items 48 and 49 should be used if any portion of the OH line extension requires overbuild on existing Hawaiian Electric facilities. 4-5” conduits and 6’x14’ manholes required for the 46kV UG. OH/UG route and civil infrastructure drawings provided by Proposer. Civil infrastructure (pads, MH/HHs, conduits, etc.) designed, procured, and installed by Proposer. Does not include vegetation clearing, grading, dewatering, permitting or land rights. 		

B. TYPICAL TELECOMMUNICATIONS REQUIREMENTS FOR SUBTRANSMISSION INTERCONNECTIONS

- Projects \geq 1 MW – See Section 2.4 for Telecommunications costs
 - Primary communications links can consist of lease line, licensed radio, fiber, or microwave.
 - Licensed radio is permitted for projects 3MW or smaller in size only.
 - Back-up communications links are optional for projects up to 3MW.
 - Back-up communications links are required for projects greater than 3MW.
 - Back-up communications links can consist of lease line, licensed radio, fiber, or microwave.

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- f. Back-up communications links must be transport diverse until the “last mile” for projects greater than 10MW.
 - g. Additional analog leased telephone lines are required to support revenue meters (Proposer shall do their own due diligence for costs on this).
2. Requirements are subject to change based on project specific evaluations, technical reviews, or IRS.

C. SECURITY REQUIREMENTS FOR SUBTRANSMISSION INTERCONNECTIONS

- 1. For Company-owned facilities 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.

~~2.3 TYPICAL INTERCONNECTION AT WAENA BESS SITE (MAUI)
 (ATTACHMENT 5)~~

~~Please refer to Attachment 5 (for projects interconnecting at Waena BESS) of this Appendix H for a single line diagram depicting the required interconnection to the Company’s system. Please see Attachment 6 for examples of how to apply the per-unit costs provided. Costs provided in Section 2.3 assume the COIF will be built by the Proposer.~~

~~A. TYPICAL INTERCONNECTION AT WAENA BESS SITE (MAUI) (ATTACHMENT 5)~~

TYPICAL INTERCONNECTION AT WAENA BESS SITE (MAUI) (ATTACHMENT 5)		
Item	Description	Cost
Substation & Meter Baseline Costs		
61	Components at the Project Site on the Company side of the demarcation as shown in Attachment 5 <ul style="list-style-type: none"> • Includes engineering, materials, construction, and testing. • Civil infrastructure and space for COIF provided by Proposer. • T&D line extension — See Items 44, 46, and 47. • Telecommunications requirements — See Section 2.2B. • Security requirements — See Section 2.2C. 	\$379,000

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TYPICAL INTERCONNECTION AT WAENA BESS SITE (MAUI) (ATTACHMENT 5)		
Item	Description	Cost
62	Company work for components at Waena BESS Site as shown in Attachment 5 <ul style="list-style-type: none"> • Includes engineering, materials, construction, and testing. • Assumes substation is SCADA enabled. 	\$600,000/ interconnecting line
<u>Notes:</u> <ul style="list-style-type: none"> a) Assumes construction in 2022. b) Includes Company costs for engineering, materials, construction, and testing of Company responsible items—See Section 3. 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. 		

2.3 – RESERVED

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), Attachment 3 (Distribution Primary Interconnection for 1 MW and larger), or Attachment 4 (for Subtransmission Projects) of this Appendix H for single line diagrams depicting the required interconnection to the Company’s system. Please see Attachment 65 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.

TELECOMMUNICATIONS BASELINE COSTS		
Item	Description	Cost
Communications Cabinet or Enclosure		

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TELECOMMUNICATIONS BASELINE COSTS		
Item	Description	Cost
70	Communications Enclosure with circuits to support SCADA (Projects < 1 MW) <ul style="list-style-type: none"> Only applicable to Cellular, Lease Line, or Company-owned fiber options 	\$43,000 / site
71	Communications Cabinet with circuits to support SCADA (Projects ≥ 1 MW and ≤ 3 MW) <ul style="list-style-type: none"> Projects with SCADA and DTT but no diverse communication circuits 	\$164,000 / site
72	Communications Cabinet with circuits to support SCADA and Relay Protection (Projects > 3 MW or Subtransmission) <ul style="list-style-type: none"> Projects with SCADA, DTT, and diverse communication circuits 	\$192,000 / site
Notes: <ol style="list-style-type: none"> Assumes construction Costs provided are in 2022 dollars. All projects that require communications will require facilities to store the communications equipment. The examples above are provided but other alternatives may be available upon request. Cabinet is used to support Company equipment and capable of providing communications circuit for SCADA. Communications cabinet cost does not include fiber, microwave, radio equipment or lease circuits. Proposer will provide all conduits, foundations, HHs, AC power, grounding as required per Company standards. 		
Cellular or Lease Line Options		
73	Cellular or Lease Line one-time and recurring costs	Will vary based on 3 rd party provider
Notes: <ol style="list-style-type: none"> Add cost of Communications Cabinet – See Items 70-72. Check with Company to understand the current cellular or lease line requirements. Communication circuit requirements will be based on applications needed for the project. Company can provide communication circuit interconnection requirements and assist with review of circuit order from the 3rd party provider as needed. Proposer to work directly with 3rd party provider if a cellular or lease line circuit is needed. Cost will be the responsibility of the Proposer and is to be negotiated with the 3rd party provider. 		
Licensed 900 MHz Radio Option		

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INFORMATION

TELECOMMUNICATIONS BASELINE COSTS		
Item	Description	Cost
74	Licensed 900 MHz Radio Equipment <ul style="list-style-type: none"> • Includes 2 each antenna equipment to create a radio link 	\$140,000 / link
Notes: <ol style="list-style-type: none"> Assumes construction Costs provided are in 2022 dollars. Add cost of Communications Cabinet – See Items 71-72. The radio equipment will be installed within the Communication Cabinet. Assumes there is radio line-of-sight clearance between the communication endpoints. Assumes FCC licensed 900MHz Frequencies are available. Assumes there is an existing structure/building with space available on the Company side to mount the antenna equipment and house the radio equipment. Assumes Telecommunications grounding standards are up to date at both sites. Assumes 48 V DC power with 12-hour battery backup is available. 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. 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. 		
Fiber-Optic Cable Option		
75	New Fiber-only pole line (200’ avg spans, 60-strand ADSS) <ul style="list-style-type: none"> • Includes new wood poles 	\$394 386,000 / mile
76	Fiber underbuild on new or existing pole line (200’ avg spans, 60-strand ADSS) <ul style="list-style-type: none"> • Assumes no replacements of existing poles are needed 	\$182 179,000 / mile
Notes: <ol style="list-style-type: none"> Assumes construction Costs provided are in 2022 dollars. Add cost of Communications Cabinet – See Items 70-72. Assumes no splices are needed along the route. 		
Microwave Option		
77	Point-to-Point Microwave Link <ul style="list-style-type: none"> • Includes 2 each antenna equipment to create a radio link 	\$697,000 / link
78	50ft Microwave Tower	\$612,000 each
79	100ft Microwave Tower	\$888,000 each
Notes: <ol style="list-style-type: none"> Assumes construction Costs provided are in 2022 dollars. 		

Hawaiian Electric Company
APPENDIX H - INTERCONNECTION FACILITIES COST AND SCHEDULE
INFORMATION

TELECOMMUNICATIONS BASELINE COSTS		
Item	Description	Cost
	<ul style="list-style-type: none"> 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 and 2.2C.

SECTION 3 – PROPOSER-BUILD RESPONSIBILITIES

3.1 – COIF AT PROPOSER SITE

Company will perform the following:

1. Review and approval of Proposer drawings and material selection.
2. Inspect Proposer construction.
3. Programming and functional testing of digital devices (i.e. DFR, RTU, etc.).
4. Terminate wiring between RTU and IPP interface cabinet.

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APPENDIX H - INTERCONNECTION FACILITIES COST AND SCHEDULE
INFORMATION

5. Perform acceptance testing.
6. Procurement, installation, and testing of revenue meters.

Proposer is responsible for the following:

1. Design, procurement, and construction of:
 - a. All COIF except what is identified above.
 - i. Pull wiring between RTU and IPP interface cabinet and coil up on both ends.
 - b. All civil infrastructure (conduits, equipment pads, etc.) at the Proposer facility.
2. As built drawings prior to acceptance testing.

3.2 – COIF AT EXISTING COMPANY-OWNED SUBSTATIONS

Company will perform all engineering, material procurement, and construction at existing Company-owned substations.

3.3 – T&D LINE WORK

Company will perform the following:

1. Review and approve Proposer drawings.
2. Inspection of Proposer construction.
3. Design, procurement, and construction of electrical facilities for the final tap at the GCP.
4. Design, procurement, and construction of electrical facilities within the existing Company right-of-way (i.e. where Company's energized facilities are).
5. Procurement does not include the conductors or cable required for the last span as discussed below.
6. Break into Company's existing UG facilities for interception point (i.e. at an existing MH/HH/vault)

Proposer is responsible for the following:

1. Route design of the OH or UG lines (locations of poles, MHs, HHs, vaults, conduits, equipment, etc.).
2. Design, procurement, and construction of:
 - a. All civil infrastructure (vaults, manholes, conduits, equipment pads, etc.) between the Proposer facility and the GCP.
 - b. All electrical facilities from the Proposer facility up to and including the last pole or manhole/vault prior to existing Company facilities.
3. For OH to existing OH final tap
 - a. Coil enough OH conductor on the last pole for Company to string and terminate the last span of conductor to the GCP.

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APPENDIX H - INTERCONNECTION FACILITIES COST AND SCHEDULE
INFORMATION

4. For UG tap to existing OH final tap
 - a. Stub-up the riser conduit above ground level at the bottom of the riser pole.
 - b. Pull cable to the last MH/HH/vault prior to the riser.
 - c. Provide enough cable for Company to make the last pull up the riser and terminate the cables.
5. For UG tap to existing UG
 - a. Conduits to connect to interception point provided by Company.
 - b. Pull cable to the last MH/HH/vault prior to intercepting Company's existing facilities.

3.4 – TELECOMMUNICATIONS

Company will perform the following:

1. Review and approval of Proposer drawings.
2. Design, procurement, installation and testing of network equipment such as routers, multiplexers and associated hardware required at Proposer Site, Company Switching Station and/or Remote Substation Facilities to provision circuits required for the project.
3. Design, procurement, and installation of fiber termination equipment within Company owned or managed facilities at Proposer Site, Company Switching Station and/or Remote Substation Facilities, as needed, to support the communication requirements.
4. Design, procurement and installation of microwave radio or wireless radio within Company owned or managed facilities at Proposer Site, Company Switching Station and/or Remote Substation Facilities, as needed, to support the communication requirements.

Proposer is responsible for the following:

1. Preparation of drawings related to the installation of telecommunication equipment to be turned over for Company ownership and/or Company management, including telecommunications cabinets and/or racks and telecommunications power.
2. Design, procurement, and installation of telecommunications cabinets and/or racks at the Proposer site and/or Company Switching Station to support the telecommunications equipment, as well as supporting equipment including air conditioning, alarming equipment, ground bars and fuse panels.
3. Design, procurement, and installation of equipment at the Proposer site and/or Company Switching Station to support telecommunications power requirements, including, but not limited to, batteries, battery racks, rectifiers, and distribution panels.
4. Design, procurement, and installation of fiber cable, as needed, to support communications requirements, including SCADA connection from the Developer's RTU to the Company's RTU.

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APPENDIX H - INTERCONNECTION FACILITIES COST AND SCHEDULE
INFORMATION

5. Ordering and installation of leased services, as needed, to support communications requirements.

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)

Hawaiian Electric Durations to be Considered in Schedules (12kV and Below) General Guidelines for Planning Purposes Only Hawaiian Electric Build ≥ 1 MW		
Milestone	Duration	Notes
IRS Phase		
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
Engineering Phase		
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

Hawaiian Electric Durations to be Considered in Schedules (12kV and Below) General Guidelines for Planning Purposes Only Hawaiian Electric Build ≥ 1 MW		
Milestone	Duration	Notes
Issued for Construction (IFC) Design & Review	30 business days	Designs & Reviews for COIF & review of SOIF supporting/impacting COIF. Following 90% Design acceptance.
Procurement Phase		
Procurement	9 months	Procurement of materials typically happens at 60% design completion
Construction Phase		
Construction	7-8 months	Based on scope/complexity of work. <u>For Mid-Tier projects ≥ 1 MW, construction can begin 3 months after completion of IFC.</u>
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 ≥ 1 MW

4.2 – DISTRIBUTION PROJECTS (PROPOSER-BUILD)

Hawaiian Electric Durations to be Considered in Schedules (12kV and Below) General Guidelines for Planning Purposes Only Proposer Build ≥ 1 MW		
Milestone	Duration	Notes
IRS Phase		
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
Engineering Phase		
30% Design & Review	20 business days	Design Reviews for COIF & review of SOIF supporting/impacting COIF
60% Design & Review	20 business days	Design Reviews for COIF & review of SOIF supporting/impacting COIF. Following 30% Design acceptance.
90% Design & Review	20 business days	Design Reviews for COIF & review of SOIF supporting/impacting COIF. Following 60% Design acceptance.

Hawaiian Electric Company
APPENDIX H - INTERCONNECTION FACILITIES COST AND SCHEDULE
INFORMATION

Hawaiian Electric Durations to be Considered in Schedules (12kV and Below) General Guidelines for Planning Purposes Only Proposer Build \geq 1 MW		
Milestone	Duration	Notes
Issued for Construction (IFC) Design & Review	20 business days	Design Reviews for COIF & review of SOIF supporting/impacting COIF. Following 90% Design acceptance.
Construction Phase		
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

4.3 – SUBTRANSMISSION 46KV (O‘AHU) PROJECTS (COMPANY-BUILD)

Hawaiian Electric Durations to be Considered in Schedules (46kV) General Guidelines for Planning Purposes Only Hawaiian Electric Build O‘ahu Only		
Milestone	Duration	Notes
IRS Phase		
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
Engineering Phase		
30% Design & Review	40 business days	Designs & Reviews for COIF & review of 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.
Issued for Construction (IFC) Design & Review	30 business days	Designs & Reviews for COIF & review of SOIF supporting/impacting COIF. Following 90% Design acceptance.
Procurement Phase		
Procurement	9 months	Procurement of materials typically happens at 60% design completion

Hawaiian Electric Company
 APPENDIX H - INTERCONNECTION FACILITIES COST AND SCHEDULE
 INFORMATION

Hawaiian Electric Durations to be Considered in Schedules (46kV) General Guidelines for Planning Purposes Only Hawaiian Electric Build O'ahu Only		
Milestone	Duration	Notes
Construction Phase		
Construction	10-12 months	Based on scope/complexity of work. <u>Construction to begin after procurement completion.</u>
Acceptance Testing	30 business days	Approximately 3 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.

4.4 – SUBTRANSMISSION 46KV (O'AHU) PROJECTS (PROPOSER-BUILD)

Hawaiian Electric Durations to be Considered in Schedules (46kV) General Guidelines for Planning Purposes Only Proposer Build: O'ahu Only		
Milestone	Duration	Notes
IRS Phase		
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
Engineering Phase		
30% Design & Review	20 business days	Design Reviews for COIF & review of SOIF supporting/impacting COIF
60% Design & Review	20 business days	Design Reviews for COIF & review of SOIF supporting/impacting COIF. Following 30% Design acceptance.
90% Design & Review	20 business days	Design Reviews for COIF & review of SOIF supporting/impacting COIF. Following 60% Design acceptance.
Issued for Construction (IFC) Design & Review	20 business days	Design Reviews for COIF & review of SOIF supporting/impacting COIF. Following 90% Design acceptance.
Construction Phase		
Acceptance Testing	25 business days	Approximately 3 weeks after construction completion

Hawaiian Electric Company
APPENDIX H - INTERCONNECTION FACILITIES COST AND SCHEDULE
INFORMATION

Hawaiian Electric Durations to be Considered in Schedules (46kV) General Guidelines for Planning Purposes Only Proposer Build: O'ahu Only		
Milestone	Duration	Notes
CSAT	30 business days	To occur after commissioning of Proposer's Facility. Duration depends on Proposer's ability to meet the Performance Standards.

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REQUEST FOR PROPOSALS

FOR

COMMUNITY-BASED RENEWABLE ENERGY TRANCHE 1

O‘AHU, MAUI, AND HAWAI‘I ISLAND

~~AUGUST 25, 2021~~

FEBRUARY 23, 2022

Docket No. 2015-0389

Appendix I – ~~Grid Needs Assessment~~(Reserved)



Hawaiian Electric

~~Appendix I-1 Non-Wire Alternatives Grid Needs Assessment for O‘ahu~~

~~This Appendix provides the definitions and Non-Wire Alternatives (NWA) Grid Needs considered in the Locational Value non-price criteria in the CBRE RFPs.~~

~~NWA Grid Service Definitions~~

~~Table 1 NWA Grid Service Definitions~~

Grid Service	Definition
Distribution Capacity	A supply and/or a load modifying service that DERs provide as required via the dispatch of power output for generators and electric storage, and/or reduction in load that is capable of reliably and consistently reducing net loading on desired distribution infrastructure in response to Company Dispatch
Distribution Reliability	A load-modifying or supply service capable of improving local distribution reliability under abnormal conditions in response to Company Dispatch

~~For NWA needs, a certainty rating of “1” means that there is an existing need; need identified within 3 years (could be due to “natural” load growth or specific new service requests); or a need identified within 4-5 years due to a new service request.[†] A certainty rating of “0” means all other situations where a need may be identified. A geographic map of these needs can be found on the Company’s LVM (locational value map). The following table provides the NWA grid needs as of August 2021. Refer to the Company’s LVM for the most up to date list and information.~~

[†]~~New service request is defined as a request made to the Company by an electrical contractor or electrical consultant that includes drawings, plans, electrical loading, and in-service information~~

Need or Distribution Service	Year of Need	Location	MW Need	Time of Day	Certainty Rating	LVM Grid Need Name
Distribution Capacity or Distribution Reliability (back-tie)	202X	Circuits/Transformer	Size of overload (or load increase that caused voltage issue)	Daytime or Evening	1 or 0	Grid Need Name
Both	2022: Contingency 2023: Normal	CEIP 46 46 kV Circuit ^(a)	27.8	Evening	1	Grid Need Oahu—A
Both	2022: Normal 2023: Contingency	Waipio Tsf 1 ^(b)	2	Evening	1	Grid Need Oahu—F
Distribution Reliability	2023	Waiiau Steel Mill 46 kV Circuit ^(c)	10	Evening	1	Grid Need Oahu—B
Distribution Reliability	2023	Waiiau Mililani 46 kV Circuit ^(d)	10	Evening	1	Grid Need Oahu—C
Distribution Reliability	2023	Ewa Beach 2—Ewa Beach 3 12 kV Circuit Ocean Pointe 1—Ocean Pointe 1 12 kV Circuit	3	Evening	1	Grid Need Oahu—G
Distribution Capacity	2024	Ewa Nui A Transformer ^(e)	2.7	Evening	1	Grid Need Oahu—D
Distribution Reliability	2026	Kamoku 2—Kewalo 10 25 kV Circuit Kewalo 3—Kewalo 6 25 kV Circuit	2.3	Both	0	Grid Need Oahu—E
Both	2025	Ho’opili ^(f)	10	Both	0	Grid Need Oahu—Area H

^(a)Distribution Substations/Circuits: Kamokila 3—Kamokila 5 circuit, Kamokila 3—Kamokila 6 circuit, Kapolei 1—Kapolei 1 circuit, Kapolei 1—Kapolei 2 circuit, Kaloii 1—Kaloii 1 circuit, Kaloii 1—Kaloii 2 circuit, Kaloii 2—Kaloii 3 circuit, Kaloii 2—Kaloii 4 circuit, Fort Weaver 2—Fort Weaver 3 circuit, Fort Weaver 2—

~~Fort Weaver 4 circuit, Ewa Beach 1-Ewa Beach 1 circuit, Ewa Beach 1-Ewa Beach 2 circuit, Ocean Pointe 2-Ocean Pointe 3 circuit, Ocean Pointe 2-Ocean Pointe 4 circuit, West Loch-Westloch 1 circuit~~

~~^(b)Distribution Substation/Circuits: Waipio 1—Waipio 1 circuit, Waipio 1—Waipio 2 circuit~~

~~^(c)Distribution Substations/Circuits: Kapolei 2—Kapolei 3 circuit, Kapolei 2—Kapolei 4 circuit, Fort Weaver 1—Fort Weaver 1 circuit, Fort Weaver 1—Fort Weaver 2 circuit~~

~~^(d)Distribution Substations/Circuits: Waimalu 2-Waimalu 3 circuit, Waimalu 2-Waimalu 4 circuit, Upper Kipapa 1—Kuahelani 1 circuit, Upper Kipapa 1—Kuahelani 4 circuit, Kunia—Kunia circuit~~

~~^(e)Distribution Substations/Circuits: Makakilo 2-Makakilo 2 circuit, Makakilo 2-Makakilo 4 circuit, Ewa Nui 1—Ewa Nui 1 circuit, Ewa Nui 2—Ewa Nui 2 circuit, Kunia Makai 1-Kunia Makai 1 circuit, Kunia Makai 1-Kunia Makai 2 circuit, Kunia Makai 2-Kunia Makai 3 circuit, Kunia Makai 2-Kunia Makai 4 circuit, Ewa Beach 2-Ewa Beach 3 circuit, Ewa Beach 2-Ewa Beach 4 circuit, Ocean Pointe 1-Ocean Pointe 1 circuit, Ocean Pointe 1-Ocean Pointe 2 circuit, Iroquois Pt—Iroquois circuit, Hoaeae 1-Leole circuit, Hoaeae 1-Hoaeae 1 circuit, Waipahu 2-Wailani circuit, Waipahu 2-Mokuola circuit~~

~~^(f)Distribution Substation/Circuits: Ewa Nui 2—Ewa Nui 2 circuit, Kaloi 1—Kaloi 2 circuit, Kamokila 2-Kamokila 4 circuit~~

~~Appendix I 2 Non-Wire Alternatives Grid Needs Assessment for Maui~~

~~This Appendix provides the definitions and Non-Wire Alternatives (NWA) Grid Needs considered in the Locational Value non-price criteria in the CBRE RFPs.~~

~~NWA Grid Service Definitions~~

~~The following grid services are used to identify the grid needs. The projected hourly annual energy potential production profile of the Facility for the provided RFP NEP Projection will be used to inform the capability of the project to provide each of the grid services.~~

~~Table 1 NWA Grid Service Definitions~~

Grid Service	Definition
Distribution Capacity	A supply and/or a load-modifying service that DERs provide as required via the dispatch of power output for generators and electric storage, and/or reduction in load that is capable of reliably and consistently reducing net loading on desired distribution infrastructure in response to Company Dispatch
Distribution Reliability	A load-modifying or supply service capable of improving local distribution reliability under abnormal conditions in response to Company Dispatch

~~For NWA needs, a certainty rating of “1” means that there is an existing need; need identified within 3 years (could be due to “natural” load growth or specific new service requests); or a need identified within 4-5 years due to a new service request.⁺ A certainty rating of “0” means all other situations where a need may be identified. A geographic map of these needs can be found on the Company’s LVM (locational value map). The following table provides the NWA grid needs as of August 2021. Refer to the Company’s LVM for the most up-to-date list and information.~~

⁺ New service request is defined as a request made to the Company by an electrical contractor or electrical consultant that includes drawings, plans, electrical loading, and in-service information

Need or Distribution Service	Year of Need	Location	MW Need	Time of Day	Certainty Rating	LVM Grid Need Name
Distribution Capacity or Distribution Reliability (back-tie)	202X	Circuits/Transformer	Size of overload (or load increase that caused voltage issue)	Daytime or evening	1 or 0	Grid Need Name
Distribution Reliability	2023	Waiinu 69-23kV Tie Tsf ^(a)	10	Evening	1	Grid Need Maui-A

^(a)Wailuku Tsf 1-4 distribution circuits: 4035, 4031, 1289, 1290, 1447, 1446

Waiehu Tsf distribution circuits: 1378, 1379

Waiinu Tsf 1 distribution circuits: 2030

Kahului Sub-8 Tsf 3-6 distribution circuits: 1264, 1265, 4048, 4049, 4050

~~*Appendix I-3 Non-Wire Alternatives Grid Needs Assessment for Hawai‘i Island*~~

~~This Appendix provides the definitions and Non-Wire Alternatives (NWA) Grid Needs considered in the Locational Value non-price criteria in the CBRE RFPs~~

~~NWA Grid Service Definitions~~

~~The following grid services are used to identify the grid needs. The projected hourly annual energy potential production profile of the Facility for the provided RFP NEP Projection will be used to inform the capability of the project to provide each of the grid services.~~

~~Table 1 NWA Grid Service Definitions~~

Grid Service	Definition
Distribution Capacity	A supply and/or a load-modifying service that DERs provide as required via the dispatch of power output for generators and electric storage, and/or reduction in load that is capable of reliably and consistently reducing net loading on desired distribution infrastructure in response to Company Dispatch
Distribution Reliability	A load-modifying or supply service capable of improving local distribution reliability under abnormal conditions in response to Company Dispatch

~~For NWA needs, a certainty rating of “1” means that there is an existing need; need identified within 3 years (could be due to “natural” load growth or specific new service requests); or a need identified within 4-5 years due to a new service request.¹ A certainty rating of “0” means all other situations where a need may be identified. A geographic map of these needs can be found on the Company’s LVM (locational value map). The following table provides the NWA grid needs as of August 2021. Refer to the Company’s LVM for the most up-to-date list and information.~~

¹ ~~New service request is defined as a request made to the Company by an electrical contractor or electrical consultant that includes drawings, plans, electrical loading, and in-service information~~

Need or Distribution Service	Year of Need	Location	MW Need	Time of Day	Certainty Rating	LVM Grid Need Name
Distribution Capacity or Distribution Reliability (back-tie)	202X	Circuits/Transformer	Size of overload (or load increase that caused voltage issue)	Daytime or Evening	1 or 0	Grid Need Name
Distribution Capacity	2020	Halaula 1 Circuit	0.3	Both	1	Grid Need Hawaii -A

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REQUEST FOR PROPOSALS

FOR

COMMUNITY-BASED RENEWABLE ENERGY TRANCHE 1

O‘AHU, MAUI AND HAWAI‘I ISLAND

~~AUGUST 25, 2021~~

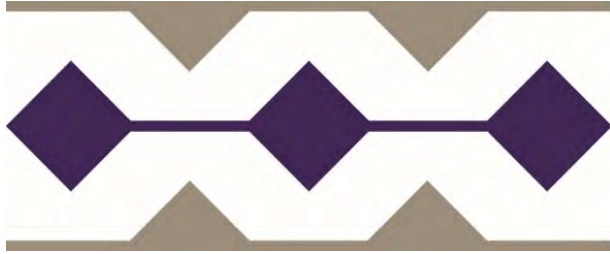
FEBRUARY 23, 2022

Docket No. 2015-0389

~~*Appendix K-4 – Attachment COS to the Project
Specific Addendum for the Mid-Tier Standard Form
Contract: Company-Owned Site (Maui only)*~~

~~[NOTE: Please refer to Exhibit 8 of the August 25, 2021 filing for the Draft
Mid-Tier Standard Form Contract for Renewable Dispatchable Generation,
which includes this attachment.]~~

Appendix K-4 – Reserved



Hawaiian Electric