

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 (CBRE) - PHASE 2
DRAFT TARIFF AND APPENDICES, AND RFPS AND
MODEL CONTRACTS FOR LMI CUSTOMERS, MOLOKAI AND LANAI

BOOK 1 OF 3

Filed July 9, 2020



July 9, 2020

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

Dear Commissioners:

Subject: Docket No. 2015-0389 – Community-Based Renewable Energy Program Submission of CBRE Phase 2 Draft Tariff and Appendices, and RFPs and model contracts for LMI customers, Moloka'i and Lāna'i

In accordance with Ordering Paragraph No. 2 of Order No. 37070 (“Order No. 37070”), issued on April 9, 2020 in the subject proceeding, the Hawaiian Electric Companies¹ respectfully provide the following documents and related filings with regards to the Company’s Community-Based Renewable Energy (“CBRE”) Phase 2 for the Commission’s review and further action:

The Hawaiian Electric Companies submit the following exhibits with this transmittal:

- Exhibit 1: Description of Development of the CBRE Phase 2 Program tariff sheets, proposed CBRE Request for Proposals for LMI Customers, CBRE Request for Proposals for Moloka'i, and CBRE Request for Proposals for Lāna'i
- Exhibit 2: Rule No. 29 CBRE Phase 2 with the following Appendices:
Appendix I – Subscriber Agency Agreement and Consent Form
Appendix II – Disclosure Checklist
Appendix III – Interconnection Agreement
Appendix IV – Standard Form Contract
Appendix V – Typical Distribution Interconnection Single Line Diagram for Projects Less than 250 kW
Appendix VI – Affidavit and Verification to Confirm LMI Status
- Exhibit 3: Redline² of Rule No. 29 CBRE Phase 2 (Body Only)

¹ Hawaiian Electric Company, Inc. (“Hawaiian Electric”), Hawaii Electric Light Company, Inc. (“Hawaii Electric Light”), and Maui Electric Company, Limited (“Maui Electric”) are collectively referred to as the “Hawaiian Electric Companies” or “Companies”.

² Redlined against Rule No. 26 CBRE Program Phase 1

- Exhibit 4: Redline³ of Disclosure Checklist
- Exhibit 5: Draft CBRE Low- and Moderate-Income (“LMI”) Request for Proposals (“RFP”) for the Island of Maui⁴⁵
- Exhibit 6: Draft CBRE Request for Proposals for the Island of Moloka‘i⁶
- Exhibit 7: Draft RFP for Variable Renewable Dispatchable Generation Paired with Energy Storage and CBRE for the Island of Lāna‘i⁷
- Exhibit 8: Chart of Differences Between the LMI RFPs
- Exhibit 9: CBRE RFP Code of Conduct
- Exhibit 10: CBRE Large RDG PPA (PV+Storage only)⁸
- Exhibit 11: CBRE Mid-Tier RDG PPA (PV+Storage only)⁹

³ Redlined against Rule No. 26 CBRE Program Phase 1 Disclosure Checklist

⁴ The Companies have only submitted the Draft CBRE LMI RFP for the island of Maui at this time. The Companies’ Draft CBRE LMI RFPs for the islands of O‘ahu and Hawai‘i will be very similar to the Draft Renewable RFP. The Companies have determined it would be more efficient to file one version of the Draft CBRE LMI RFP, receive comments, revise such draft and then create versions of the RFPs for O‘ahu and Hawai‘i, as opposed to making identical or very similar edits in three different documents at one time. The major differences in the RFPs among the islands relate to the amount of generation and storage being sought and technical differences in the Companies’ grids. These differences are further described in Exhibit 8 to this letter.

⁵ Appendix J – Rule 29 Tariff is provided in this filing as Exhibit 2 and not provided here. Appendix K – Model PV RDG PPA is provided as Exhibit 10, and Appendix L – Standard Form Contract for PV Projects 250 kW to 2.5 MW is provided as Exhibit 11. Appendix O – Grid Needs Assessment is still in development and will be provided in advance of the July 29, 2020 Status Conference.

⁶ Appendix J – Rule 29 Tariff is provided in this filing as Exhibit 2 and not provided here. Appendix K – Model PV Large RDG PPA and Appendix L – Model PV Mid-Tier RDG PPA (250 kW to 2.5 MW) will be based off of the model agreements provided as Exhibit 10 and Exhibit 11. The Companies have determined it would be more efficient to file one version of the model agreements, receive comments, revise such drafts, and then create versions of the agreements for Moloka‘i.

⁷ Appendix J – Rule 29 Tariff is provided in this filing as Exhibit 2 and not provided here. Appendix L – Model PV RDG PPA will be provided in advance of the July 29, 2020 Status Conference and is not provided here.

⁸ The Companies have only submitted the CBRE RDG PPA for the Draft CBRE LMI RFP for the island of Maui at this time. See *supra*, note 2.

⁹ The Companies have only submitted the CBRE Mid-Size PPA for the Draft CBRE LMI RFP for the island of Maui at this time. See *supra*, note 2

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Exhibit 12: Proposed Shared Savings Mechanism for CBRE Phase 2 (Confidential)¹⁰

Exhibit 13: Confidentiality Justification Table

The Draft Rule No. 29 CBRE Phase 2, RFPs and proposed model agreements will be made available to the public on Hawaiian Electric's website at <https://www.hawaiianelectric.com/products-and-services/customer-renewable-programs/community-solar> ("RFP Website") no later than Monday, July 13, 2020.

The Companies look forward to discussing these filings further at the technical conference scheduled for July 29, 2020 and receiving Commission, Consumer Advocate and other stakeholder feedback to ensure a successful CBRE Phase 2.

Sincerely,

/s/ Kaiulani Shinsato

Kaiulani Shinsato
Director
Customer Energy Resources Programs

Attachments

cc: Service List (with Attachments)

¹⁰ Attached Exhibit 13 (Confidentiality Justification Table) identifies the redacted information and the basis for confidentiality.

EXHIBIT 1

Description of Development of the CBRE Phase 2
Program tariff sheets, RFPs for LMI Customers, and
CBRE RFPs for Molokai and Lanai

Exhibit 1

Description of Development of the CBRE Phase 2 Program Tariff Sheets, Proposed CBRE Request for Proposals for LMI Customers, CBRE Request for Proposals for Moloka‘i, and CBRE Request for Proposals for Lāna‘i

This Exhibit 1 explains the Hawaiian Electric Companies’¹ process and rationale for developing the proposed competitive bidding process set forth in the Requests for Proposals (“RFPs”) for Moloka‘i, Lāna‘i and Low- and Moderate-Income (“LMI”) projects, and Phase 2 program tariff sheets filed on July 9, 2020 (“the July 9 Filing”), and the Companies’ plans to successfully execute the Community-Based Renewable Energy (“CBRE”) Phase 2 program.

I. Background

On April 9, 2020, the State of Hawai‘i Public Utilities Commission (“Commission”) issued Order No. 37070 *Commencing Phase 2 of the Community-Based Renewable Energy Program* (“Order No. 37070”) in which it commenced Phase 2 of the CBRE program (“CBRE Phase 2” or “Phase 2”) and directed the Companies to develop and file by July 9, 2020, (1) draft tariff for smaller projects (“CBRE Phase 2 Tariff” or “Rule 29”), (2) draft RFPs for LMI customers on O‘ahu, Maui and Hawai‘i Island, and (3) draft RFPs for Moloka‘i, and Lāna‘i, consistent with the guidance and directives in Order No. 37070.

CBRE Phase 2 is designed to allow eligible Subscribers the opportunity to receive the benefits of renewable energy to offset their personal monthly energy consumption by purchasing an interest in the energy (kilowatt-hours) production from a CBRE Small Project² (less than 250 kW) for up to 20 years, or an interest in the availability of the Contract Capacity from a CBRE Mid-Tier³ Project or CBRE Large Project⁴ for up to 20 years.

In preparing the proposed competitive bidding process set forth in the Draft CBRE RFPs for Moloka‘i, Lāna‘i, Draft LMI RFPs for O‘ahu, Maui and Hawai‘i islands, CBRE Small Projects tariff and associated contracts, the Companies followed the Commission’s seven objectives for Phase 2:⁵

- (1) Use Phase 2 to develop a robust CBRE market with competitive pricing, because the Commission believes there is significant latent demand for renewable energy among customers without rooftop solar.
- (2) Expand Phase 2 to help compensate for DER adoption that has fallen short of PSIP projections.
- (3) Promote Act 100’s⁶ objectives for diverse project sizes and business models.

¹ Hawaiian Electric Company, Inc., Maui Electric Company, Limited, and Hawai‘i Electric Light Company, Inc. are each referred to as a “Company” and collectively as the “Hawaiian Electric Companies” or “Companies.”

² Capitalized terms used but not defined in this Exhibit 1 have the meaning given to them in the Companies’ proposed Rule 29, Community-Based Renewable Energy Program Phase 2.

³ The Companies define a Mid-Tier project as project ranging in size from 250 kW to 2.5 MW on Maui, Hawai‘i, Moloka‘i, and Lāna‘i and a project ranging in size from 250 kW to 5 MW on O‘ahu.

⁴ The Companies define a Large Project as any project larger than 2.5 MW on Maui, Hawai‘i, Moloka‘i, and Lāna‘i and any project larger than 5 MW on O‘ahu.

⁵ See Order No. 37070 at 20-21.

⁶ 2015 Haw. Sess. Laws Act 100. Act 100 was later codified as Hawaii Revised Statutes § 269-27.4.

- (4) Give LMI customers access to renewable energy.
- (5) Encourage CBRE facilities to participate in future grid programs for grid services and non-wires alternatives (“NWA”).
- (6) Given the slower-than-planned market uptake of Phase 1, and the imperative to support economic recovery, Phase 2 should speed market development and customer access to CBRE benefits.
- (7) As the Commission anticipates the retirement of certain fossil fuel generators, Phase 2 should help address these near-term capacity needs.

To help meet the Commission’s stated objectives, in developing CBRE Phase 2, the Companies established and followed the following set of guiding principles:

- (1) Transparency, predictability and streamlining lowers costs to customers and fosters trust in the process;
- (2) Community engagement is critical to achieving near-term and long-term project success;
- (3) Coordination and collaboration of all parties is necessary to achieve successful and timely procurement;
- (4) The cost-shift to non-CBRE customers should be minimized; and
- (5) There is no perfect answer, tradeoffs must be considered.

In order to provide more clarity to the CBRE Phase 2 Tariff and related documents, the following sections explain some, but not all, of the key decisions and tradeoffs made in the development of CBRE Phase 2 based on the above Commission objectives and Companies’ guiding principles.

II. Proposed Tariff Rule 29 (“Rule 29”) Community-Based Renewable Energy Program, Phase 2

The Commission directed the Companies to develop a simplified tariff to accommodate CBRE Phase 2 projects that are smaller than 250 kW. The proposed CBRE Phase 2 Tariff was designed to simplify the administrative and interconnection processes to enable faster market development and customer access to CBRE benefits.

Since the scope of Paragraph 2 in Order No. 37070 included LMI projects and CBRE Mid-Tier/Large Projects for the Moloka’i and Lāna’i RFPs, and a tariff is needed to address Subscriber and Subscriber Organization requirements for these programs, the Companies believed it was simpler to combine the tariffs into a single Rule 29 for each Company. The Companies started with the CBRE Phase 1 Rule 26 tariff and organized Rule 29 into three sections: (1) Part 1: CBRE Small Projects (< 250 kW), (2) Part II: CBRE Mid-Tier and Large Projects (250 kW and above), and (3) Part III: LMI. Each section contains language specific to the subject section, while maintaining references to shared language in other sections.

The Companies simplified the tariff through administrative process improvements including automation, standardization and consolidation of activities. To the extent possible, the Companies are seeking to combine the initial application submission requirements and Rule 14H Completeness Review for CBRE Small Projects. This enables projects that are awarded capacity to directly enter Initial Technical Review. It also reduces application review time by ensuring only complete

applications are submitted up front.

The Companies have introduced the “Pay-As-You-Go” subscriber model in proposed Rule 29 in Part I.D.10. This model removes upfront payment barriers for residential and LMI customers. Since the model uses a lease or subscription interest model, the Companies propose that the interest should be non-transferrable to another customer. The Subscriber can alternatively cancel or terminate the interest with the Subscriber Organization.

Order No. 37070 also required that the Companies propose specific requirements to document site control early in the Subscriber Organization’s application process. In Part I.E.3.o of proposed Rule 29, the Companies described requirements for documentation confirming legally enforceable rights to use and control the Site, applicable zoning of the Site, documentation demonstrating a binding commitment with the landowner and exceptions for government or public lands. This will also reduce application review time and ensure viable projects enter the program.

In the Phase 2 Standard Form Contract (“SFC”) for CBRE Small Projects, the Companies are also seeking to simplify the Subscriber enrollment notification process for SOs by allowing the submission of enrollment notifications until the last day of the Production Month. In Phase 1, the enrollment notifications to the Companies were due on or before five business days immediately preceding the first day of each Production Month.

Customer participation has been simplified compared to Phase 1. Consistent with the original CBRE Framework,⁷ existing Tariff Rule 26 at Sheet No. 49 requires that:

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 6 months at the time of enrollment and has not received any disconnection notifications at that same location within the last 12 months;

The Companies’ proposed Rule 29 removed the “has not received any disconnection notifications at the same location within the last 12 months” requirement for two-years for non-LMI customers. For LMI customers, the Companies have proposed to remove this requirement permanently. The temporary removal of the requirement for non-LMI Customers is in recognition of the current COVID-19 economic downturn, while the permanent removal of this requirement for LMI Customers is intended to improve the chances of reaching this historically underserved market.

Residential Customer Requirements

The Companies have proposed a global requirement that all CBRE Phase 2 projects reserve 40% of the facility’s capacity for residential customer individual subscriptions. The intent of this requirement is to ensure that sufficient Phase 2 capacity is reserved for the residential customer segment. For CBRE Mid-Tier and Large Projects, non-price evaluation provisions for residential participation requirements are included in the RFP.

⁷ The “*Community-Based Renewable Energy: A Program Framework*,” Attachment A to Decision & Order No. 35137, filed December 22, 2017, in Docket No. 2015-0389.

Small Project Interconnection Improvements

To further optimize the application process, the Companies have developed an expedited review for CBRE Small Projects. If an interconnection requirements study (“IRS”) is required, the Companies will complete the CBRE Small Project study in 90 calendar days (reduced from 150 calendar days) after all required information is provided by the Subscriber Organization.

Further, if the Facility is on a secondary distribution system that is customer-owned with available hosting capacity, an IRS will not be required.

CBRE Phase 2 projects on 4 kV and 2.4 kV circuits are not eligible for expedited review.

In addition, the Companies have developed a draft standardized Single Line Diagram (“SLD”), submitted in Exhibit 2, Appendix V. This standardized SLD will clarify requirements for Subscriber Organizations and aid in the Companies’ review of CBRE Phase 2 project applications.

Community Outreach Plan

Demonstrating transparency and a willingness to engage in early communication with communities is an important part of a project’s viability and success. A community outreach and communications plan (“Community Outreach Plan”) is an essential roadmap that guides a Subscriber Organization as it works with various communities and stakeholders to raise awareness and collect input for a project. The Companies propose in Rule 29 that Subscriber Organizations for a project between 100 kW and 250 kW should have a Community Outreach Plan to provide nearby community members key information about a proposed project. Detailed requirements for Community Outreach Plans for projects 250 kW and larger are specified in the respective CBRE RFPs.

LMI

The Companies have included provisions for LMI projects in Part III of proposed Rule 29. The LMI definition, as stated in Order No. 37070, was based on the U.S. Department of Housing and Urban Development (“HUD”) definition for income and household size eligibility. The annual income limits, per county, are available on HUD’s website for public viewing. The Companies have proposed that LMI income be verified at the time the customer applies for participation using two methods: third-party verification and/or self-verification confirmed by the Subscriber Organization through the use of and completion of a proposed LMI Subscriber Affidavit. Once validated, the LMI Subscriber could not be later disqualified if household size or income were to change.

The Companies proposed annual LMI verification spot-checks to minimize fraud or gaming, along with penalties if subscribers submitted a failed eligibility verification. The Companies also considered requiring LMI Subscriber Organizations to use a third-party entity, at their cost, to verify LMI customer eligibility per HUD requirements. Other jurisdictions have used Third-Party verification methods, including credit verification companies or state agencies. This verification would be done at enrollment, and could serve as an alternative to periodic audit reviews conducted by the Company. The Companies are particularly open to stakeholder feedback on the process to

verify income for LMI customers.

In recognition of the challenges of acquiring LMI subscribers, the Companies have proposed grace periods to reach 100% LMI Subscribers requirements or committed-to LMI Subscriber percentages. Thereafter, Subscriber Organizations will be subject to varying reductions of the Subscriber Organization's allocation of the Lump Sum Payment or potential liquidated damages for failure to meet these LMI percentage metrics.

Competitive Credit Rate Procurement

Order No. 37070 specified a specific credit rate for CBRE Small Projects where applications for such projects do not fill CBRE Phase 2 capacity limits. Where applications exceed such limits, Order No. 37070 incorporated the competitive credit rate procurement ("CCRP") mechanism introduced in the CBRE Framework as a means to determine competitive credits rates for CBRE Small Projects. A four-month application period will be implemented starting at the commencement of each Phase 2 tranche for CBRE Small Projects to facilitate this process.

To mitigate the risk of each program capacity queue from shrinking due to dropped or terminated applications, the Companies have proposed to maintain a post-award application queue comprised of the unselected applications in the same CCRP ranking. This backup application queue will commence from the award date and continue for another four-month period. Any program capacity that is opened due to a dropped or terminated application will allow for ranked backup application to be provided the opportunity to utilize remaining program capacity at the Credit Rate established from the CCRP mechanism. If that Applicant should decline the capacity, the next ranked applicant will be given such opportunity until available program capacity is filled.

III. Requests for Proposals

Procurement Targets and Scope

In Order No. 37070, the majority of the expanded capacity for Phase 2 was designated for procurement through competitive bidding. All five islands in the Companies' service territory will have competitive offerings for CBRE. This is consistent with the Companies' suggestion in their August 2019 comments, and allows the market to determine the appropriate pricing levels for each RFP. Within the RFPs, because selected projects sized below 2.5 MW will not require further Commission review, the Companies expect increased interest in Mid-Tier projects. This expedited treatment, coupled with the carve-out for Small Projects, help to meet the Commission's objective to promote Act 100's goal seeking diverse project sizes. For CBRE projects, the Companies have also reduced the amount of Proposal Fees, with \$2,000 per proposal for the Moloka'i RFP, compared with \$5,000 for the 2019 Moloka'i Variable Dispatchable Generation Paired with Energy Storage RFP. As the Lāna'i CBRE RFP is combined with the Lāna'i Variable Dispatchable Generation Paired with Energy Storage RFP for the Companies' Phase 2 RFP the Proposal Fee is being kept at \$5,000. To encourage LMI participation, Proposal Fees for the LMI RFPs are reduced by 50% compared to non-LMI RFPs. As such, the Maui and Hawai'i Island LMI RFPs will have \$1,000 Proposal Fees, and on O'ahu, a tiered system will result in Proposal Fees of \$1,000 for projects between 250 kW and 2.5 MW, \$2,500 for projects between 2.5 MW and 10 MW, and \$5,000 for projects larger than 10 MW.

Allowed Technologies

Recognizing the Commission's intention to allow all eligible generation technologies defined in the State's Renewable Portfolio Standard ("RPS"), the Companies appreciate the Commission's willingness to consider a narrowed scope for eligibility to be proposed within the RFPs.⁸ For the Phase 2 CBRE RFPs, the Companies have proposed to limit the allowed technology on O'ahu, Maui and Hawai'i Islands to photovoltaic ("PV") and wind, the most mature renewable technologies. These technologies may also be paired with energy storage. By limiting allowed technologies to these resources, the Companies hope to attract a wide range of proposals that can meet the Commission's objectives to speed market development and provide customer access to CBRE benefits as soon as possible. This is supported by the fact that PV and wind projects have successfully reached commercial operations locally. Additionally, recent procurement and experience from the Stage 1 and Stage 2 renewable RFPs, which were open to any generation technology eligible under the State's RPS statute, resulted in only PV paired with storage and standalone storage projects in the respective Final Award Groups. Facilities using these technologies can likely reach commercial operations sooner, reducing construction and execution risk, positioning such projects for a greater chance to succeed. The Companies have further limited technologies on Moloka'i and Lāna'i to PV paired with storage based on community input received prior to and during the Companies' Stage 2 renewable RFPs that wind, especially large wind turbines, was not a preferred choice in these communities.

LMI

To meet the Commission's stated Phase 2 objective of increasing access to renewable energy for LMI customers, the Companies were directed to offer LMI-specific RFPs on O'ahu, Maui, and Hawai'i Island. To provide additional opportunities to access renewable energy, the Companies also encouraged facilitating LMI participation in the non-LMI-specific RFPs by adding evaluation criteria that would reward a proposal for commitment to LMI customers.

Residential

As described in proposed Rule 29, the Companies instituted provisions to ensure that residential Subscribers will be provided an opportunity to participate in CBRE. In addition to the requirement in proposed Rule 29, which requires all CBRE Phase 2 projects to contain at least 40% residential Subscribers, the non-LMI RFPs include evaluation provisions that give preference to proposals that commit to higher amounts of residential Subscribers and facilitating a convenient accessible alternative to renewable energy participation in lieu of traditional rooftop solar.

Moloka'i and Lāna'i

Moloka'i and Lāna'i were specifically identified in Order No. 37070 to seek all of the Phase 2 capacity in Tranche 1, with the unallocated Phase 1 capacity transferred to Phase 2. The Companies therefore propose to offer the entire capacity for each island through the respective RFPs as detailed

⁸ See Order No. 37070 at 36: "The Companies may propose narrowing the scope of eligible technology, within the bounds of the RPS."

below.

Draft Lāna‘i CBRE RFP:

The Companies present a creative plan for the Draft Lāna‘i CBRE RFP, which combines the previously issued Variable Renewable Dispatchable Generation Paired with Energy Storage RFP (“Lāna‘i RDG RFP”) and the CBRE RFP to optimize the benefits of procuring renewable energy, spurring development and increasing the likelihood of success of the CBRE Program on Lāna‘i. The Draft Lāna‘i CBRE RFP not only reduces the number of potentially concurrent procurements for the Lāna‘i community thus creating efficiencies for the Lāna‘i community, stakeholders, Commission, and the Companies, but additionally, is an innovative approach to procure renewable energy in response to the Commission’s COVID-19 Emergency Order issued on March 24, 2020, which stated that “[C]lean energy development can accelerate Hawaii’s recovery from the crisis. Therefore, the Commission invites creative proposals and new programs that can support and expand clean energy job opportunities.” The Draft Lāna‘i CBRE RFP allows the Companies to continue collaborating with the majority landowner, Pūlama Lāna‘i, who has designated a new larger predetermined site to facilitate expeditious development of a renewable energy project that meets the objectives of both RFPs, while reducing the cost of a project by leveraging economies of scale and coordinating interconnection to the grid. Pūlama Lāna‘i has already completed numerous studies on this parcel as part of its Final Environmental Assessment (“FEA”).⁹ Pūlama Lāna‘i is currently seeking a finding of no significant impact on its FEA and will begin work on boundary amendments and rezoning. These actions will aid developers in preparing a proposal and ensure that the project can move quicker into construction once selected as much of the work needed to study the site has already been completed. The new site is also located adjacent to the Companies’ Miki Basin Plant which will allow for an easier interconnection to the switchyard, as compared to the previous site which was across the street from the Miki Basin Plant. Since there were no projects proposed for Lāna‘i in CBRE Phase 1, the Companies are optimistic that the proposed innovative procurement featuring an attractive site and increased scope will yield a robust and competitive response.

The total amount of variable renewable dispatchable generation being solicited in the Draft Lāna‘i CBRE RFP is the capability to provide a minimum of 35,800 megawatt hours (“MWh”) annually through a 17.5 MW PV project paired with a 17.5 MW/70 MWh energy storage system. This targeted amount includes a minimum of 3 MW that must be dedicated to CBRE and assumes Lāna‘i Sustainability Research and Mānele Bay Combined Heat and Power facilities are no longer available. This amount also assumes that the two resorts on Lāna‘i will remain connected to the Companies’ electrical system. This targeted energy amount is an increase from what was proposed in the Companies’ most recent Stage 2 renewable RFP filing due to no longer assuming the resorts would be removed from the Companies’ system, allowing for the system to run with no must-run fossil fuel units on many days of the year, and to accelerate achieving Hawai‘i’s 100% renewable RPS goal. Additionally, the Companies updated certain assumptions used as the basis to form the previous Stage 2 renewable RFP target. They include updated load forecasts (higher) and fuel forecasts (lower) being used in in the Integrated Grid Planning docket, and updated PV capacity factors and resource cost pricing observed in the current Moloka‘i Stage 2 renewable RFP. In order

⁹ These studies can be found at: <https://luc.hawaii.gov/pending-petitions-2/boundary-amendments/a19-809-lanai-resorts-llc-dba-pulama-lanai/a19-809-lanai-resorts-llc-dba-pulama-lanai-miki-basin-enviromental-assessment-2020/>.

to achieve this scenario in addition to the 17.5 MW PV project paired with energy storage, the Companies must also procure and install at least one synchronous condenser on the system to replace the services currently being provided by the island's fossil fuel units. In addition, the selected project will be required to provide grid forming and black start capabilities, which is essential as these variable projects begin to replace fossil fuel generation which would typically provide such services. Proposals must utilize the designated site owned by Pūlama Lānaʻi. Reflecting the change in schedule and the addition of CBRE, the Guaranteed Commercial Operations Date has been revised to be no later than December 31, 2024.

A timeline that highlights the development of the Draft Lānaʻi CBRE RFP is below:

On November 27, 2019, the Companies issued the Request for Proposals for Variable Renewable Dispatchable Generation, Island of Lānaʻi in response to Order No. 36776 issued on November 15, 2019. The Companies had collaborated with Pūlama Lānaʻi and created an RFP that required Proposers to propose sizing variations that addressed four (4) possible variable renewable generation targets depending on the availability of existing generating facilities.

On January 14, 2020, in response to Pūlama Lānaʻi's announcement to remove the Four Seasons Resort Lānaʻi at Mānele and the Four Seasons Resort Lānaʻi at Kōʻele from the grid, the Companies postponed the RFP to re-evaluate the scope and schedule.

On March 10, 2020, the Companies submitted a draft revised RFP for Variable Renewable Dispatchable Generation, Island of Lānaʻi (the "Draft Revised Lānaʻi RDG RFP") to the Commission, which included a revised scope to accommodate Pūlama Lānaʻi's plans.

On April 6, 2020, the Commission issued Order No. 37063, which extended the period for its review of the Draft Revised Lānaʻi RDG RFP by sixty (60) days, from April 9, 2020 to June 8, 2020. The extension was granted to allow Pūlama Lānaʻi to continue discussions with the Companies regarding the potential ownership of the electrical system and grid on Lānaʻi.

On April 9, 2020, the Commission issued Order No. 37070 directing the Companies to develop an RFP for 3 MW of CBRE on the Island of Lānaʻi (the "Phase 2 Lānaʻi CBRE RFP").

On May 1, 2020, Pūlama Lānaʻi and the Companies ceased discussions regarding the acquisition of the Maui Electric system on the Island of Lānaʻi.

On June 10, 2020, the Companies, in consultation with the Independent Observer, proposed combining the Draft Revised Lānaʻi RDG RFP and the Phase 2 Lānaʻi CBRE RFP ("Draft Lānaʻi CBRE RFP").

Draft Molokaʻi CBRE RFP:

The Companies are seeking new variable PV generation paired with storage systems for the Draft Molokaʻi CBRE RFP. The Companies believe that at the scale of renewable projects being sought for the Draft Molokaʻi CBRE RFP, PV Paired Projects have the greatest ability to reach commercial operations as soon as possible. Given the current system conditions on Molokaʻi, the Companies will require CBRE projects to be paired with storage. As stated in the Companies' DER Quarterly report filed in Docker No. 2019-0323 on April 29, 2020, the Molokaʻi system has 0 MW system

hosting capacity remaining. Interconnecting a CBRE project not paired with storage may lead to uneconomic curtailment. Attaining additional storage for the Moloka‘i system will enable the acquisition of grid services at times of the day when PV is not available. In addition, projects 1 MW and larger on Moloka‘i will be required to provide grid forming and black start capabilities, which is essential as these variable projects begin to replace fossil fuel generation which would typically provide such services.

Moloka‘i and Lāna‘i Community Outreach

The Companies held community meetings on both Lāna‘i and Moloka‘i over the last few years as part of their effort to learn about each community’s needs and to collaborate on how to reach the 100% renewable RPS goal. Recognizing COVID-19 related risks, instead of travelling, the Companies will invite residents on each island to attend virtual meetings later this month to continue this effort and to provide updates on various projects the Companies have been working on. In addition to the Technical Conference scheduled by the PUC for July 29, these meetings give the communities opportunities to provide feedback to the Companies that may be used to help shape the Final CBRE RFPs for Lāna‘i and Moloka‘i.

Self-Build Options and Affiliate Participation

The Companies appreciate the Commission’s recognition of the value of allowing broad competition in the CBRE RFPs to include all bidders, including the Companies and their affiliates.¹⁰ The Companies will allow self-build and affiliate bids in all of their CBRE RFPs, with the exception of the LMI RFPs, as discussed below. The Competitive Bidding Framework and Code of Conduct will be strictly adhered to as discussed in Section 1.9 and Appendix C and Appendix G of the Draft CBRE RFPs for the islands of Moloka‘i and Lāna‘i. The Companies also intend to follow these procedures and allow for self-build and affiliate bids in their non-LMI RFPs for O‘ahu, Hawai‘i and Maui islands, the drafts of which will be filed for review later this year. The Companies also intend to allow Self-Build and Affiliate participation for small projects under Rule 29.

However, consistent with the guidance in Order No. 37070, the Companies will not allow self-build proposals for consideration in the LMI RFPs. Order No. 37070 states: “If there are no successful competitive bids for the LMI project on one island or more, then the Commission will consider a utility self-build option for that island. Any utility self-build application shall be consistent with Section VI of the Competitive Bidding Framework.” As stated in Order No. 37070, the Companies may propose a utility solution if there are no successful competitive bids in a particular LMI RFP.

Available Sites

In addition to offering a Pūlama Lāna‘i-owned site for the Draft Lāna‘i CBRE RFP, the Companies re-issued its most recent Land RFI on June 15, 2020. This updated initiative is similar to the Land RFI that was issued in 2017 in that it seeks to make information about potential locations for renewable energy development on the islands of O‘ahu, Hawai‘i, Maui, and Moloka‘i to be more accessible to potential developers. However, in this new initiative, the Companies also seek

¹⁰ See Order No. 37070 at 26: “The CBRE RFPs will be open to all bidders, including independent power producers, the Companies, and any of their affiliates.”

information from owners of large rooftops and parking lots. These types of spaces could be appropriate for CBRE projects. The Companies will share information collected in the Land RFI with interested developers who execute confidentiality agreements with the Companies. These developers can then reach out directly to the land and rooftop owners to discuss using such sites for CBRE and other renewable energy projects. Facilitating new options to site CBRE or other renewable energy projects can improve the likelihood for successful development, may provide opportunities to build resilience through geographic diversification, and can aid the economic recovery and the transition to clean energy.

Interconnection

In order to simplify and streamline the interconnection process for CBRE projects and reduce execution risk, the Companies have proposed limiting interconnection to distribution circuits (25 kV and below on O‘ahu and 12 kV and below on all other islands) on all islands except for O‘ahu, where interconnection at the 46 kV sub-transmission level will also be allowed. Project sizes will not be capped for the 46 kV interconnection to allow the market to determine its size. Interconnection on Lana‘i from the site specified in the RFP will be directly into the Companies’ existing Miki Basin switchyard. Distribution circuit interconnections will be limited to 3 MW. CBRE Phase 1 capped project sizes at 1 MW on Maui and Hawai‘i Island and 3 MW on O‘ahu, which seemed to suit the market demand in Phase 1. Most substations transformers are rated at 10 MVA, typically supplying power to two distribution circuits. During normal operations, these transformers typically carry 4-7 MVA of load (i.e, 2-3.5 MVA per circuit). The 3 MW limit per distribution circuit will reduce the risk of technical issues stalling an individual project and align with the way circuits are planned. Capping of projects tying into the distribution circuits will also help to ensure that CBRE projects do not take up the majority of the available hosting capacity for other future customer rooftop systems. In addition, limiting project sizes, will increase the total number of CBRE projects that can be selected. A greater number of projects not only ensures a robust CBRE market and more options for Subscribers, but it should inherently provide the opportunity for geographic diversity and create a more resilient system. To further limit developer interconnection risk, the Companies will construct, at Seller’s expense, Company-owned interconnection facilities for projects interconnecting to distribution-level circuits (25 kV and below on O‘ahu and 12 kV and below for all other islands).

In addition, while not currently incorporated into the Draft LMI RFP for Maui presented with this filing, in the spirit of the Commission’s guidance to offer creative solutions to rejuvenate the post COVID-19 economy, and due to numerous discussions as part of the Companies’ IGP Competitive Bidding Working Group, the Companies offer an innovative interconnection process that could replace the current process specified in the Draft LMI RFP. The Companies propose to remove the interconnection costs for company-owned interconnection facilities from the pricing bid by developers in the RFPs. Therefore, developer pricing would only reflect the cost to build its facility and seller-owned interconnection facilities. The Companies would develop their assumed costs for interconnection based on the typical CBRE interconnection provided in Appendix H of the Draft LMI RFP for Maui, and would use these as a proxy in the evaluation process. The Companies would assume responsibility for these costs and for completion of the interconnection work and would seek recovery for such costs separately through mechanisms such as MPIR, REIP or some other approved means. This is similar to steps that have been taken in New York to streamline the interconnection process.

The Companies believe such a solution would benefit customers, developers and the Companies. First, this solution removes the uncertainty of interconnection costs from developer bids, preventing risk of over-inflation of prices to account for potentially unknown interconnection costs, which should lower costs for customers. It should also avoid delays during the interconnection process by eliminating any need for discussions between the Companies and developers regarding whether a requirement is more properly characterized as an interconnection requirement or a system upgrade. It also avoids the risk of developers dropping out of the process during the interconnection requirements study amendment process if interconnection costs are higher than the developer assumed in its bid, thus providing greater assurance of successful projects. Finally, with more control over interconnection design, the Companies should have more opportunity to identify and execute upon innovative cost saving solutions, such as combining interconnection requirements for multiple projects. For example, instead of building multiple substations to interconnect each project, the Companies could design one substation in a central location based on the final award group and allow multiple projects to interconnect to such substation. This would reduce not only the cost of interconnection requirements for customers, but also reduce the land footprint needed to interconnect new renewable projects. The Companies are proposing to test this process for the LMI RFPs, which the Companies anticipate will result in a limited number of projects, and be more manageable for a first attempt at a new interconnection process.

Changes to Evaluation Process

Building off the experience gained from successfully completing the Stage 2 Variable RDG RFPs, and in compliance with Order No. 37070, the Companies will evaluate eligible Proposals on the basis of both Price and Non-Price criteria. Evaluation of Non-Price aspects of a Proposal for CBRE RFPs will be elevated in importance, with 49% of a Proposal's total score being based on its Non-Price score and 51% of it being based on its Price score. The shift from a 40/60 Non-Price/Price weighting in the previous RFPs reflects, in the Companies' view, the increasing significance of non-price factors in contributing to the greater probability of successful project development and completion.

Grid Needs Assessment and Solution Evaluation Methodology:

As indicated in the Companies' letter to update the IGP schedule, workplan, and interdependencies with other dockets in Docket No. 2018-0165 on May 27, 2020, the Companies intend to demonstrate the grid needs assessment and solution evaluation processes developed in the Integrated Grid Planning ("IGP") Solution Evaluation & Optimization Working Group ("SEOWG") in the CBRE RFPs.

An RFP appendix will be provided to define the grid services, identify the need for each grid service and its relative value for each hour in a representative modeled day. This information can help bidders understand what the grid needs are and structure their proposals to provide the most value to the Companies.

In the Price and Detailed Evaluations, individual proposals would be ranked based on the potential benefit they provide across the grid services, calculated using the expected ability of the proposal to provide a service and the service value. This ranking could then be used to consider portfolios of

projects to assess their combined benefit.

In recognition of the unique aspects of CBRE and to support the Commission's objectives, several Non-Price criteria were also added to the CBRE RFPs, including:

Commitment to Residential Subscriber Participation:

Proposers must reserve a minimum 40% of its capacity for residential Subscribers. Preference will be given to Projects that are committed to a larger residential Subscriber portion and/or the extent to which it reserves capacity for LMI customers.

CBRE Program:

The proposed CBRE Program criteria will consider the extent to which it is committed to obtaining LMI participation, development of its marketing and outreach plan, plans to retain Subscribers, and level of experience in community-based renewable energy programs.

NWA and Grid Services; Community Resilience:

Proposals will be scored on the extent to which they are sited to support grid needs, non-wire alternatives, and/or community resilience. This category does not apply to Lāna'i because the site has been pre-determined to be at the Pūlama Site adjacent to Miki Basin Plant and the requirement for grid forming and black start capability will contribute to the resilience of the Lāna'i system. There are no NWA opportunities identified on Moloka'i, and therefore the NWA portion of this criteria will not be applicable to the Moloka'i RFP. Additionally, proposals for projects on Moloka'i that are 1 MW or larger will be required to include grid-forming and black start capabilities.

Procurement Timeline

The Companies have proposed RFP schedule dates in Section 3.1, Table 1 for the Draft RFPs to be consistent with Order No. 37070.

For the Draft LMI RFPs and Draft Moloka'i CBRE RFP, the Final Award Group is scheduled to be announced on June 25, 2021. For the Draft Lāna'i CBRE RFP, the Final Award Group is scheduled to be announced on March 5, 2021. These projected dates are based on assumptions for the procedural schedule leading up to the RFP issuance. Section 3.1, Table 1 will be updated with final dates when each RFP is issued in fall 2020.

The Companies are able to accelerate the selection of the Final Award Group for the Draft Lāna'i CBRE RFP because it will not conduct a Detailed Evaluation for this RFP. A Detailed Evaluation is not needed on Lāna'i due to the fact that Proposers are required to propose projects on the same site, utilizing the same technology and same size.

To increase transparency in procurements and to increase community engagement, the Companies have revised the RFPs so that details about the projects included in the Final Award Groups will be announced within 5 days of the notification of selection. This will allow the selection and project

details of the Final Award Group to be announced simultaneously, thus advancing the opportunity for Final Award Group developers and communities to begin to engage on project details earlier.

Number of Variations Allowed

In trying to balance developers' interest in proposal flexibility with the need and desire by all to move more quickly with an expanded CBRE Phase 2 scope, the Companies have proposed to reduce the number of variations that may be submitted with a single Proposal Fee from four (4) to two (2). The Companies understand that allowing variations gives Proposers flexibility to consider different options and they have allowed up to four (4) variations in the past. However, since the Companies will be conducting up to eight (8) CBRE RFPs simultaneously and expect to receive a larger number of proposals for each RFP due to the expected smaller size of the projects, to balance limited resources while still providing flexibility to Proposers, two (2) variations will be allowed with each Proposal Fee.

IV. Contracts

Subscriber Organization Contracts

In order to facilitate the implementation of Phase 2 as directed by Order No. 37070, the Companies developed three different categories of model contracts. For CBRE Small Projects sized below 250 kW and procured under proposed Rule 29, updates were made to the existing Standard Form Contract ("SFC") and Interconnection Agreement ("IA"). For projects procured through the RFPs, two different form model contracts were developed. Because Order No. 37070 stated that "projects sized 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, to proceed without further regulatory review after selection by the Companies," a Mid-Tier RDG PPA was created with the intent that it would be pre-approved and non-negotiable to alleviate any concerns that there will be no further regulatory review and approval after Project selection. Creating this standard form Mid-Tier RDG PPA also allowed the Companies to streamline certain provisions and in some cases provide for less stringent requirements consistent with the SFC for projects under 250 kW. For projects sized above 5 MW on O'ahu and above 2.5 MW on Maui and Hawai'i Island, the Renewable Dispatchable Generation ("RDG") Model PPA ("RDG PPA") from the Stage 2 RFPs was modified to include CBRE concepts.

The Companies appreciate the Commission's support for the use of the RDG PPA concept in CBRE and eliminating compensable curtailment for CBRE Small Projects. The contracts developed reflect this philosophy. CBRE Small Projects will not receive any preferential curtailment treatment. As these projects will be the first to be curtailed under the Companies' seniority-based curtailment mechanisms (last in, first curtailed), the Companies strongly encourage CBRE Small Projects to include storage with their proposals. Without storage, due to the amount of variable renewable energy already on the Companies' systems, it is highly likely such facilities will see a high amount of curtailment and therefore limited energy payments for such CBRE Small Projects. Under RDG PPA-type contracts, Mid-Tier and Large Projects will be able to be dispatched to meet system needs.

CBRE Small Projects

The primary update to the SFC and IA was to eliminate the concept of compensable curtailment. Reverting to a more simplified “as-available” payment model resulted in more streamlined payment provisions, compared to the Phase 1 structure where curtailed energy would have to be calculated and then compensated. In addition, updates were made to reflect updates to the proposed tariff, to streamline technical requirements as appropriate for projects sized below 250 kW, and to make the SFC technology agnostic. Requirements for projects paired with storage, referencing applicable provisions from Rule 24 Customer Grid Supply Plus and Rule 25 Smart Export, were also incorporated.

RFP Contracts – RDG PPAs

- The Mid-Tier RDG PPA was developed based on the updated SFC and IA. It also incorporates applicable provisions from the model RDG PPA in order to align this contract form with the RDG PPA concept. Certain adjustments to performance standards and technical references were made to account for Mid-Tier Project sizing. CBRE Mid-Tier Projects under the pre-approved and non-negotiable Mid-Tier RDG PPA will be permitted to proceed without further review and approval from the Commission.
- The CBRE Large Project RDG PPA adheres closely to the model RDG PPA, with modifications made to incorporate the CBRE concepts set forth in proposed Rule 29. The CBRE Large Project RDG PPA was additionally updated to allow only for a Lump Sum Payment as payment to the Subscriber Organization for PV projects, eliminating the option of a Purchase Price for Electric Energy component. This change reflects what has been seen in the market in recent procurements, where few PV and PV + storage projects bid a Purchase Price for Electric Energy. It also helps to streamline processes under the CBRE concept which are more complicated with the addition of bill credits to Subscribers versus a direct payment to an independent power producer.
- The Lāna‘i RDG PPA (PV+Storage only) is based on the CBRE Large Project RDG PPA, modified to account for requirements specific to the Lāna‘i RFP. Most significantly, changes were made to allow for both CBRE and non-CBRE allocations as allowed by the Lāna‘i RFP. The RDG PPA for the island of Lāna‘i will be made available for review ahead of the July 29, 2020 Status Conference.

In the interest of focusing efforts for the July 9 Filing, only PV versions of the CBRE Large Project RDG PPA and CBRE Mid-Tier Project RDG PPA are submitted for review and comment, and will be customized for the LMI RFPs. The CBRE Large Project RDG PPA and CBRE Mid-Tier Project RDG PPA for the Moloka‘i CBRE RFP will similarly be customized when issued. Given the results of the Stage 1 and Stage 2 renewable RFPs, the Companies anticipate that the majority of the interest for CBRE will be for PV projects. Wind versions of the contracts will be made available for review ahead of the July 29, 2020 Technical Conference.

V. Next Steps

At the Technical Conference scheduled for July 29, 2020, the Companies will present the details of the draft CBRE RFPs, contract documents, and draft Rule 29. Stakeholders are invited to participate and may submit comments to the Companies until August 12, 2020. The Companies will review submitted comments and thoughtfully consider them, in coordination with the Independent Observer, prior to preparing their proposed final CBRE RFPs to be filed on September 8, 2020.

In accordance with Order No. 37139, *Granting Hawaiian Electric Companies' Motion for Partial Reconsideration of Order No. 37070*, dated May 14, 2020, the Companies will file Draft CBRE RFPs for Large Projects no later than October 9, 2020. On October 28, 2020, the Companies will host a Technical Conference and present details on their plans for Large Projects. Stakeholders may submit comments to the draft RFPs until October 14, 2020, and the Companies will review these comments before filing the proposed final Large Project RFPs on October 28, 2020.

The Companies look forward to continuing to work with the Commission, Consumer Advocate, Independent Observer, and stakeholders to finalize the Phase 2 CBRE program, including the Draft RFPs, to significantly increase the benefits of renewable energy available to customers, consistent with Act 100 and support economic recovery from the COVID-19 pandemic.

EXHIBIT 2

CBRE Phase 2 Program Tariff and Appendices

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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: Thirty (30) 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: 2.5 MW
 - Maui: 2.5 MW + 0.975 MW transferred from CBRE Phase 1
 - O‘ahu: 15 MW
 - b. Tranche 2:
 - Hawai‘i: 2.5 MW
 - Maui: 2.5 MW
 - O‘ahu: 5 MW
2. Eligibility shall be limited to photovoltaic or wind generation project sizes greater than 4 kW AC and less than 250 kW AC with battery storage strongly recommended. 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.

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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 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 (a) received service at the same location for which they are requesting participation for at least 6 months at the time of enrollment and (b) commencing two (2) years after the effective date of this Rule No. 29, has not received any disconnection notifications at the same location within the last 12 months;

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;

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

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

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Subscriber is served under any of the following Company rate schedules: Schedule R, TOU-R, TOU-RI, TOU EV, or any other residential rate option.

3. Customers shall be required to enter into an appropriate CBRE Subscriber Agreement (“Subscriber Agreement”) with a CBRE subscriber organization (“Subscriber Organization”). The Subscriber Agreement shall contain standard information and provisions that ensure transparency and proper consumer protection. The Subscriber Agreement shall include or be supplemented by, at minimum, the following elements:
 - a. CBRE Phase 2 Facility and Subscriber Organization information
 - i. CBRE Phase 2 Facility name and address;
 - ii. CBRE Subscriber Organization and/or owner name, address, website URL, phone number, and email address;
 - iii. Subscriber name, address, phone number, and email address; and
 - iv. Subscriber’s utility name and account number;
 - b. Financial Information:
 - i. Credit rate (“Credit Rate”) and calculation;
 - ii. Bill credit mechanism and timing;
 - iii. Tax and securities implications;
 - iv. Any fees, charges or payments to be made by the participant to enroll or over the life of the contract;
 - v. Use of escrow account, 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:

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- i. Subscriber's account and energy usage data as required to verify eligibility, determine the appropriate subscription size, and shall not include interval data from advanced metering;
 - ii. Subscription information;
 - iii. Aggregated CBRE Project data and anonymized Subscriber data in response to information requests from the Commission or the State of Hawai'i Department of Commerce and Consumer Affairs, Division of Consumer Advocacy ("CA"); and
 - iv. Subscriber data in response to information requests from the Commission or the CA.
 - d. The standard form disclosure checklist ("Disclosure Checklist") is attached hereto as Appendix II, which each Subscriber Organization shall complete with each Subscriber acquiring an interest in such Subscriber Organization's CBRE Facility.
4. Interested Customers shall (a) obtain confirmation of eligibility and maximum buy-in level 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 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.6 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 for the previous 12 months.
 - a. Company shall use the 12 months immediately prior to application submission to determine the Subscriber's previous 12 months of energy consumption.

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- b. If Subscriber does not have a 12 month billing history prior to application submission, and there is not 12 months of billing history, including billing history of another customer associated with the Subscriber's premises, the Company shall use the available monthly average consumption multiplied over 12 months in order to generate a proxy average annual consumption.
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 Subscriber may not transfer their interest to another Customer. 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.

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.

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- ii. A transfer shall be for no less than all (100%) 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 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.

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12. 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:

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.

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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 notice by the Subscriber Organization 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 three billing cycles. Subscribers will see eligible credits on a future bill depending on the day their meter is read. Eligible charges on the Subscriber's electric bill shall be all light and power charges.
5. The Subscriber's electric bill cannot be reduced below the sum of the customer charge, the Green Infrastructure Fee, and any other per-customer charge for the customer's applicable rate schedule or the minimum bill applicable in the underlying tariff, whichever is greater.
6. If the Subscriber's monthly CBRE bill credit exceeds the eligible charges, the value of excess credits shall be carried over to the next billing period(s) within the current 12-month period, as a CBRE bill credit and applied to the Subscriber's electric bill(s) subject to Part I Sections C.4 and C.5 above.
7. Reconciliation will be made at the end of every 12-month period by applying the Subscriber's remaining CBRE bill credit to the Subscriber's remaining eligible charges within the 12-month period. Any CBRE bill credit that remains unused at the end of each 12-month period shall be extinguished.
8. If the Subscriber terminates its CBRE service prior to the end of any 12-month period, the Company shall reconcile the remaining CBRE bill credit to remaining eligible charges at the end of the monthly billing period when service was terminated, similar to the reconciliation that would have been performed at the end of the normal 12-month period. Any CBRE bill credit that remains unused shall be extinguished.
9. Compensation for Unsubscribed Energy:

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- 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.

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

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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

10. A Subscriber Organization shall be required to have a minimum of 4 individual Subscribers per CBRE Facility at all times. For a period of 6 months following initial commercial operations, the Subscriber Organization shall incur no payment reduction if it should fall below this minimum number of Subscribers. Effective after 6 months of commercial operations, the following shall be placed into effect for the remainder of the term of the CBRE Facility:
- a. For any CBRE Facility which does not have the minimum 4 individual Subscribers for any month during the term of its 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.
 - 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 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

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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 should fall below this minimum percentage of residential Subscribers. Effective after 6 months of commercial operations, the following shall be placed into effect for the remainder of the term of the CBRE Facility:
- a. For any CBRE Facility which does not have the minimum 40% residential Subscribers for any month during the term of its SFC or PPA, 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.
 - 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 and such amount shall be multiplied by the applicable Credit Rate (the sub-part a. percentage * 15.00 cents/kWh) to equal a dollar amount

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liquidated damages for 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.

2. Demonstrating transparency and a willingness to engage in early communication with communities is an important part of a Project's viability and success. A community outreach and communications plan ("Community Outreach Plan") is an essential roadmap that guides a Subscriber Organization as they work with various communities

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and stakeholders to raise awareness and collect input for a project. A Subscriber Organization for a project between 100 kW and 250 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.
4. Prior to developing a Facility, an Applicant shall submit a completed application to the Company, which shall provide the following in order to be considered a complete application:
 - a. A one-time, non-refundable application processing fee of \$250 per application;
 - b. Applicant company name, contact information, and address, and indicate their role (e.g., Subscriber Organization, owner, or operator);
 - c. Applicant contact person name, contact information, and address;
 - d. Entity name, contact information, address, and identity role of the Subscriber Organization if approved; if entities other than the Subscriber Organization will act as either owner or operator of the CBRE Facility, name, role identification, contact information, and address shall be provided for those other entities;
 - e. Proposed CBRE Phase 2 Facility name, address, and estimated completion date;
 - 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);

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- 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;
- 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

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Sheets 34D-2 through 34D-3 for these requirements. While applicants shall receive a timestamp for completed applications that comply with this Part I, Section E.4 requirements, such application shall not be deemed complete until Applicant's Rule No. 14H completeness review is deemed complete. Time frames to review and for Applicant to provide requested information shall be as specified in Rule No. 14H;

- o. Demonstrating Site Control for the Site required for the successful implementation of a specific Facility must include all Interconnection Facilities required for the Facility. The need for a firm commitment is necessary to ensure that applications are realistic and shovel-ready so that there is a high likelihood that the proposed project will be developed to completion. In addition, developmental requirements and restrictions such as zoning of the Site and the status of easements must be identified and will be considered in determining whether the application meets the Site Control requirement.

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

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

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

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same Site, the documents granting the binding commitments must not prevent the Company from moving forward with the application that otherwise would have been selected.

- iii. Government/Public Lands Only: The above two points may not be feasible where government or publicly owned lands are part of the Site or are required for the successful implementation of the application. In such a case, at a minimum the Applicant must provide a credible and viable plan, including evidence of any steps taken to date, to secure all necessary Site Control for the application, including but not limited to evidence of sufficient progress toward approval by the government agency or other body vested with the authority to grant such approval (as demonstrated by records of the agency). The Applicant will be required, however, to demonstrate Site Control as required in the applicable SFC.

- p. If an Applicant submits an application that does not contain all the required items listed in this Part I, Section E.4 above, the application shall be deemed incomplete and the timestamp for the completed application shall be when the last item(s) is/are received from the Applicant that renders the application complete under Part I, Section E.4 , with the exception of (1) Part I, Section E.4.a, regarding application processing fee payment and (2) Part I, Section E.4.m regarding the refundable deposit. If the (1) application fee and/or (2) refundable deposit are the only missing items and are received within 15 calendar days from the date of submission, the timestamp will be the date the application was submitted electronically. Partially completed applications will be deemed abandoned if all required items are not submitted so as to render the application complete after 60 calendar days.

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

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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. • 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		

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

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If there is no active queue of available applications, or after the four-month queue process has run, as applicable, any subsequent failure of a CBRE Small Project in Phase 2 shall not be replaced.

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.

F. CO-LOCATION LIMITATIONS

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

G. COMMUNICATIONS AND CONTROLLABILITY

1. The Facility shall include a telemetry and control interface which allows the Company to remotely measure, monitor, evaluate and verify technical compliance, CBRE Facility performance, and power quality and, if necessary, control the CBRE Facility (“Communication and Controls”). The acceptable method(s) of implementing the Communication and Controls requirements will be specified by the Company and may be modified after technical review. Monitoring will be performed by system dispatchers or operators at the Company’s control center.

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2. Communication and Controls through cellular or comparable technology shall be required, and, could include but not be limited to 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 pursuant to the terms of an interconnection agreement (“Interconnection Agreement”) between the Subscriber Organization and the Company, attached hereto as Appendix III.
 - a. Status of Customer’s distribution breaker CB-A (HECO# XXXX);
 - b. Distribution line amps (3 phase), distribution voltage (3 phase L-N), frequency, NET MW, NET MVAR, and NET power factor at point of interconnection. Power factor to be a calculated value;
 - c. PV MW and MVAR output;
 - d. BESS MW and MVAR output/charge;
 - e. Received KWh accumulator, sent KWh accumulator, received KVARh accumulator, Sent KVARh accumulator.
 - f. Status Indicating when Maximum Power Limit is in effect;
 - g. Latest received Maximum Power Limit and Power Reference Limit Setpoints;
 - h. Solar Irradiance in Watts/m2;
 - i. kW output for each inverter;
 - j. Status for each inverter;
 - k. Plant Power Possible (MW);
 - l. Frequency Droop percent and deadband settings;
 - m. BESS State of Charge (%);
 - n. BESS Energy remaining (MWH);
 - o. kW set point for each inverter.

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.

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2. CBRE Phase 2 Facilities interconnected at the Distribution Level² that are selected shall follow the applicable Rule No. 14H interconnection process at the time of interconnection with an added provision of an expedited review. An expedited review of a CBRE Phase 2 Facility shall be applied as follows:
 - If an interconnection requirements study (IRS) is required, the IRS shall be completed within 90 calendar days after all information required to commence and complete the IRS is provided by the Subscriber Organization.
 - If the Facility is on a secondary distribution³ system that is customer-owned and on a circuit with available hosting capacity an IRS shall not be required. Any necessary mitigation required for an applicable facility to interconnect shall be determined within the standard initial technical or supplemental review timeframe.

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

- CBRE systems on 4kV and 2.4 kV circuits
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

² 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.

³ Secondary distribution system (Level) is defined as interconnection to electrical wires, equipment, and other facilities at a low voltage level (less than or equal to 600 volts, such as 120V, 208V, or 480V), through which the utility provides electrical service to its customers.

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technical review. Subscriber Organizations shall not be permitted to announce availability, market, solicit, sign up or 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.
4. Subscriber Organizations shall ensure CBRE Facilities are built within the specific number of months as specified in the SFC.
5. Subscriber Organizations are responsible for their own operation and maintenance of their Facility to ensure the Facility meets agreed performance warranties, pursuant to the terms and conditions set forth in the applicable SFC, Interconnection Agreement and/or Rule No. 14H.
6. Electric energy delivered to the Subscriber Organization by the Company shall be billed under the Company's applicable rate schedule. Electric energy delivered to the Subscriber Organization by the Company shall be metered separately from the electric energy delivered by the Subscriber Organization to the Company, either by use of multiple meters or a meter capable of separately recording the inflow and outflow of electricity. Electric energy generated by the CBRE Small Project shall not be used to offset electric energy needs of the Facility itself so as to maximize the output of the Facility and the corresponding bill credits of the Subscribers to such Facility.
7. Subscriber Organization will calculate and will be responsible for the accuracy of the Subscriber's monthly credit. The Subscriber's monthly credit will be provided by the Subscriber Organization to the Company in dollars, per Part I, Section C above and the SFC, no later than ten days after the end of each calendar month.
8. Subscriber Organization's notification of a Subscriber's acquisition of a subscription shall be Subscriber Organization's representation and warranty that the Subscriber Organization has executed a Subscriber Agreement with the Subscriber and provided a completed Disclosure Checklist executed by the Subscriber that is attached to the

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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

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

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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 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

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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 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

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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 or wind generation project sizes greater than or equal to 250kW up to 5 MW (O'ahu) and 2.5 MW (Hawai'i and Maui) ("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 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, and a minimum project size of 250 kW. The form of contract used, either the Mid-Tier RDG PPA or the Large RDG PPA, including provisions regarding interconnection and battery storage, will be predicated on project size and subject to system limitations established by the Company. See Part III below.

B. CUSTOMER PARTICIPATION AND ELIGIBILITY

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

C. CREDIT RATE

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

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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 notice by the Subscriber Organization 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 three billing cycles. Subscribers will see eligible credits on a future bill depending on the day their meter is read. Eligible charges on the Subscriber's electric bill shall be all light and power charges.
6. The Subscriber's electric bill cannot be reduced below the sum of the customer charge, the Green Infrastructure Fee, and any other per-customer charge for the customer's applicable rate schedule or the minimum bill applicable in the underlying tariff, whichever is greater.
7. If the Subscriber's monthly CBRE bill credit exceeds the eligible charges, the value of excess credits shall be carried over to the next billing period(s) within the current 12-month period, as a CBRE bill credit and applied to the Subscriber's electric bill(s) subject to Part II, Sections C.5 and C.6 above. Reconciliation will be made at the end of every 12-month period by applying the Subscriber's remaining CBRE bill credit to the Subscriber's remaining eligible charges within the 12-month period. Any CBRE bill credit that remains unused at the end of each 12-month period shall be extinguished.

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

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

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

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

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

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

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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.

- c. If the Subscriber Organization does not have a 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 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 total output of a Facility's CBRE 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 should fall below this minimum percentage of residential Subscribers. Effective after 6 months of commercial operations, the following shall be placed into effect for the remainder of the term of the CBRE Facility
 - a. For any CBRE Facility which does not have the minimum 40% residential Subscribers for any month during the term of its PPA, the difference in percentage between the project's actual residential Subscriber percentage and the 40% minimum shall reduce the Subscriber Organization's allocation of the Lump Sum Payment allocated to Unsubscribed RDG. The Subscriber Organization's allocation of the Lump Sum Payment delivered shall be reduced by a factor equal to one-fourth (0.25) of such percentage difference. For example, if a project's residential Subscriber percentage is 30%, the difference, 10%, from the 40% minimum requirement, shall be multiplied by 0.25 ($10\% * 0.25 = 2.5\%$). 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

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

Damages for Failure to Maintain Minimum Percentage of Residential Subscribers. The percentage determined in sub-part a. shall be multiplied by 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

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month after the first 6 months of commercial operations, if the Subscriber Organization fails to meet multiple minimum requirements or exceeds maximum thresholds, the percentage reductions in Subscriber's allocation specified above will be added and the aggregate sum of such percentages shall be used to reduce the Subscriber's allocation for Unsubscribed RDG in any given month.

D. SELECTION PROCESS TO AWARD CBRE PROGRAM CAPACITY FOR PROJECTS GREATER THAN 250KW

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

E. SUBSCRIBER ORGANIZATION ELIGIBILITY

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

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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 and solicit Subscribers.
 2. CBRE Large Projects
 - a. Shall negotiate the terms and conditions of the Large RDG PPA that will govern the terms of the project with the Company.
 - b. The Large RDG PPA between the Subscriber Organization and the Company for each CBRE Large Project shall be subject to Commission review and approval before proceeding to develop its project and solicit Subscribers.
 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.

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G. CO-LOCATION LIMITATIONS

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

H. COMMUNICATIONS AND CONTROLABILITY

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

I. COMMISSION OVERSIGHT

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

J. SUBSCRIBER ORGANIZATION AGREEMENTS

1. Subscriber Organizations selected in the Final Award Group for any CBRE RFP that have accepted the Company's offer to proceed with its project shall negotiate the appropriate PPA for its project size as specified in Part II, Section F above. Subscriber Organizations shall not be permitted to announce availability, market, solicit, sign up or 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.

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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.
4. Subscriber Organizations shall ensure CBRE Mid-Tier Projects and CBRE Large Projects are built and achieve commercial operations within the specific number of months as specified in the applicable PPA.
5. Subscriber Organizations are responsible for interconnection, operation and maintenance of their Facility to ensure the Facility meets agreed performance warranties, pursuant to the terms and conditions set forth in the applicable PPA and, as applicable for CBRE Mid-Tier Project, Rule No. 14H and Part I, Section H.
6. Electric energy delivered to the Subscriber Organization by the Company shall be billed under the Company's applicable rate schedule. Electric energy delivered to the Subscriber Organization by the Company shall be metered separately from the electric energy delivered by the Subscriber Organization to the Company, either by use of multiple meters or a meter capable of separately recording the inflow and outflow of electricity. Electric energy generated by the CBRE Mid-Tier Project or CBRE Large Project shall not be used to offset electric energy needs of the Facility itself so as to maximize the output of the Facility and the corresponding bill credits of the Subscribers to such Facility.
7. Subscriber Organization will calculate and will be responsible for the accuracy of the Subscriber's monthly credit. The Subscriber's monthly credit will be provided by the Subscriber Organization to the Company in dollars, per the requirements of the PPA, no later than ten days after the end of each calendar month.
8. Subscriber Organization's notification of a Subscriber's acquisition of a subscription shall be Subscriber Organization's representation and warranty that the Subscriber Organization has executed a Subscriber Agreement with the Subscriber and provided a completed Disclosure Checklist executed by the Subscriber that is attached to the Subscriber Agreement for such Subscriber. The Administrator, IO for the CBRE Program, or the Commission may request copies of all Subscriber Agreements and/or Disclosure Checklists completed by the Subscriber Organization with its Subscribers at any time during the term of the Subscriber Organization's Facility.
9. The Company may, but shall not be required to, confirm that the Subscribers submitted by the Subscriber Organization are qualified pursuant to Part I, Section B above for

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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.

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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 LMI Customers only.

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.

A minimum threshold of one project per island but 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

A LMI customer is a member of a household with a household income equal to or less than the income limit 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. Such LMI customer shall be referred to as “LMI Customer” or “LMI Subscriber,” as applicable, in this Rule No. 29.

C. LMI VERIFICATION AT APPLICATION AND APPLICATION REQUIREMENTS

1. Subscriber Organizations are required to verify eligibility of the LMI Customers at the time the LMI Customer applies for CBRE participation by meeting any one of the following:
 - a. Utilizing a third-party income verification service to independently verify household income. The Subscriber Organization shall collect a Request for Transcript of Tax Return Form (IRS Form 4506-T) for all household members age 18 and over and

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send or upload to a third-party income verification service, as identified by the Company. The third-party verification service will return the tax transcript to the Subscriber Organization.

- b. Verifying income documentation for all household members over the age of 18 by reviewing photocopies of the first two pages of the previous year's income tax return documents, or IRS confirmation of no prior year's tax return, or most recent, verified paystubs, in order to confirm that such income meets the HUD LMI qualifications for the appropriate household size. Subscriber Organizations will provide to and obtain from the Subscriber an executed CBRE Program-approved affidavit ("LMI Subscriber Affidavit"), attached hereto as Appendix VI, certifying that the Subscriber is eligible to be classified as an LMI Customer under the applicable HUD guidelines referred to in Part III, Section B above. Subscribers shall grant the Subscriber Organization the authority to share such LMI Subscriber Affidavit with the Company and agree to provide other verifying income documents as requested by the Company. Subscriber Organization shall acknowledge the LMI Subscriber Affidavit certifying that it has confirmed Subscriber's LMI status.
2. In addition to the income and household size verifications in the LMI Subscriber Affidavit, Subscriber shall:
 - a. Affirm that they have resided at their current residence for a minimum of 6 months;
 - b. Grant the Subscriber Organization the authority to share such LMI Subscriber Affidavit with the Company and agree to provide other verifying income documents as requested by the Company.
 3. Subscriber Organization shall acknowledge the LMI Subscriber Affidavit certifying that it has confirmed Subscriber's LMI status.
 4. Subscriber Organization shall collect and store the LMI Subscriber Affidavit for each new LMI Subscriber acquiring a subscription in that Subscriber Organization's CBRE Project. Subscriber Organization's enrollment of the LMI Subscriber shall be Subscriber Organization's representation that it has collected the LMI Subscriber Affidavit from such LMI Subscriber.
 5. Once a LMI Subscriber eligibility is verified subsequent income changes will not disqualify the LMI Subscriber's eligibility.

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6. LMI Subscribers shall be required to acquire a minimum subscription of 0.5 kW AC.

D. LMI ANNUAL VERIFICATION DURING TERM

1. Annually the Company at its discretion will complete spot checks of up to 10% of LMI Subscriber Affidavits to confirm LMI Subscriber eligibility.
2. Company will select random LMI Subscribers for verification of LMI status as of enrollment. If the subscriber is unable to provide income verification documentation, the Subscriber Organization will bear the cost of performing the eligibility verification of such selected LMI subscribers using a third-party verification service for a random sample of up to 10% of subscribers.
3. If a threshold of 15% or more of the random sample fails verification, the Company at its discretion may perform a second sample test upon Subscriber Organization's request. The Subscriber Organization shall bear the cost of the Company performing the verification of a second sample of 10% of all LMI subscribers using a third-party verification service.
4. If the combined sample concludes that 15% or more of the LMI Subscribers which were tested failed the verification process, Subscriber Organization's allocation of the Lump Sum Payment for Unsubscribed RDG will be recalculated by designating the percentage of failed LMI Subscribers 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, the percentage of unqualified LMI Subscribers, identified through the verification process in Part III, Section D, or otherwise identified, shall be removed as LMI Subscribers and prohibited from re-applying for any CBRE Project for 3 years.

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 6 months of commercial operations as specified below.

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

Damages for Failure to Achieve Interim LMI Subscriber Percentage. The Interim LMI Shortfall Percentage shall be multiplied by the 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 and month 12, inclusive, after initial commercial operations of the CBRE LMI Project.

2. Effective after 12 months of commercial operations for a CBRE LMI Project, the following shall be placed into effect for the remainder of the term of the CBRE LMI Project.

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- 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.
- c. If the LMI Shortfall Percentage exceeds 15% for any month during the term of the LMI RDG PPA but otherwise has no Unsubscribed RDG, the Subscriber Organization shall be subject to equivalent liquidated damages as specified below. Continued failure to meet the 100% LMI percentage under these circumstances by the Subscriber Organization for more than one year shall be construed as an intent to disregard the requirements of this Rule 29 and could result in termination and removal from the CBRE Program in accordance with Part I, Section K.3.

Damages for Failure to Achieve the 100% LMI Subscriber Percentage. The LMI Shortfall Percentage shall be multiplied by the 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 6 months following initial commercial operations, the Subscriber Organization shall incur no payment reduction if it should fall below its Committed LMI Percentage. Effective after 6 months of commercial operations, the following shall be

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placed into effect for the six-month period (months 7 -12) following initial commercial operations:

- a. If a CBRE Mid-Tier or Large Project fails to maintain at least 60% of its Committed LMI Percentage for its project for any month between month 7 and month 12, inclusive, following initial commercial operations (the “Interim Committed LMI Percentage”). The difference in percentage between the project’s actual LMI Subscriber percentage and the Interim Committed LMI Percentage, multiplied by a factor of 0.10, shall be used to potentially reduce the Subscriber Organization’s allocation of the Lump Sum Payment allocated to Unsubscribed RDG for the month of such shortfall. For illustrative purposes, if a CBRE Mid-Tier or Large Project has a Committed LMI Percentage of 30%, the Interim Committed LMI Percentage is 60% of 30% or 18%. If the project has only 15% LMI Subscribers in any month between months 7-12 after initial commercial operations, the Subscriber Organization is $3\% * 0.10 = 0.3\%$ short of the Interim Committed LMI Percentage for that month. This percentage (0.3%) shall be used to assess potential payment reduction or liquidated damages pursuant to sub-parts b. and sub-part c. immediately below.
- b. If the sum of the percentage determined in sub-part a. above plus the percentage deemed to be non-LMI under Part III, Section D.4. (the “Interim Committed LMI Shortfall Percentage”), is greater than 15% for any month between month 7 and month 12, inclusive, after initial commercial operations, then the Subscriber Organization’s allocation of the Lump Sum Payment for Unsubscribed RDG delivered in that month shall be reduced by such Interim Committed LMI Shortfall Percentage.
- c. If the Interim Committed LMI Shortfall Percentage exceeds 15% for any month between month 7 and month 12, inclusive, after initial commercial operations, but the CBRE LMI Project otherwise has no Unsubscribed RDG, the Subscriber Organization shall be subject to equivalent liquidated damages as specified below.

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

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

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

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APPENDIX I

**SUBSCRIBER AGENCY AGREEMENT
AND
CONSENT FORM**

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

CBRE Project Name:

CBRE Project Address:

Subscriber Organization:

**CBRE Project contact information for Subscriber
questions and complaints:
Address (if different from above):**

Telephone number:

Email address:

Website URL:

Fax:

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

Subscriber Name:

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

Subscriber Mailing Address (if different from above):

Hawaiian Electric Company Contact Information

Phone: _____

Email: _____

Fax: _____

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Order No. 37070 filed April 9, 2020, Docket 2015-0389
Transmittal Letter dated July 9, 2020.

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

1. Assignment of Energy and Capacity, Environmental Credits. The Subscriber agrees that the Subscriber Organization has authority to assign all energy produced and capacity associated with the renewable energy system at the CBRE Project to Hawaiian Electric Company, Maui Electric Company, Limited or Hawai'i Electric Light Company, Inc., as applicable (the "Company"), and the Subscriber agrees that all energy produced, and capacity associated with the Subscriber's share of the renewable energy system at the CBRE Project shall belong to Company. The Subscriber also agrees that the Subscriber Organization has authority to assign all Environmental Credits¹ associated with the renewable energy system at the CBRE Project to Company, and that if the CBRE Project or a person or entity on its behalf has assigned the Environmental Credits to Company, then all Environmental Credits associated with the Subscriber's share of the renewable energy system at the CBRE Project shall belong to Company.
2. Tax Implications. The Subscriber Organization has provided the Subscriber with a statement that Company makes no representations concerning the taxable consequences to the Subscriber with respect to its Bill Credits to the Subscriber or other tax issues relating to participation in the CBRE Project.
3. Subscriber recognizes that not all production risk factors, such as grid-failure events or atypically cloudy weather, are within the Subscriber Organization's control.
4. Information Sharing. Participating in the CBRE Program will require sharing Subscriber's Account Information (name, account number, service address, telephone number, email address, website URL, information on Subscriber participation in other distributed generation serving the premises of the Subscriber, Subscriber specific Bill Credit(s)) and Subscriber's Energy Usage Data (data collected from the utility Subscriber meters that reflects the quantity, quality, or timing of the Subscriber's electric usage or electricity production for the service address and account number identified for participation in the CBRE Project). The following outlines the type of information that will be shared, and how that information will be used.
 - a. Subscriber's Account Information and Subscriber Energy Usage Data. The Subscriber authorizes Company to provide the Subscriber Organization (and the Subscriber Organization's designated subcontractors and agents) with the Subscriber's Account Information and Subscriber's Energy Usage Data as described in Section 4 above. This information is needed to allow the Subscriber Organization to determine the extent to which the Subscriber is entitled to participate in the CBRE Project, and to validate the amount of the Bill Credits to be provided by Company to the Subscriber. The current data privacy commitments of Company applicable to its CBRE Program provided to the Subscriber by the Subscriber Organization are attached as Exhibit 1 of this Subscriber Agency Agreement and Consent Form. These privacy commitments include definitions of "Subscriber's Account Information" and "Subscriber's Energy Usage Data."
 - b. Subscriber's Subscription Information. The Subscriber authorizes the Subscriber Organization to provide information to Company identifying the Subscriber (with the Subscriber's name, service address, and account number), low-to-moderate income ("LMI") status (if applicable) and detailing the Subscriber's proportional interest in kilowatts for Small Projects or percentage of the Facility's Contract Capacity for Mid-Tier and Large Projects, and to provide additional updates of this information to Company as circumstances

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

change. This information is needed to allow the Company to properly apply Bill Credits for the energy generated by the CBRE Small Projects or availability for a CBRE Mid-Tier and Large projects. Also, this information is needed to allow Company to send to the Subscriber notices or other correspondence pertaining to their involvement in the CBRE Program.

- c. Aggregated Information. Aggregated information concerning production at the CBRE Project may be publicly disclosed to support regulatory oversight of the CBRE Program. This includes annual reports available to the public related to specific CBRE Projects, including but not limited to production from the CBRE Projects; size, location and the type of CBRE Project subscriber groups including LMI; reporting on known complaints and the resolution of these complaints; lessons learned and any potential changes to the CBRE Program; reporting on Bill Credits earned and paid; and reporting on the application process. Aggregated information will not identify individual Subscribers nor provide Subscriber-Specific Account Information, Subscriber-Specific Energy Usage Data or Subscriber-specific Bill Credits unless a Subscriber provides explicit informed consent. Depending on the nature of the aggregated information, however, it may still be possible to infer the amount of production attributed to individual Subscribers to the CBRE Project. The Subscriber agrees to the inclusion of its production information in the creation of the aggregated information. The policies of the Company related to sharing aggregated information are part of the data privacy commitments contained in the attached Exhibit 1 of this CBRE Subscriber Agency Agreement and Consent Form.
- d. Information Requests from the PUC or CA or other governmental agencies. The Subscriber agrees that the Subscriber Organization and the Company are authorized to provide any information they possess related to the Subscriber or the Subscriber's participation in the CBRE Project to:
 - (i) the Hawaii Public Utilities Commission (PUC) or the State of Hawaii Division of Consumer Advocacy (CA), provided that if such disclosure includes personally identifiable information of the Subscriber, such disclosure shall be made under an applicable protective order to maintain the confidentiality of such information (This information is needed to allow proper regulatory oversight of the Company and of the CBRE Program); and
 - (ii) Other governmental agencies under exigent circumstances provided for in the Company privacy policy.
- e. Liability Release. While the Company requires the Subscriber Organization to implement appropriate data security measures, the Company shall not be responsible for monitoring or taking any steps to ensure that the Subscriber Organization maintains the confidentiality of the Subscriber's Account Information, the Subscriber's Energy Usage or the Bill Credits received pertaining to the Subscriber's participation in the CBRE Project. However, the Company shall remain liable for its own inappropriate release of Subscriber's Account Information and Subscriber's Energy Use Data in accordance with existing tariff rules.
- f. Duration of Consent. The Subscriber's consent to this information sharing shall be ongoing for the Term of the Contract between the Subscriber Organization and Company, or until the Subscriber no longer has a Subscription to the CBRE Project and the Subscriber Organization notifies Company of this fact. Provided, however, the Subscriber's consent shall also apply thereafter to all such information of the Subscriber pertaining to that period of time during which the Subscriber had a Subscription to the CBRE Project.
- g. Successor or Assigns. This Subscriber Agency Agreement and Consent Form shall apply fully to and inure to the benefit of Subscriber Organization and all subsequent successors or assigns, and to

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the Company and all of its subsequent successors or assigns, without the need for Subscriber's consent.

- h. Modification. The above provisions addressing data privacy and in Exhibit 1 shall remain in place until and unless other requirements are adopted by the Company and/or the PUC. Company shall file necessary revisions to its tariffs and contracts within a reasonable time after such Order.

5. Subscriber Disclosures.

- a. Customer data can provide insight into activities within the premise receiving utility service. Company may not disclose customer data except (1) if you authorize the disclosure, (2) to contracted agents that perform services on behalf of the utility, or (3) as otherwise permitted or required by regulations. Any such permitted disclosure shall be in accordance with policies relating to the sharing of customer data which may be found in the Company's privacy policy.
- b. Not authorizing disclosure will not affect utility service but will impact a proposed Subscriber's ability to participate in the CBRE program.
- c. Subscribers may access their standard customer data from Company without any additional charge.
- d. Company will have no control over the data disclosed pursuant to this consent and will not be responsible for monitoring or taking any steps to ensure that the data recipient maintains the confidentiality of the data or uses the data as authorized by you. Please be advised that you may not be able to control the use or misuse of your data once it has been released.
- e. In addition to the Subscriber data described above, the data recipient may also receive the following from Company: your name; account number; service number; meter number; utility type; service address; premise number; premise description; meter read date(s); number of days in the billing period; utility invoice date; base rate bill amount; other charges including base rate and non-base rate adjustments; taxes; and invoice total amount. Company will not provide any other information, including information such as LMI designation, your Social Security Number or any financial account number to the data recipient through this consent form.
- f. For additional information, including the Company privacy policy that applies to Company, visit: www.hawaiianelectric.com.

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

Subscriber's Name: _____
Subscriber's Signature: _____
Print or Type name and
Title of signatory if
Subscriber is a corporation
or unit of government: _____
Date: _____

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EXHIBIT 1

TO

SUBSCRIBER AGENCY AGREEMENT AND CONSENT FORM

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

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

Definitions

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

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

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

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

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

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

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

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

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

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

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

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

Overview

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

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

a. Subscriber Specific Information

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

- (i) The Company will disclose the following Subscriber-specific information to the Subscriber Organization:
 - Subscriber's Account Information
 - Subscriber's Energy Usage Data
 - Bill credits

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

b. Aggregated and Anonymized Subscriber Information

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

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

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

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

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

a. Program Management

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

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

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

b. Permitted Public Reporting

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

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

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

c. Prohibited Reporting or Sharing

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

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

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

3. **Subscriber Data Access and Correction**

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

a. Information Available from the Company

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

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

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

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

b. Information Available from the Subscriber Organization

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

- Future costs and benefits of the Subscription, including:
 - i. All nonrecurring (i.e., one-time) charges;
 - ii. All recurring charges;
 - iii. Terms and conditions of service;
 - iv. Whether any charges may increase during the course of service, and if so, how much advance notice is provided to the Subscriber;
 - v. Whether the Subscriber may be required to sign a term contract;
 - vi. Terms and conditions for early termination;
 - vii. Any penalties that the CBRE Project may charge to the Subscriber;
 - viii. The process for unsubscribing and any associated costs;
 - ix. An explanation of the Subscriber data the Subscriber Organization will share with the Company and that Company will share with the Subscriber Organization;
 - x. The data privacy policies of the Company and of the Subscriber Organization;
 - xi. The method of providing notice to Subscribers when the CBRE Project is out of service, including notice of estimated length and loss of production;

HAWAIIAN ELECTRIC COMPANY, INC.

Order No. 37070 filed April 9, 2020, Docket 2015-0389
Transmittal Letter dated July 9, 2020.

- xii. Assurance that all installations, upgrades and repairs will be under direct supervision of a NABCEP-certified solar professional and that maintenance will be performed according to industry standards, including the recommendations of the manufacturers of solar panels and other operational components;
 - xiii. Allocation of unsubscribed production; and
 - xiv. A statement that the Subscriber Organization is solely responsible for resolving any disputes with Company or the Subscriber about the accuracy of the CBRE Project production and that the Company is solely responsible for resolving any disputes with the Subscriber about the applicable Credit Rate used to determine the amount of the Bill Credit.
- Copy of the contract with Company for the CBRE Program
 - Copy of the solar panel warranty
 - Description of the compensation to be paid for any underperformance
 - Proof of insurance
 - Proof of a long-term maintenance plan
 - Current production projections and a description of the methodology used to develop production projections
 - Subscriber Organization contact information for questions and complaints
 - Demonstration to the Subscriber by the Subscriber Organization that it has sufficient funds to operate and maintain the CBRE Program

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

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

4. **Data Retention**

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

Appendix II
Disclosure Checklist

**Community Based Renewable Energy (CBRE) Phase 2 Program
Subscriber Organization Disclosure Checklist**

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

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

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

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

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

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

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

HAWAIIAN ELECTRIC COMPANY, INC.

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

APPENDIX III
COMMUNITY-BASED RENEWABLE ENERGY PROGRAM
INTERCONNECTION AGREEMENT

(Less than 250 kW)

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

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

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

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

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

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

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

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

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

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

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

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

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

Table 1: Voltage Ride-Through Table

Operating Region	Voltage at Point of Interconnection (% of Nominal Voltage)	Operating Mode	Ride-Through Until (s)	Default Maximum Trip Time (s)
OV2	$V > 120$	Cease to Energize	N/A	0.16 ⁽¹⁾
OV1	$120 \geq V > 110$	Momentary Cessation	12	13
CO	$110 \geq V > 100$	Continuous Operation (Volt-Watt)	N/A	N/A
CO	$100 > V \geq 88$	Continuous Operation	N/A	N/A
UV1	$88 > V \geq 70$	Mandatory Operation	20	21
UV2	$70 > V \geq 50$	Mandatory Operation	10-20	11-21 ⁽²⁾
UV3	$50 > V$	Momentary Cessation	N/A	2

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

⁽²⁾May be adjusted within these ranges at manufacturer's discretion.

- (b) Frequency-Watt. A Facility’s inverters shall be certified to meet the frequency-droop requirement stated in IEEE 1547-2018, “IEEE Standard for Interconnection and Interoperability of Distributed Energy Resources with Associated Electric Power System Interfaces.” For certification purposes, range of allowable settings in Table 21 shall be used as an exception to the 1547-2018 values. In this mode, the Advanced Inverter shall modulate active power when the frequency at the Point of Interconnection is outside the Frequency-Watt deadband dbOF and dbUF as specified by the default settings in Table 2.

Table 2 Frequency-Watt Settings

Parameter	Default Value	Range of allowable settings ⁽¹⁾

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

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

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

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

8. **Installation.**

- (a) Design, installation, operation and maintenance of the CBRE Facility shall include control and protection equipment as specified by the Company, including but not limited to an automatic load-break device such as a circuit breaker or inverter and a manual disconnect that has a visible break or breaker with rack-out capability to isolate the CBRE Facility from the Company’s system. The manual disconnect device must be accessible by the Company and be capable of being locked by the Company in the open position, to establish working clearance for maintenance and repair work in accordance with the Company’s safety rules and practices. The disconnect devices shall be furnished and installed by the Subscriber Organization and are to be connected between the CBRE Facility and the Company’s electric system. The disconnect devices shall be located in the immediate vicinity of the electric meter serving the Subscriber Organization. The manual disconnect device shall be, at a minimum, clearly labeled “Subscriber Organization System Disconnect”. With permission of the Company, the disconnect devices may be located at an alternate location which is readily and safely accessible to the Company on a 24-hour basis. Such alternate location shall be clearly identified with signage placed in the immediate vicinity of the electric meter serving the Subscriber Organization.
- (b) The Subscriber Organization grants access to the Company to utilize the disconnect device, if needed. Company may enter premises where the CBRE Facility is located, as permitted by law or tariff, for the following purposes: (1) to inspect CBRE Facility’s protective devices and read or test meter(s); and (2) to disconnect the CBRE Facility and/or service to Subscriber Organization, whenever in Company’s sole opinion, a hazardous condition exists and such immediate action is necessary to protect persons, Company’s facilities, or property of others from damage or interference caused by the CBRE Facility, or the absence or failure of properly operating protective device.
- (c) Under no circumstances shall a Subscriber Organization interconnect and operate the CBRE Facility in

parallel with the Company's electric system without prior written approval by the Company.

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

9. **Interconnection Facilities.**

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

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

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

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

Company, a suitable location for and access to all such equipment. If a 120/240 Volt power source or sources are required, the Subscriber Organization shall provide these at no expense to the Company.

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

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

Promptly following the Commercial Operations Date, and the complete performance of all of Subscriber Organization's obligations under this Agreement and the SFC, including but not limited to the obligation to pay any and all amounts owed by Subscriber Organization to Company, Company shall release the Security (including any accumulated interest, if applicable) to Subscriber Organization.

10. **Dispute Resolution:** Each Party agrees to attempt to resolve all disputes arising hereunder promptly, equitably and in a good faith manner. In the event a dispute arises under this Agreement, and if it cannot be resolved by the Parties within thirty (30) days after written notice of the dispute to the other Party, the Parties agree to submit the dispute to the Independent Observer for the CBRE Tariff. Pursuant to Section I.6. of the CBRE Tariff, material disputes unresolved after consultation with the Independent Observer may be presented to the Commission for review and the Commission may issue guidance and/or orders to resolve such disputes consistent with the CBRE Tariff.
11. **Continuity of Service.**
- (a) The Company may require the Seller to temporarily curtail, interrupt or reduce deliveries of energy when necessary in order for the Company to construct, install, maintain, repair, replace, remove, investigate, test or inspect any of its equipment or any part of the Company System including, but not limited to, accommodating the installation and/or testing of non-utility owned facilities to the Company system; or if the Company determines that such curtailment, interruption or reduction is necessary because of a system emergency, forced outage, operating conditions on its system; or the inability to accept deliveries of energy due to excess energy conditions; or if either the CBRE Facility does not operate in compliance with good engineering and operating practices or acceptance of energy from the Seller by the Company would require the Company to operate the Company system outside of good engineering and operating practices which in this case shall include, but not be limited to, excessive system frequency fluctuations or excessive voltage deviations, and any situation that the Company system operator determines, at his or her sole discretion, could place in jeopardy system reliability.
 - (b) When the Company determines that curtailment of energy becomes necessary for excess energy (“Curtailment Event”), curtailments shall be made in reverse chronological order in accordance with Section 2.A.2 of the Standard Form Contract. When Company determines that curtailment of energy becomes necessary for engineering and/or operating reasons that are directly attributable to the CBRE Facility, or system conditions exist that require reduction of the CBRE Facility for reliability and stability reasons, the above curtailment order will not apply.
 - (c) The CBRE Facility will be included in a group of solar projects designated as Phase 2 of the CBRE Program established by the Commission’s Decision and Order No. 37070 in Docket No. 2015-0389 that Company will, to the extent possible, treat as a single “block” (designated for convenience of reference as “CBRE Phase 2 Curtailment Block”) for purposes of implementing excess energy curtailment. When the Company is implementing excess energy curtailments, facilities included in the CBRE Phase 2 Curtailment Block shall be curtailed in reverse chronological order in accordance with the Standard Form Contract Section A.2 and Section D(3) of Attachment B to the Standard Form Contract. Projects (such as photovoltaic net energy metering projects, feed-in tariff projects, etc.) that are allowed to be installed without remote curtailment controls and projects for which remote control is otherwise unavailable or inoperable will not be curtailed before the CBRE Facility for excess energy.
 - (d) If the telemetry and control interface is unavailable, due to loss of communication link, remote terminal unit failure, or other event resulting in the loss of the remote control by Company, provision must be made for Subscriber Organization to be able to institute via local controls, within 30 minutes (or such other period as Company accepts in writing) of the verbal directive by the Company system operator, such raising and lowering of the curtailment limits as directed by the Company system operator. Due to timing considerations, this local instruction may not correlate to the remaining CBRE “block” controls.
 - (e) If all local and remote curtailment controls become unavailable or fail, the CBRE Facility shall, without intentional delay, disconnect from the Company’s system.

- (f) If direct transfer trip is determined to be required, but is unavailable due to any reason, including loss of communication or equipment problems, provision must be made for the Subscriber Organization to trip the main circuit breaker.
 - (g) In the event that the Company initiates a curtailment event pursuant to this Agreement, Company shall not be obligated to accept any electric energy from the CBRE Facility except for such electric energy that Company notifies the Subscriber Organization that it is able to take during the duration of a curtailment. The Company shall not be liable to the Subscriber Organization for any curtailments that are not a Curtailment Event. The Subscriber Organization shall not override Company's curtailment.
12. **Personnel and System Safety.** If at any time the Company determines, in its sole discretion, that the continued operation of the CBRE Facility may endanger any person or property, the Company's electric system, or have an adverse effect on the safety or power quality of other customers, the Company shall have the right to curtail or disconnect the CBRE Facility from the Company's electric system remotely or otherwise. The CBRE Facility shall remain curtailed or disconnected until such time as the Company is satisfied that the endangering or power quality condition(s) has been corrected, and the Company shall not be obligated to accept any energy from the CBRE Facility during such period. The Company shall not be liable, directly or indirectly, for permitting or continuing to allow an attachment of the CBRE Facility for the acts or omissions of the Subscriber Organization that cause loss or injury, including death, to any third party.
13. **Prevention of Interference.** The Subscriber Organization shall not operate equipment that superimposes a voltage or current upon the Company's system that interferes with the Company's operations, service to the Company's customers, or the Company's communication facilities. Such interference shall include, but not be limited to, overcurrent, voltage imbalance, and abnormal waveforms. If such interference occurs, the Subscriber Organization must diligently pursue and take corrective action at its own expense after being given notice and reasonable time to do so by the Company. If the Subscriber Organization does not take timely corrective action, or continues to operate the equipment causing interference without restriction or limit, the Company may, without liability, disconnect the Subscriber Organization's equipment from the Company's system.
14. **Limitation of Liability.**
- (a) Each Party shall at all times indemnify, defend and save the other Party harmless from any and all damages, losses, claims, including claims and actions relating to injury or death of any person or damage to property, costs and expenses, reasonable attorneys' fees and court costs, arising out of or resulting from the Party's performance of its obligations under this Agreement, except to the extent that such damages, losses or claims were caused by the negligence or intentional acts of the other Party.
 - (b) Each Party's liability to the other Party for failure to perform its obligations under this Agreement, shall be limited to the amount of direct damage actually incur
 - (c) ed. 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.
 - (d) Notwithstanding any other provision in this Agreement, with respect to the Company's provision of electric service to any customer including the Subscriber Organization, the Company's liability to such customer shall be limited as set forth in the Company's tariffs and terms and conditions for electric service, and shall not be affected by the terms of this Agreement.

15. **Subscriber Organization and CBRE Facility Information.** By signing this Agreement, the Subscriber Organization expressly agrees and authorizes the Company to: (a) request and obtain from Subscriber Organization and its contractors, vendors, subcontractors, installers, suppliers or agents (collectively “Subscriber Organization Agents”), at no cost to Company, information related to the CBRE Facility, including but not limited to Watts, Vars, Watt Hours, current and voltage, status of the CBRE Facility, inverter settings, any and all recorded event or alarm logs recorded, (collectively “CBRE Facility Data”) that Company reasonably determines are needed to ensure the safe and reliable operation of the CBRE Facility or the Company’s system; or (b) make such modifications to the Subscriber Organization’s system, at no cost to the Company, that Company determines, in its reasonable discretion, are needed to ensure the safe and reliable operation of the CBRE Facility or the Company’s system. Subscriber Organization expressly agrees and irrevocably authorizes Subscriber Organization Agents to disclose such Subscriber Organization Data to Company and to make such modifications to the Subscriber Organization’s CBRE Facility upon request by Company.
16. **Additional Information.** The Company reserves the right to request additional information from Subscriber Organization relating to the CBRE Facility, where reasonably necessary, to serve the Subscriber Organization under this Agreement or to ensure reliability, safety of operation, and power quality of the Company’s system.
17. **No Material Changes to CBRE Facility.** The Subscriber Organization agrees that no material changes or additions to the CBRE Facility shall be made without having obtained prior written consent from the Company, which consent shall not be unreasonably withheld. Total Rated Capacity of the CBRE Facility must be less than 250kW and in no event may exceed such Total Rated Capacity. If the CBRE Facility changes ownership, the Company may require the new Subscriber Organization to complete and execute an amended Agreement or new Agreement, as may be applicable.
18. **Certification by Licensed Electrical Contractor.** Generating and interconnection systems must comply with all applicable safety and performance standards of the National Electrical Code (NEC), Institute of Electrical and Electronic Engineers (IEEE), and accredited testing laboratories such as the Underwriters Laboratories (UL), and where applicable, the rules of the Commission, or other applicable governmental laws and regulations, and the Company's interconnection requirements, in effect at the time of signing this agreement. This requirement shall include, but not be limited to, the interconnection standards and procedures of the Company’s Rule 14H, as well as any other requirements as may be specified in this Agreement, its exhibits, and/or in the SFC, all as authorized by the Commission. Upon request by Company, Subscriber Organization shall cause a Licensed Electrical Contractor, as agent for Subscriber Organization, to certify that once approved by the Company, the proposed CBRE Facility will be installed to meet all preceding requirement(s).
19. **Good Engineering Practice.**
 - (a) Each Party agrees to install, operate and maintain its respective equipment and facilities and to perform all obligations required to be performed by such Party under this Agreement in accordance with good engineering practice in the electric industry and with applicable laws, rules, orders and tariffs.
 - (b) Wherever in this Agreement and the attached Exhibits the Company has the right to give specifications, determinations or approvals, such specifications, determinations and/or approvals shall be given in accordance with the Company’s standard practices, policies and procedures, which may include the Company’s Electric Service Installation Manual, the Company’s Engineering Standard Practice Manual and the IEEE Guides and Standards for Protective Relaying Systems.
20. **Insurance.** The following insurance provisions are only applicable to Generating Facilities with a Total Rated Capacity greater than 10 kW but less than 250 kW:
 - (a) The Subscriber Organization shall, at its own expense and during the term of the Agreement and any

other time that the CBRE Facility is interconnected with the Company’s system, maintain in effect with a responsible insurance company authorized to do insurance business in Hawaii and with a rating by A.M. Best Company, Inc. of “A-VII” or better, the following insurance or its equivalent at Company’s discretion that will protect the Subscriber Organization and the Company with respect to the CBRE Facility, the CBRE Facility’s operations, and the CBRE Facility’s interconnection with the Company’s system:

- (b) A Commercial General Liability policy covering bodily injury and property damage with a combined single limit of liability of at least the following amounts based on the Total Rated Capacity of the generator (for solar systems—Total Rated Capacity of the generator or inverter, whichever is lower, can be used with appropriate technical documentation on inverter, if not higher Total Rated Capacity will be used), for any occurrence. The limits below may be satisfied through the use of umbrella or excess liability insurance sufficient to meet these requirements:

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

- (c) Solely with respect to the insurance policies required for Generating Facilities with a Total Rated Capacity greater than 30 kW, said insurance by endorsement to the policy or policies shall: name the Company, its directors, officers, agents, and employees as additional insured; include contractual liability coverage for written Agreements; include provisions stating that the insurance will respond to claims or suits by additional insureds against the Subscriber Organization or any other insured thereunder; provide that the insurance is primary with respect to the Subscriber Organization and the Company; and provide that the insurance company waives all rights of subrogation which Subscriber Organization or the insurance company may have against Company, its directors, officers, agents, and employees. Any insurance carried by Company will be excess only and not contribute with this insurance.
- (d) Said insurance by endorsement to the policy or policies shall provide written notice within 30 days to the Company should the required insurance be cancelled, limited in scope, or not renewed upon expiration. “Claims made” policies are not acceptable, unless the Subscriber Organization agrees to maintain coverage in full effect at all times during the term of this Agreement and for THREE (3) years thereafter. The adequacy of the coverage afforded by the required insurance shall be subject to review by the Company from time to time, and if it appears in such review that risk exposures require an increase in the coverages and/or limits of this insurance, the Subscriber Organization shall make such increase to that extent and any increased costs shall be borne by the Subscriber Organization. The Subscriber Organization has the responsibility to determine if higher limits are desired and purchased. The Subscriber Organization shall provide certificates of insurance to the Company prior to executing the Agreement and any parallel interconnection. Receipt of any certificate showing less coverage than required shall not operate as a waiver by the Company of the Subscriber Organization’s obligation to fulfill the applicable requirements of this Section 20. The Subscriber Organization’s indemnity and other obligations shall not be limited by the foregoing insurance requirements. Any deductible shall be the responsibility of the Subscriber Organization.
- (e) Alternatively, where the Subscriber Organization is a governmental entity, Subscriber Organization may

elect to be self-insured for the amounts set forth above in lieu of obtaining insurance coverage to those levels from an insurance company.

21. **Miscellaneous.**

- (a) **Disconnection and Survival of Obligations.** Upon termination of this Agreement, the CBRE Facility shall be disconnected from the Company's system. The termination of this Agreement shall not relieve the Parties of their respective liabilities and obligations, owed or continuing at the time of termination.
- (b) **Governing Law and Regulatory Authority.** This Agreement was executed in the State of Hawaii and must in all respects be interpreted, governed, and construed under the laws of the State of Hawaii. This Agreement is subject to, and the Parties' obligations hereunder include, operating in full compliance with all valid, applicable federal, state, and local laws or ordinances, and all applicable rules, regulations, orders of, and tariffs approved by, duly constituted regulatory authorities having jurisdiction.
- (c) **Amendment, Modifications, or Waiver.** This Agreement may not be altered or modified by either of the Parties, except by an instrument in writing executed by each of them. None of the provisions of this Agreement shall be considered waived by a Party unless such waiver is given in writing. The failure of a Party to insist in any one or more instances upon strict performance of any of the provisions of this Agreement or to take advantage of any of its rights hereunder shall not be construed as a waiver of any such provisions or the relinquishment of any such rights for the future, but the same shall continue and remain in full force and effect. This Agreement contains the entire agreement and understanding between the Parties, their agents, and employees as to the subject matter of this Agreement. Each Party also represents that in entering into this Agreement, it has not relied on any promise, inducement, representation, warranty, agreement or other statement not set forth in this Agreement.
- (d) **Termination of Existing Agreement.** This Agreement shall supersede any existing agreement, if any, under which Subscriber Organization is currently operating the CBRE Facility and any such agreement shall be deemed terminated as of the date this Agreement becomes effective.
- (e) **Notices.**
All notices, consents and waivers under this Agreement shall be in writing and will be deemed to have been duly given when (i) delivered by hand, (ii) sent by electronic mail ("E-mail") (provided receipt thereof is confirmed via E-mail or in writing by recipient), (iii) sent by certified mail, return receipt requested, or (iv) when received by the addressee, if sent by a nationally recognized overnight delivery service (receipt requested), in each case to the appropriate addresses and E-mail Addresses set forth below (or to such other addresses and E-mail addresses as a Party may designate by notice to the other Party):

Company:

By Mail:

Delivered By Hand or Overnight Delivery:

By E-mail:

With a copy to:

By Mail:

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

By E-mail:

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

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

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

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

such receipt has been confirmed by the recipient.

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

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

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

22. **Generator/Equipment Certification**

Generating Facilities that utilize inverter technology must be compliant with *Institute of Electrical and Electronics Engineers IEEE Std 1547* and *Underwriters Laboratories UL 1703* and *UL 1741* in effect at the time this Agreement is executed as well as the Company's Rule 14H and any additional requirements in Exhibit E attached hereto that apply to Generating Facilities greater than 1 MW. Generating Facilities that use a rotating machine must be compliant with applicable National Electrical Code, Underwriters Laboratories, and Institute of Electrical and Electronics Engineers standards and rules and orders of the Public Utilities Commission of the State of Hawaii in effect at the time this Agreement is executed. By signing below, the Applicant certifies that the installed generating equipment will meet the appropriate preceding requirement(s) and can supply documentation that confirms compliance, including a certification of the same from the Installing Electrical Contractor upon request by the Company.

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

[Subscriber Organization]

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

By: _____

By: _____

Name: _____

Name: _____

Date: _____

Date: _____

EXHIBIT A
DESCRIPTION OF CBRE FACILITY

1. Subscriber Organization Information

Name (print): _____

Property Address: _____

City: _____ State: _____ Zip: _____

Meter # (if applicable): _____ TMK: _____

Phone: _____ Cell: _____ Email: _____

Mailing Address is the same as the Property Address

Mailing Address: _____

City: _____ State: _____ Zip: _____

Name of Person Authorized to Sign on behalf of Subscriber Organization: _____

Hawaii Gross Excise Tax License Number of Subscriber Organization: _____

2. Electrical Contractor

Electrical Contractor: _____ Hawai`i License #: _____

Mailing Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Cell: _____ Email: _____

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

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

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

3. Insurance Not Applicable (less than 10 kW)

Insurance Carrier: _____

4. General Technical Information (Attached)

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

5. Generator Qualifications

Generator Type:

- Photovoltaic with DC Inverter Non-Photovoltaic DC Generator
-

Does this design include an Energy Storage System?

- No Yes (include Exhibit A-1)

What is the system's Maximum Export capability?

Technical System Size: _____ kW Maximum Export: _____ kW

6. Interconnecting Equipment Technical Data

Generator Disconnect Information:

Manufacturer: _____ Catalog #: _____

Type: _____ Rated Amps: _____ Rated Volts: _____

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

Mounting Location: _____

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

- No Yes

7. Generator Facility Technical Information

System Information:

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

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

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

8. Reserved Not Applicable

9. Interconnecting Equipment Technical Data Not Applicable

Transformer Data Not Applicable
A copy of transformer Nameplate and Manufacturer's Test Report may be substituted

Transformer Primary (Volts): _____ Transformer Secondary (Volts): _____
 Delta Wye Wye Grounded Delta Wye Wye Grounded

Size: _____ KVA Transformer Impedance: _____ % on _____ KVA Base

Transformer Fuse Data Not Applicable

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

At Primary Voltage At Secondary Voltage

Manufacturer: _____ Type: _____ Size: _____ Speed: _____

Transformer Protection (if not fuse) Not Applicable

Please describe: _____ Not Applicable

Generator Main Circuit Breaker Not Applicable

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

Manufacturer: _____ Type: _____

Continuous Load Rating (Amps): _____ Interrupting Rating (Amps): _____ Trip Speed (Cycles): _____

Feeder Circuit Breaker Not Applicable

Attach copy of any proposed Time-Overcurrent Coordination Curves

Manufacturer	Type	Style/Catalog No.	Proposed Setting

Current Transformer Data Not Applicable

Attach copy of Manufacturer's Excitation & Ratio Correction Curves

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

EXHIBIT A-1

DESCRIPTION OF CBRE FACILITY – ADDITIONAL INFORMATION

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

1. Energy Storage System Information

Not Applicable

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

Description of Energy Storage System Operations:

Manufacturer: _____ Model: _____

Size kW: _____ Max Capacity kWh: _____

Rated kW discharge: _____ Rated kW charge: _____

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

No Yes

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

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

No Yes, charging periods: _____

Will power be exported to the grid?

No Yes, maximum export to the grid: _____

2. Wind Generator System Information

Not Applicable

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

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

3. Technical Information for Synchronous and Induction Generators

Not Applicable

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

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

Generator Grounding Method (check all that apply):

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

Generator Characteristic Data*:

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

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

4. Interconnecting Equipment Technical Data

Transformer Data Not Applicable

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

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

Transformer Fuse Data Not Applicable

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

At Primary Voltage At Secondary Voltage
 Manufacturer: _____ Type: _____ Size: _____ Speed: _____

Transformer Protection (if not fuse) Not Applicable

Please describe: _____

Generator Main Circuit Breaker Not Applicable

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

Manufacturer: _____ Type: _____
 Continuous Load Rating (Amps): _____ Interrupting Rating (Amps): _____ Trip Speed (Cycles): _____

Feeder Circuit Breaker Not Applicable

Attach copy of any proposed Time-Overcurrent Coordination Curves

Manufacturer	Type	Style/Catalog No.	Proposed Setting

Current Transformer Data Not Applicable

Attach copy of Manufacturer's Excitation & Ratio Correction Curves

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

EXHIBIT B

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

1. CBRE Facility

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

e. CBRE Facility protection and maintenance.

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

f. Information Security Requirements.

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

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

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

g. Subscriber Organization Interconnection Facilities.

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

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

- (iv) Subscriber Organization shall provide final as-built drawings of the Subscriber Organization Interconnection Facilities within thirty (30) days of the successful completion of the initial verification test. Within thirty (30) days of Company's receipt of the proposed as-built drawings, Company shall provide Subscriber Organization with either (A) its comments on the proposed as-built drawings or (B) notice of acceptance of the proposed as-built drawings as final as-built drawings. If Company provides comments on the proposed as-built drawings, Subscriber Organization shall incorporate such comments into a final set of as-built drawings and provide such final as-built drawings to Company within twenty (20) days of Subscriber Organization's receipt of Company's comments.
- h. Approval of Design Drawings. The single-line diagram, relay list, trip scheme and settings of the CBRE Facility, and three-line diagram shall be approved by a Professional Electrical Engineer registered in the State of Hawaii prior to being submitted to the Company. Such approval shall be indicated by the engineer's professional seal on all drawings and documents.
- i. [Reserved]
- j. Schedule. The Company and the Subscriber Organization have agreed upon on a schedule for the progression of the CBRE Facility's construction (e.g., construction start date, Commercial Operations Date, etc.) and each Party has a copy of such schedule and agrees to use commercially reasonable efforts to adhere to such schedule.

2. Verification Testing.

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

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

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

3. Inspection of the CBRE Facility.

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

relay settings and trip schemes) and its operations (including but not limited to the operation of control, synchronizing, and protection schemes) after the CBRE Facility commences operations.

4. Operating Records and Procedures.

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

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

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

6. CBRE Facility Equipment List.

The CBRE Facility shall include the following equipment:

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

EXHIBIT C
COMPANY-OWNED INTERCONNECTION FACILITIES

(To be filled out by Company)

1. Description of Company Interconnection Facilities

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

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

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

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

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

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

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

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

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

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

3. Operation, Maintenance and Testing Costs

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

EXHIBIT D

FORM OF LETTER OF CREDIT

[Bank Letterhead]

[Date]

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

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

Re: [Irrevocable Standby Letter of Credit Number]

Ladies and Gentlemen:

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

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

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

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

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

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

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

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

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

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

Manager, DER Operations
Hawaiian Electric Company, Inc.
220 South King Street, 21st Floor
Honolulu, Hawai'i 96813

and to

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

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

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

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

[Bank's Name]:

By: _____
[Authorized Signature]

APPENDIX IV

STANDARD FORM CONTRACT FOR
HAWAI'I COMMUNITY BASED RENEWABLE ENERGY – PHASE TWO

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 construct and 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

[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.

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

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

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

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

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

3. Residential Customer Requirement. 40% of the Contract Capacity of the CBRE Facility shall be reserved for individual subscriptions for residential Subscribers (as defined in the CBRE Tariff). For a period of six (6) Production Months following the Commercial Operations Date, the Subscriber Organization shall incur no payment reduction if it should fall below this minimum percentage of residential Subscribers. Effective after six (6) Production Months, the following shall be placed into effect for the remainder of the term of the CBRE Facility
 - a. If the CBRE Facility does not have the minimum 40% residential Subscribers for any month, the difference in percentage between the CBRE Facility's actual residential Subscriber percentage and the 40% minimum shall reduce the Subscriber Organization's Bill Credit Rate for compensation for Unsubscribed Energy delivered by a factor equal to one-fourth (0.25) of such percentage difference. For example, if the CBRE Facility's residential Subscriber percentage is 30%, the difference, 10%, from the 40% minimum requirement, shall be multiplied by 0.25 ($10\% * 0.25 = 2.5\%$). The 2.5% result shall reduce the Bill Credit Rate for Unsubscribed Energy for that month by such percentage.
 - b. If the Subscriber Organization's Unsubscribed Energy for the CBRE Facility is also greater than 15% in such month, the compensation for Unsubscribed Energy delivered in that month shall be reduced by the sum of the percentage payment reduction for the unmet residential Subscriber percentage plus the percentage of Unsubscribed Energy for that month.
 - c. If the Subscriber Organization does not have the required minimum percentage of residential Subscribers but does not have any Unsubscribed Energy, the CBRE Facility shall be subject to an equivalent penalty as specified below. Continued failure to achieve this minimum percentage of residential Subscribers for more than one year could result in termination and removal from the CBRE Program in accordance with the CBRE Tariff.

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

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

3. HOUSE POWER.

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

4. METERING REQUIREMENTS, CHARGES AND TESTING.

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

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

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

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

- B. Metering Charge per Month: \$25.00.** Subscriber Organization shall be charged each month during the Term an administrative metering fee of a \$25.00 for the Production Meter. The administrative metering fee is addition to the costs associated with the purchase, installation, maintenance and testing of the Production Meter and Meter Infrastructure.
 - C. Meter Testing.** Company shall provide at least twenty-four (24) hours' notice to Subscriber Organization prior to any test it may perform on the Production Meter or metering equipment. Subscriber Organization may request tests in addition to the every fifth-year test and Subscriber Organization shall pay the cost of such tests. Company may perform tests in addition to the fifth-year test and Company shall pay the cost of such tests. If any of the meters or metering equipment is found to be inaccurate at any time, as determined by testing in accordance with this Section, Company shall promptly cause such equipment to be made accurate, and the period of inaccuracy, as well as an estimate for correct meter readings, shall be determined as provided in Company’s Tariff Rule No.11[Billing Error, Meter Tests and Adjustment for Meter Errors].
- 5. [RESERVED]**
- 6. INTERCONNECTION AGREEMENT; REQUIREMENTS.** The Subscriber Organization must sign the Company’s Interconnection Agreement and comply with all of the terms and conditions of that Interconnection Agreement except as otherwise specified in this Contract. In the event of any inconsistency or conflict between the terms and provisions of this Contract and the Interconnection Agreement, the terms and provisions of the Interconnection Agreement shall control.
- 7. CBRE TARIFF REQUIREMENTS.**
- A.** The Subscriber Organization shall comply with and assure that the requirements of the CBRE Framework and CBRE Tariff applicable to the CBRE Facility are met.
 - B.** Subscriber Organization shall require all prospective Subscribers to execute a Subscription Agreement as a precondition to enrollment as a Subscriber in the CBRE Facility. The Subscription Agreement must satisfy the requirements of the CBRE Tariff, CBRE Framework, this Contract and any additional guidance from the PUC. Prior to executing the Subscription Agreement, the Subscriber Organization shall make to the Subscriber the disclosures required under the Disclosure Checklist (Appendix II to the CBRE Tariff). A copy of the Disclosure Checklist signed by both

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

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

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

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

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

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

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

F. Project Completion.

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

G. Financial Compliance.

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

- 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.**
1. If the CBRE Facility uses a Pay-As-You-Go model for Subscriber interests, a Subscriber may not transfer their interest to another Customer. If a Subscriber wishes to terminate their interest in the CBRE Facility, the Subscriber shall either cancel or terminate their subscription with the Subscriber Organization in accordance with the provisions of the Subscriber Agreement.
 2. If the CBRE Facility uses 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 all (100%) 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.
 - iv. Eligibility Requirements for Transferees. The transferee(s) of such Subscriber Allocation must satisfy the requirements under the CBRE Tariff to be a Subscriber under the CBRE Program.
 - v. Limitations on Size of Subscriber Allocation. Following completion of such transfer, the aggregate Subscriber Allocation to be held by such transferee(s) (including both the transferred Subscriber Allocation and any pre-existing Subscriber Allocation) must comply with the size limitations set forth in the CBRE Tariff.

- vi. Eligibility Determination. Subscriber Organization shall determine the eligibility and permitted size of any such transfer by inquiry to the Company, manually through Company personnel in Phase 2 and electronically through the CBRE Online Portal once such software tool is available.
 - 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 thirty (30) days of the Subscriber's request.
 - ii. Upon completion of a subscription buy-back, the Subscriber Organization shall notify the Company by the last day of the month the transaction was completed. The Company shall confirm such buy-back in the Subscriber database and cease CBRE bill credits effective as communicated by the Subscriber Organization on the first day of the month of notification if such transaction was completed on or prior to the twentieth (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.
 - 3. A Subscriber may change the premises to which the CBRE Facility's renewable energy generation shall be attributed. So long as the premises is on the same island and meets eligibility requirements set forth in the CBRE Tariff, neither the Subscriber Organization nor Company shall charge a transfer fee. For example, when a Subscriber sells the premises to which the Subscription is attributed and inhabits new premises on the same island, this provision is intended to permit a Subscriber to transfer the Subscription to the new premises.
- D. 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 Sections 2.(B)1 and 2.(B)2 of this Contract.
- E. 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 all applicable Laws and regulations concerning renewable energy grid interconnections, and shall continue to be in compliance for the duration of the Term.

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

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

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

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

17. SIGNATURES

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

[Subscriber Organization]

[Hawaiian Electric Company, Inc.

Hawai'i Electric Light Company, Inc.

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

By: _____

By: _____

Name: _____

Name: _____

Date: _____

Date: _____

ATTACHMENT A

Schedule of Defined Terms

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

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

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

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

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

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

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

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

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

The CBRE Online Portal should be completed in time for the commencement of Phase Two of the CBRE Program.

“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 provided Company with written notice that (i) it has enrolled at least four (4) individual Subscribers in the Subscriber Organization's CBRE Program and (ii) 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 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 its 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.

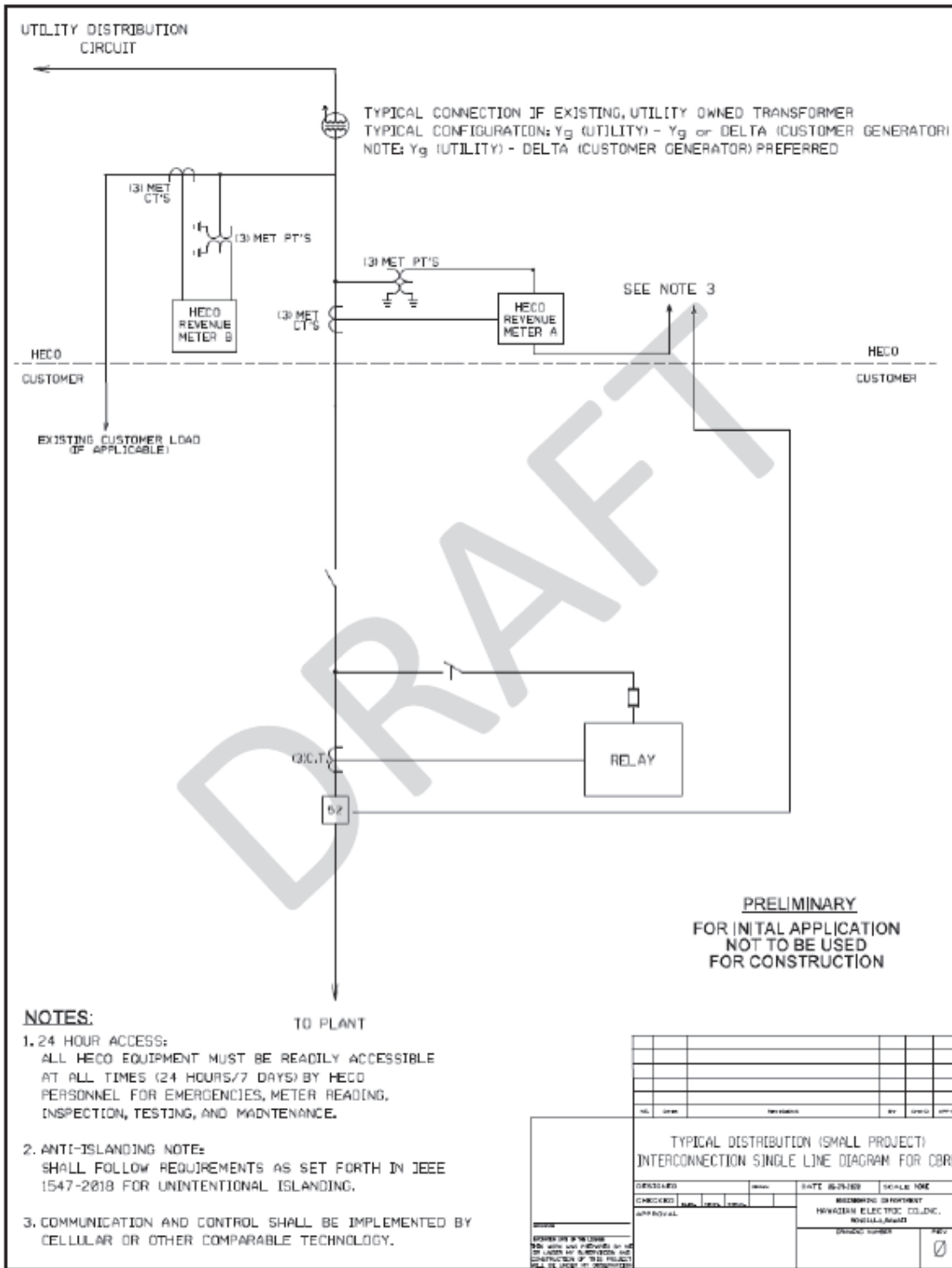
ATTACHMENT C
MONTHLY CURTAILMENT REPORT

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

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



HAWAIIAN ELECTRIC COMPANY, INC.

APPENDIX 6

**HAWAIIAN ELECTRIC
CBRE PROGRAM PHASE 2**

**AFFIDAVIT and VERIFICATION
TO CONFIRM
LOW-TO-MODERATE INCOME STATUS**

STATE OF HAWAII)
) SS:
CITY & COUNTY OF HONOLULU)

I, _____, being first duly sworn on oath, hereby deposes and says:

1. I make this affidavit from my personal knowledge and information to confirm my eligibility to qualify as a Low-to-Moderate Income (“LMI”) customer eligible to participate in the Community Based Renewable Energy (“CBRE”) projects for LMI customers.

2. I am a customer of Hawaiian Electric with an account for electric service for at least six months. My account number is _____.

3. My place of residence is _____ and my account is associated with this address.

4. The following table identifies the household members living at the above address based on the Department of Housing and Urban Development’s household member definition that I have reviewed or had explained to me.

5. The table also lists all household members with income and specifies their weekly, monthly or annual gross income used for income tax purposes.

6. The income amounts listed include all sources of income and amounts for all household members at or above the age of 18, including income from employment, AFDC/TANF, VA, Social Security, SSI, SSID, Unemployment, Worker’s Compensation, Child Support, etc.

Household Size: _____

Household Member Name	Income Source	Amount (\$)	Frequency - Per	
			Week Year	Month
			Week Year	Month
			Week Year	Month
			Week Year	Month
			Week Year	Month
			Week Year	Month
			Week Year	Month
			Week Year	Month
			Week Year	Month
			Week Year	Month

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

8. I understand that I may be asked to confirm my statements made in this affidavit to the Subscriber Organization of the CBRE project that I wish to subscribe to and to the appropriate Hawaiian Electric utility servicing my account to verify my LMI customer status and that I may be further requested to provide, for inspection and review only, copies of relevant household status and income confirming documents to confirm my LMI customer status. I agree to cooperate with the Subscriber Organization and Hawaiian Electric in this regard.

9. I have made these statements and provided the household and income amounts to the best of my ability and understand them to be true and correct.

Further, Affiant sayeth naught.

Print Name: _____

Date: _____

Subscriber Organization Verification

The undersigned, for and on behalf of the Subscriber Organization identified below, hereby certifies to Hawaiian Electric that he/she has reviewed the household size and income amounts stated by the above Hawaiian Electric customer and examined documents verifying the same. Based on this review and confirmation, the above Hawaiian Electric customer is an eligible LMI customer within the meaning of CBRE Tariff Rule 29 and eligible to participate in CBRE program projects reserved for LMI customers.

Subscriber Organization

By: _____

Print Name: _____

Title: _____

Date: _____

EXHIBIT 3

Redline of Rule 29 CBRE Phase 2 (Body Only)

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

~~PHASE 1~~

PART I: For Projects Sized Less Than 250kW AC

A. AVAILABILITY

Phase ~~1~~₂ (“Phase ~~1~~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”) whereas follows:

1. Capacity: Thirty (30) 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: 2.5 MW
 - Maui: 2.5 MW + 0.975 MW transferred from CBRE Phase 1
 - O‘ahu: 15 MW
 - b. Tranche 2:
 - Hawai‘i: 2.5 MW
 - Maui: 2.5 MW
 - O‘ahu: 5 MW
2. Eligibility shall be limited to photovoltaic or wind generation project sizes greater than 4 kW AC and less than 250 kW AC with battery storage strongly recommended. 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.

HAWAIIAN ELECTRIC COMPANY, INC.

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

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 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 (a) received service at the same location for which they are requesting participation for at least 6 months at the time of enrollment and (b) commencing two (2) years after the effective date of this Rule No. 29, has not received any disconnection notifications at ~~that~~the same location within the last 12 months;

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 ~~("CSS")~~ ("CSS") tariff program, or similar customer program; ~~and~~ at the same service location where CBRE participation is requested;

Customer is not currently ~~participating in a~~ Subscriber for another CBRE Phase 1 or Phase 2 Facility; ~~and~~

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~~B. CUSTOMER PARTICIPATION~~

~~Customers who subscribe to a CBRE Phase 1 Facility (“Facility”) are defined as “Subscribers.”~~

~~1. Customers shall be allowed to purchase or lease an interest in the energy output of any eligible CBRE Phase 1 Facility on the same island as their service address that is allocated CBRE Phase 1 Program capacity to offset their energy consumption.~~

~~Subscribers~~ 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.

~~1.3.~~ 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 ~~1~~2 Facility and Subscriber Organization information

- i. CBRE Phase ~~1~~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;
- ~~iv.~~v. Use of escrow account, or other alternative proposed by Subscriber Organization and approved by the Independent Observer to hold or segregate

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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 ~~v.vi.~~ Transfer, cancellation, termination and/or exit fees/terms and terms/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;
 - ii. Subscription information;
 - iii. Aggregated CBRE Project data and anonymized Subscriber data; ~~and 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 PUC Commission or the ~~Division of Consumer Advocacy ("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.

~~2.4.~~ Subscribers/Interested Customers shall (a) obtain approval/confirmation of eligibility, ~~confirm~~ and maximum buy-in level and (b) apply to enroll into the CBRE Program through the ~~Company (the Company, in its role as administrator of Company's online portal for the CBRE Program, is sometimes referred to herein as (the "CBRE Portal"). Through the "Administrator"-CBRE Portal,~~ Company shall facilitate completion of these tasks, but final approval and enrollment of the Customer into a Subscriber into a Subscriber's Organization's CBRE Phase ~~12~~ Facility shall rest with such Subscriber Organization.

~~3.5.~~ Subscriber's effective kilowatt ("kW") alternating current ("AC") interest in the CBRE Phase ~~12~~ Facility shall be calculated based on the Subscriber's portion of the renewable

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energy output (contract capacity) of the CBRE Phase ~~1~~2 Facility multiplied by the total contract capacity of the CBRE Phase ~~1~~2 Facility in kW AC.

- ~~4.6.~~ Subscribers shall be required to purchase/acquire a minimum of 1 kW AC, ~~except in the ease of confirmed low to moderate. A lower minimum requirement has been set for Low- and Moderate-Income (“LMI”) Subscribers for which this requirement shall be 0.5 kW AC as specified in Part III, Section C.6 herein.~~
- ~~5.7.~~ Subscribers shall be permitted to purchase/acquire a CBRE Program interest equivalent to an expected production of no more than 100 ~~percent~~% of their historic energy consumption for the previous 12 months.
- a. Company shall use the 12 months immediately prior to ~~the first billing cycle upon which a Subscriber is eligible to receive a credit for the CBRE Subscription application submission~~ to determine the Subscriber’s previous 12 months of energy consumption.
 - b. If Subscriber does not have a 12 month billing history ~~as of that first billing eye~~prior to application submission, and there is not 12 months of billing history, including billing history of another customer associated with the Subscriber’s premises, the Company shall use the available monthly average consumption multiplied over 12 months in order to generate a proxy average annual consumption.
- ~~2. In Phase 1, 40 percent of the total output of each project’s total CBRE capacity shall be reserved for individual subscriptions up to 50 kW.~~
- ~~3. An eligible Customer shall be allowed to acquire and hold an interest in only one (1) CBRE Phase 1 Facility at any given time.~~
- ~~6.8.~~ 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 ~~1~~2 Facility in which they are participating.
- ~~7.9.~~ Subscriber may change the premises to which the CBRE Phase ~~1~~2 Facility ~~electricity~~ 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:

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A Subscriber may not transfer their interest to another Customer. 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.

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 ~~at least 50%~~for no less than all (100%) 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 ~~thirty (30)~~ days of the Subscriber’s request.

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ii. Upon completion of a subscription buy-back, the Subscriber Organization shall notify the Company ~~within two business days by the last day of completion of the month~~ the transaction ~~was completed~~. The Company shall confirm such buy-back in the Subscriber database and cease CBRE ~~participation bill~~ credits effective as communicated by the Subscriber Organization on the first day of the month of notification if such ~~notice is given transaction was completed~~ on or prior to the twentieth (20th) day of the month. ~~Notice provided 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.

8-12. 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.

B.C. CREDIT RATE

4. ~~Subscribers served under this tariff who also to a CBRE Program interest shall continue to receive energy electric service from the Company and shall be billed monthly for the energy supplied by the Company,~~ in accordance with the Company’s Rule No. 8, the applicable rate schedule, and ~~Company’s~~ Company rules filed with the Commission.

1. All rates, terms, and conditions from the applicable rate schedule will schedules and Company rules shall continue to apply, except for the adjustments described below.

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2. ~~The applicable~~ Subscribers shall receive CBRE bill credits applied to their electric bill in accordance with the applicable credit rates (“Credit Rates”) for CBRE Phase ~~1~~2 subscriptions purchased or leased by Subscribers for each rate schedule ~~shall be~~ as follows:

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, which for Phase 1 shall 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 Facility life 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 ~~participation 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 ~~1~~2 Facility, provided that Subscriber Organization ~~promptly~~ notifies the Administrator of Subscriber’s subscription no later than the ~~twentieth (20th) last calendar~~ day of the month in which Subscriber subscribed into the CBRE Phase ~~1~~2 Facility. Subscriber’s monthly CBRE ~~participation bill~~ credit shall begin accruing on the first (1st) day of the next month if the notice by the Subscriber Organization is made after the twentieth (20th) day of the month. The amount of the Subscriber’s monthly CBRE ~~participation 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”).

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4. A Subscriber's monthly CBRE participation 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~~three billing cycles. Subscribers will see eligible credits on a future bill depending on the day their meter is read. Eligible charges on the Subscriber's electric bill shall be all light and power charges.
5. The Subscriber's electric bill cannot be reduced below the sum of the customer charge, the Green Infrastructure Fee, and any other per-customer charge- for the customer's applicable rate schedule or the minimum bill applicable in the underlying tariff, whichever is greater.
- ~~6.~~ If the Subscriber's monthly CBRE participation 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 participation bill credit and applied to the Subscriber's electric bill(s) subject to ~~paragraph 5-Part I Sections C.4 and 6C.5~~ above.
- ~~6-7.~~ Reconciliation will be made at the end of every 12-month period by applying the Subscriber's remaining CBRE participation bill credit to the Subscriber's remaining eligible charges within the 12-month period. Any CBRE participation bill credit that remains unused at the end of each 12-month period shall be extinguished.
- ~~7-8.~~ If the Subscriber terminates its CBRE service prior to the end of any 12-month period, the Company shall reconcile the remaining CBRE participation 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 participation bill credit that remains unused shall be extinguished.

~~C. SUBSCRIBER ORGANIZATION PARTICIPATION~~

- ~~8-1. A CBRE Phase 1 Facility 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.~~
- ~~1. 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:~~

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- ~~a. A one-time Application processing fee of \$1,000 per application, 75% of which shall be refunded if the Applicant submits a CBRE Phase 1 Facility less than or equal to 250 kW AC and is not selected to receive CBRE Program Phase 1 capacity;~~
- ~~b.a. Applicant company name, contact information, and address, and indicate their role (e.g., Subscriber Organization, owner, or operator);~~
- ~~e.a. Applicant contact person name, contact information, and address;~~
- ~~d.a. Entity name, contact information, address, and identity role of the Subscriber Organization if approved; if entities other than the Subscriber Organization will act as either owner or operator of the CBRE Facility, name, role identification, contact information, and address shall be provided for those other entities;~~
- ~~ii. Proposed CBRE Phase 1 Facility name, address, and estimated completion date;~~
- ~~iii. CBRE Phase 1 Facility system nameplate direct current (DC) capacity, AC output (inverter nameplate), mount location, tracker type, azimuth, and tilt.~~
- ~~iiii. 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.~~
- ~~iiiv. 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 thirty (30) days prior to submittal by the Applicant.~~
- ~~iv. 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 independent observer ("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 shall be accepted beginning on the effective date of the tariff. Applications deemed complete (providing all information required under Section D.2 above) shall~~

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~~receive a timestamp which shall serve as the date of the Applicant's application for award and queue purposes.~~

~~2.1. Phase 1 CBRE Program capacity shall be awarded on a first come, first served basis based on the timestamp of a completed Application. If an Applicant submits an Application that does not contain all the required items listed in Section D.2 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 Section D.2, with the exception of Section D.2.a, regarding Application processing fee payment and Section D.2.i, regarding the "waiver" from the IO. If the application fee or the waiver is the only item missing and it is received within fifteen (15) days from the date of submission, the time stamp 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 sixty (60) days.~~

~~Phase 1 Applications for CBRE Phase 1 Facilities shall be conditionally accepted subject to verification of the requirements in Section D.2 above. Upon successfully meeting the CBRE requirements, the Facility shall be accepted into Phase 1 of the CBRE Program if unused capacity is available to accept the Applicant's project. If the Applicant's proposed project size exceeds the available capacity remaining for Phase 1, the Applicant shall have the one-time option to reduce the proposed size of its Facility to the remaining capacity available. If the Applicant does not exercise this option, the Applicant's application shall be placed in the Phase 1 queue described below. Facility selection shall continue until the capacity allocation for Phase 1 on each island is fully allocated. If a Facility drops out after selection for inclusion in Phase 1 the allocation for such Facility shall be added back to the capacity allocation for the respective island and the first complete Application for a CBRE Phase 1 Facility in the queue for that island (with the one-time option described above) shall be offered the opportunity to become a CBRE Phase 1 Subscriber Organization. The Company shall continue to offer Subscriber Organization status to Applicants in the applicable queue until the capacity allocation made available is filled. Concurrently and after acceptance into Phase 1, CBRE Phase 1 Facilities shall undergo completeness and technical review under Company's Rule 14H for interconnection.~~

~~3.2. After any applicable capacity limitations are met in Phase 1, excess completed Applications for CBRE Phase 1 Facilities in that category shall be placed in a queue to replace any Phase 1 capacity dropouts. Phase 1 will terminate one (1) year after the commencement of Phase 2 of the CBRE Program ("Phase 2"). If, at the conclusion of~~

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~~Phase 1, 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 available capacity in Phase 2, as directed by the Commission. The queue for Phase 1 shall be terminated as well and any subsequent failure of a CBRE Phase 1 Facility shall not be replaced.~~

~~4. Applications for queued CBRE Phase 1 Facilities may be resubmitted at no additional cost in Phase 2.~~

~~9.1 Additional fees and deposit required from Subscriber Organizations in addition to the application processing fee shall include:~~

~~Any applicable interconnection fees, costs and expenses necessary to interconnect the CBRE Phase 1 Facility to the system grid; and Compensation for~~

~~a. 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 1 Facility.~~

9. “Unsubscribed Energy:

a. “Unsubscribed Energy” is CBRE Phase ~~1~~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.

a.b. The following shall be effective ~~six~~6 months from the date of initial commercial operations. Compensation for Unsubscribed Energy shall be as follows:

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

Unsubscribed capacity shall be calculated at the end of the month and applied retroactively to the CBRE ~~Phase 1~~ Facility when calculating that month’s prior ~~unsubscribed credits~~ Unsubscribed Energy payment.

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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	
<u>Credit Rate (cents/kWh)</u>	<u>15.00</u>
<u>Facility Capacity (kW)</u>	<u>100</u>

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

*Unsubscribed Energy provision becomes applicable

10. A Subscriber Organization shall be required to have a minimum of ~~four~~4 individual Subscribers per CBRE ~~Phase 1~~ Facility at all times. For a period of ~~six (6)~~ months following initial commercial operations, the Subscriber Organization shall incur no ~~penalty~~payment reduction if it should fall below this minimum number of Subscribers. Effective after ~~six (6)~~ months of commercial operations, the following shall be placed into effect for the remainder of the term of the ~~Subscriber Organization's~~ CBRE Facility:

- a. For any CBRE Facility which does not have the minimum ~~four (4)~~ individual Subscribers for ~~six (6) consecutive months~~, 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 in the next month shall by such

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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 ~~50~~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 ~~energy delivered in that month~~ Unsubscribed Energy shall be reduced by at the sum of the percentage ~~equal to the higher of (1) 50% or (2) determined from sub-part a. above~~ plus the percentage of Unsubscribed Energy for that month.

- 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 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 should fall below this minimum percentage of residential Subscribers. Effective after 6 months of commercial operations, the following shall be placed into effect for the remainder of the term of the CBRE Facility:

- a. For any CBRE Facility which does not have the minimum 40% residential Subscribers for any month during the term of its SFC or PPA, 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

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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.
- 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 and such amount shall be multiplied by the applicable Credit Rate (the sub-part a. percentage * 15.00 cents/kWh) 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.

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.

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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.

2. Demonstrating transparency and a willingness to engage in early communication with communities is an important part of a Project's viability and success. A community outreach and communications plan ("Community Outreach Plan") is an essential roadmap that guides a Subscriber Organization as they work with various communities and stakeholders to raise awareness and collect input for a project. A Subscriber Organization for a project between 100 kW and 250 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.

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4. Prior to developing a Facility, an Applicant shall submit a completed application to the Company, which shall provide the following in order to be considered a complete application:
- a. A one-time, non-refundable application processing fee of \$250 per application;
 - b. Applicant company name, contact information, and address, and indicate their role (e.g., Subscriber Organization, owner, or operator);
 - c. Applicant contact person name, contact information, and address;
 - d. Entity name, contact information, address, and identity role of the Subscriber Organization if approved; if entities other than the Subscriber Organization will act as either owner or operator of the CBRE Facility, name, role identification, contact information, and address shall be provided for those other entities;
 - e. Proposed CBRE Phase 2 Facility name, address, and estimated completion date;
 - 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

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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;
- 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.

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

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

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

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p. If an Applicant submits an application that does not contain all the required items listed in this Part I, Section E.4 above, the application shall be deemed incomplete and the timestamp for the completed application shall be when the last item(s) is/are received from the Applicant that renders the application complete under Part I, Section E.4 , with the exception of (1) Part I, Section E.4.a, regarding application processing fee payment and (2) Part I, Section E.4.m regarding the refundable deposit. If the (1) application fee and/or (2) refundable deposit are the only missing items and are received within 15 calendar days from the date of submission, the timestamp will be the date the application was submitted electronically. Partially completed applications will be deemed abandoned if all required items are not submitted so as to render the application complete after 60 calendar days.

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

<u>Awarding CBRE Program Capacity</u>
<ul style="list-style-type: none"><u>• 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.</u><u>• If applications do exceed the available CBRE Program capacity, then a CCRP mechanism will be employed to award capacity.</u><u>• 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).</u>

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- 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)

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

6. In the event that the last application to be tentatively accepted to fill the remaining CBRE capacity does not exactly fill the amount of available CBRE Program capacity, the Applicant will be provided the opportunity to secure the remaining capacity at the highest accepted credit rate bid but only for the capacity remaining. For example, in Table 3 suppose 6 MW of capacity had been available rather than 5 MW. After Projects 1, 2 and 3 had been awarded capacity based on their winning credit rate bids, 1 MW of capacity would remain available, but the next lowest bidder (Project 4) had proposed a 3 MW project. Under the CBRE Program rules, that bidder would be offered the 1 MW of remainder capacity at its discounted credit rate bid, and, if they refused, then the next lowest bidder would be offered the same and so forth until the capacity was successfully awarded. If the remainder capacity remains unawarded at the end of this described process, the capacity will be allocated to the next active capacity release cycle.
7. Completed Phase 2 applications for CBRE Small Projects that have been allocated Tranche 1 (or Tranche 2, after it is opened) program capacity (“Selected Projects”) shall

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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. 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, then a queue process, in effect for 4 months after Selected Projects are notified of their selection, will be in effect to replace allocated capacity should a Selected Project drop out or is terminated after selection. 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 four-month queue process has run, as applicable, any subsequent failure of a CBRE Small Project in Phase 2 shall not be replaced.

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:

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a. Any applicable interconnection fees, costs and expenses necessary to interconnect the CBRE Phase 2 Facility to the system grid; and

- ~~5. A \$5/kW AC Program Administration Fee~~ Subscriber Organizations notification of a Subscriber's purchase or lease 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 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.
- ~~6. The Company may, but shall not be required to, confirm that the Subscribers submitted by the Subscriber Organization are qualified pursuant to Section A above for participation in the CBRE Phase 1 Program. If any Subscribers are not qualified or are not purchasing an interest within the allowed limits set out in Section B above, then the Subscribers shall not be accepted into Phase 1 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.~~

~~D. CAPACITY ALLOCATION~~

- ~~1. Phase 1 capacity allocation is for "Standard" CBRE Facilities, which are defined as all CBRE Facilities that are developed, owned, or operated by a third party.~~
- ~~2. Only solar photovoltaic facilities shall be allowed in Phase 1.~~
- ~~3. The capacity allocation in Phase 1 shall be 5.0 MW.~~

b. assessed annually commencing on the first day of the month immediately succeeding the date of initial commercial operations for any CBRE Phase 2 Facility.

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,

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Section A. The IO will monitor and review interconnection/program applications to guard against co-location.

C.G. COMMUNICATIONS AND CONTROLLABILITY

1. The Facility shall include a telemetry and control interface which allows the Company to remotely measure, monitor, evaluate and verify technical compliance, CBRE Facility performance, and power quality and, if necessary, control the CBRE Facility (“Communication and Controls”). The acceptable method(s) of implementing the Communication and ~~Control~~Controls requirements will be specified by the Company and may be modified after technical review. Monitoring will be performed by system dispatchers or operators at the Company’s control center.

2. ~~For CBRE Facilities with an aggregate capacity greater than~~Communication and Controls through cellular or equal to 250 kW, computerized supervisory control comparable technology shall be required, and, could include but not be limited to monitoring of: ~~(a) gross generation by the CBRE Facility; (b) feedback of Watts, Vars, WattHours, current and voltage; (c) Vars furnished by the utility; (d) status of the interrupting device; and (e) if available, monitoring of: frequency (Hertz);~~ following data points. In addition, the ~~supervisory~~cellular or comparable technology control will allow the utility to trip and/or curtail the interrupting device pursuant to the terms of an interconnection agreement (“Interconnection Agreement”) between the Subscriber Organization and the Company, attached hereto as Appendix III.

4. ~~For CBRE Facilities with an aggregate capacity less than 250 kW shall comply with the Communication and Control requirements stated in Section F.2 above, or in the alternative, upon Company approval, may implement Communication and Control through cellular or comparable technology, and include monitoring of: (a) gross generation by the CBRE Facility; (b) feedback of Watts, Vars, WattHours, current and voltage; and (c) if available, monitoring of: connection status of the CBRE Facility; frequency (Hertz). In addition, the cellular or comparable technology control will allow the utility to trip the CBRE Facility pursuant to the terms of the Interconnection Agreement.~~
 - a. Status of Customer’s distribution breaker CB-A (HECO# XXXX);
 - b. Distribution line amps (3 phase), distribution voltage (3 phase L-N), frequency, NET MW, NET MVAR, and NET power factor at point of interconnection. Power factor to be a calculated value;
 - c. PV MW and MVAR output;

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- d. BESS MW and MVAR output/charge;
- e. Received KWh accumulator, sent KWh accumulator, received KVARh accumulator, Sent KVARh accumulator.
- f. Status Indicating when Maximum Power Limit is in effect;
- g. Latest received Maximum Power Limit and Power Reference Limit Setpoints;
- h. Solar Irradiance in Watts/m2;
- i. kW output for each inverter;
- j. Status for each inverter;
- k. Plant Power Possible (MW);
- l. Frequency Droop percent and deadband settings;
- m. BESS State of Charge (%);
- n. BESS Energy remaining (MWH);
- o. kW set point for each inverter.

D.H. INTERCONNECTION

1. All CBRE Phase ~~1~~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 ~~standard form contract ("Standard Form Contract" or "SFC")~~², attached ~~here to~~hereto as Appendix IV).
- ~~5. CBRE Phase 1 Facilities shall have priority for available hosting capacity on a particular circuit over projects planned for that particular circuit that have not commenced its technical review process.~~
2. ~~CBRE Phase 1~~CBRE Phase 2 Facilities interconnected at the Distribution Level² that are selected shall follow the applicable Rule No. 14H interconnection process at the time of

² 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 the Facility is on a secondary distribution³ system that is customer-owned and on a circuit with available hosting capacity an IRS shall not be required. Any necessary mitigation required for an applicable facility to interconnect shall be determined within the standard initial technical or supplemental review timeframe.

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

- CBRE systems on 4kV and 2.4 kV circuits
3. CBRE Phase ~~1~~2 Facilities interconnecting at the Sub-Transmission ~~and Transmission levels~~level shall follow the interconnection process applicable to their Facilities at the time of interconnection.
 4. Each CBRE Phase ~~1~~2 Facility shall have one interconnection point and suitable metering equipment to measure the energy output and data required for calculation of ~~Compensable~~-Curtailed (as defined in the SFC) of the ~~CBRE Phase 1~~ Facility.

I. ~~CBRE PROGRAM FACILITY~~-SUBSCRIBER ORGANIZATION AGREEMENTS

1. Successful Subscriber Organizations (completed application process and is offered CBRE Program capacity) shall execute the SFC and Interconnection Agreement ~~with the Company for CBRE Small Projects with the Company after successful completion of the Rule No. 14H technical review. Subscriber Organizations shall not be permitted to announce availability, market, solicit, sign up or 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~~

³ Secondary distribution system (Level) is defined as interconnection to electrical wires, equipment, and other facilities at a low voltage level (less than or equal to 600 volts, such as 120V, 208V, or 480V), through which the utility provides electrical service to its customers.

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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 D-2E.4 and D-6Part I, Section E.10 above.
4. Subscriber Organizations shall ensure CBRE Facilities are built within the specific number of months as specified in the SFC.
5. Subscriber Organizations are responsible for their own operation and maintenance of their Facility to ensure the Facility meets agreed performance warranties, per-pursuant to the terms and conditions set forth in the applicable SFC, Interconnection Agreement and Tariff/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 Phase 1 FacilitySmall 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.
- 6.7. 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.4 above and the SFC, no later than seventen 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

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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

1. Pre-Execution Requirements: Prior to execution of the SFC and Interconnection Agreement, CBRE Facilities must comply with the requirements of this CBRE ~~Tariff~~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 ~~Tariff~~Rule No. 29. Unless otherwise expressly specified in an existing tariff, the Subscriber Organization shall have ~~fifteen (15) business~~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

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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

2.3 Commercial Operations Date: CBRE Phase 42 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 42 Facility.

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

1. Failure to Meet Pre-Execution Requirements or Post-Execution Requirements: Should a Subscriber Organization fail to comply with pre-execution (before execution of the Interconnection Agreement or SFC) requirements, the Subscriber Organization's Facility shall be subject to removal from the CBRE Program. Should a Subscriber Organization fail to meet post-execution requirements specified in this Rule No.29, the SFC or the Interconnection Agreement, the SFC and the Interconnection Agreement shall be subject to termination in accordance with the terms of the SFC, the Interconnection Agreement (as applicable) and this ~~tariff rule~~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 ~~five(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,

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with notice to the Subscriber Organization, which termination shall be effective no earlier than ~~thirty (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 PUC 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 ~~Operation~~Operations Date: Should a Subscriber Organization fail to place a CBRE Phase ~~4~~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 ~~4~~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.

~~Extensions For Good Cause:~~

3. Failure to Comply with CBRE Program Tariff: Should a Subscriber Organization fail to abide by any of the CBRE Program rules of this Rule No. 29, the Subscriber Organization's CBRE Facility may be subject to termination and removal from the CBRE Program. If the IO is still overseeing the CBRE Program, the Company shall obtain concurrence from the IO before any termination of a CBRE Facility may occur. No termination may occur prior to 30 days after notice of termination is provided by the Company to the Subscriber Organization.
4. IO Oversight: The IO will monitor the CBRE Small Projects to ensure an impartial and fair process. The IO's oversight over CBRE Small Projects shall continue until projects reach commercial operations, subject to direction and oversight by the Commission.

L. EXTENSIONS FOR GOOD CAUSE

When extraordinary circumstances exist that may cause a Subscriber Organization to miss a pre-execution requirement, post-execution milestone or delay the completion of a CBRE Facility within the allowed Facility development timeframe, the Subscriber Organization may request an extension, not to exceed 90 days, of the applicable deadline. All requests for

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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 ~~Phase 1~~ 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 ~~these tariff rules.~~ 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

3. 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 or wind generation project sizes greater than or equal to 250kW up to 5 MW (O'ahu) and 2.5 MW (Hawai'i and Maui) ("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 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, and a minimum project size of 250 kW. The form of contract used, either the Mid-Tier RDG PPA or the Large RDG PPA, including provisions regarding interconnection and battery storage, will be predicated on project size and subject to system limitations established by the Company. See Part III below.

B. CUSTOMER PARTICIPATION AND ELIGIBILITY

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

C. CREDIT RATE

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

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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 notice by the Subscriber Organization 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 three billing cycles. Subscribers will see eligible credits on a future bill depending on the day their meter is read. Eligible charges on the Subscriber's electric bill shall be all light and power charges.
6. The Subscriber's electric bill cannot be reduced below the sum of the customer charge, the Green Infrastructure Fee, and any other per-customer charge for the customer's applicable rate schedule or the minimum bill applicable in the underlying tariff, whichever is greater.
7. If the Subscriber's monthly CBRE bill credit exceeds the eligible charges, the value of excess credits shall be carried over to the next billing period(s) within the current 12-month period, as a CBRE bill credit and applied to the Subscriber's electric bill(s) subject to Part II, Sections C.5 and C.6 above. Reconciliation will be made at the end of every 12-month period by applying the Subscriber's remaining CBRE bill credit to the Subscriber's remaining eligible charges within the 12-month period. Any CBRE bill credit that remains unused at the end of each 12-month period shall be extinguished.

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8. If the Subscriber terminates its CBRE participation prior to the end of any 12-month period, the Company shall reconcile the remaining CBRE bill credit to remaining eligible charges at the end of the monthly billing period when service was terminated, similar to the reconciliation that would have been performed at the end of the normal 12-month period. Any CBRE bill credit that remains unused shall be extinguished.

9. Compensation for Unsubscribed RDG Availability.

a. “Unsubscribed RDG” is CBRE Phase 2 Facility Contract Capacity availability that is not associated with any Subscriber subscription and therefore not allocated to a Subscriber. The designated Subscriber Organization under the RDG PPA with the Company shall be compensated for this Unsubscribed RDG as a proportion of the Facility’s Lump Sum Payment equal to the percentage of the unallocated portion of the Facility’s contract capacity to the total contract capacity multiplied by the Lump Sum Payment, except as specified in sub-part 9.b below.

b. The following shall be effective 6 months from the date of initial commercial operations. Compensation for Unsubscribed RDG shall be as follows:

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

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

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

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

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

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

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

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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.

- c. If the Subscriber Organization does not have a 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 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 total output of a Facility's CBRE 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 should fall below this minimum percentage of residential Subscribers. Effective after 6 months of commercial operations, the following shall be placed into effect for the remainder of the term of the CBRE Facility

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

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

Damages for Failure to Maintain Minimum Percentage of Residential Subscribers. The percentage determined in sub-part a. shall be multiplied by 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

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month after the first 6 months of commercial operations, if the Subscriber Organization fails to meet multiple minimum requirements or exceeds maximum thresholds, the percentage reductions in Subscriber's allocation specified above will be added and the aggregate sum of such percentages shall be used to reduce the Subscriber's allocation for Unsubscribed RDG in any given month.

D. SELECTION PROCESS TO AWARD CBRE PROGRAM CAPACITY FOR PROJECTS GREATER THAN 250KW

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

E. SUBSCRIBER ORGANIZATION ELIGIBILITY

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

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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 and solicit Subscribers.

2. CBRE Large Projects

- a. Shall negotiate the terms and conditions of the Large RDG PPA that will govern the terms of the project with the Company.
- b. The Large RDG PPA between the Subscriber Organization and the Company for each CBRE Large Project shall be subject to Commission review and approval before proceeding to develop its project and solicit Subscribers.

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.

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G. CO-LOCATION LIMITATIONS

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

H. COMMUNICATIONS AND CONTROLABILITY

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

I. COMMISSION OVERSIGHT

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

J. SUBSCRIBER ORGANIZATION AGREEMENTS

1. Subscriber Organizations selected in the Final Award Group for any CBRE RFP that have accepted the Company's offer to proceed with its project shall negotiate the appropriate PPA for its project size as specified in Part II, Section F above. Subscriber Organizations shall not be permitted to announce availability, market, solicit, sign up or 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.

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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.
4. Subscriber Organizations shall ensure CBRE Mid-Tier Projects and CBRE Large Projects are built and achieve commercial operations within the specific number of months as specified in the applicable PPA.
5. Subscriber Organizations are responsible for interconnection, operation and maintenance of their Facility to ensure the Facility meets agreed performance warranties, pursuant to the terms and conditions set forth in the applicable PPA and, as applicable for CBRE Mid-Tier Project, Rule No. 14H and Part I, Section H.
6. Electric energy delivered to the Subscriber Organization by the Company shall be billed under the Company's applicable rate schedule. Electric energy delivered to the Subscriber Organization by the Company shall be metered separately from the electric energy delivered by the Subscriber Organization to the Company, either by use of multiple meters or a meter capable of separately recording the inflow and outflow of electricity. Electric energy generated by the CBRE Mid-Tier Project or CBRE Large Project shall not be used to offset electric energy needs of the Facility itself so as to maximize the output of the Facility and the corresponding bill credits of the Subscribers to such Facility.
7. Subscriber Organization will calculate and will be responsible for the accuracy of the Subscriber's monthly credit. The Subscriber's monthly credit will be provided by the Subscriber Organization to the Company in dollars, per the requirements of the PPA, no later than ten days after the end of each calendar month.
8. Subscriber Organization's notification of a Subscriber's acquisition of a subscription shall be Subscriber Organization's representation and warranty that the Subscriber Organization has executed a Subscriber Agreement with the Subscriber and provided a completed Disclosure Checklist executed by the Subscriber that is attached to the Subscriber Agreement for such Subscriber. The Administrator, IO for the CBRE Program, or the Commission may request copies of all Subscriber Agreements and/or Disclosure Checklists completed by the Subscriber Organization with its Subscribers at any time during the term of the Subscriber Organization's Facility.
9. The Company may, but shall not be required to, confirm that the Subscribers submitted by the Subscriber Organization are qualified pursuant to Part I, Section B above for

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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.

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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 LMI Customers only.

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.

A minimum threshold of one project per island but 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

A LMI customer is a member of a household with a household income equal to or less than the income limit 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. Such LMI customer shall be referred to as “LMI Customer” or “LMI Subscriber,” as applicable, in this Rule No. 29.

C. LMI VERIFICATION AT APPLICATION AND APPLICATION REQUIREMENTS

1. Subscriber Organizations are required to verify eligibility of the LMI Customers at the time the LMI Customer applies for CBRE participation by meeting any one of the following:

a. Utilizing a third-party income verification service to independently verify household income. The Subscriber Organization shall collect a Request for Transcript of Tax Return Form (IRS Form 4506-T) for all household members age 18 and over and

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send or upload to a third-party income verification service, as identified by the Company. The third-party verification service will return the tax transcript to the Subscriber Organization.

b. Verifying income documentation for all household members over the age of 18 by reviewing photocopies of the first two pages of the previous year's income tax return documents, or IRS confirmation of no prior year's tax return, or most recent, verified paystubs, in order to confirm that such income meets the HUD LMI qualifications for the appropriate household size. Subscriber Organizations will provide to and obtain from the Subscriber an executed CBRE Program-approved affidavit ("LMI Subscriber Affidavit"), attached hereto as Appendix VI, certifying that the Subscriber is eligible to be classified as an LMI Customer under the applicable HUD guidelines referred to in Part III, Section B above. Subscribers shall grant the Subscriber Organization the authority to share such LMI Subscriber Affidavit with the Company and agree to provide other verifying income documents as requested by the Company. Subscriber Organization shall acknowledge the LMI Subscriber Affidavit certifying that it has confirmed Subscriber's LMI status.

2. In addition to the income and household size verifications in the LMI Subscriber Affidavit, Subscriber shall:

a. Affirm that they have resided at their current residence for a minimum of 6 months;

b. Grant the Subscriber Organization the authority to share such LMI Subscriber Affidavit with the Company and agree to provide other verifying income documents as requested by the Company.

3. Subscriber Organization shall acknowledge the LMI Subscriber Affidavit certifying that it has confirmed Subscriber's LMI status.

4. Subscriber Organization shall collect and store the LMI Subscriber Affidavit for each new LMI Subscriber acquiring a subscription in that Subscriber Organization's CBRE Project. Subscriber Organization's enrollment of the LMI Subscriber shall be Subscriber Organization's representation that it has collected the LMI Subscriber Affidavit from such LMI Subscriber.

5. Once a LMI Subscriber eligibility is verified subsequent income changes will not disqualify the LMI Subscriber's eligibility.

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6. LMI Subscribers shall be required to acquire a minimum subscription of 0.5 kW AC.

D. LMI ANNUAL VERIFICATION DURING TERM

1. Annually the Company at its discretion will complete spot checks of up to 10% of LMI Subscriber Affidavits to confirm LMI Subscriber eligibility.
2. Company will select random LMI Subscribers for verification of LMI status as of enrollment. If the subscriber is unable to provide income verification documentation, the Subscriber Organization will bear the cost of performing the eligibility verification of such selected LMI subscribers using a third-party verification service for a random sample of up to 10% of subscribers.
3. If a threshold of 15% or more of the random sample fails verification, the Company at its discretion may perform a second sample test upon Subscriber Organization's request. The Subscriber Organization shall bear the cost of the Company performing the verification of a second sample of 10% of all LMI subscribers using a third-party verification service.
4. If the combined sample concludes that 15% or more of the LMI Subscribers which were tested failed the verification process, Subscriber Organization's allocation of the Lump Sum Payment for Unsubscribed RDG will be recalculated by designating the percentage of failed LMI Subscribers 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, the percentage of unqualified LMI Subscribers, identified through the verification process in Part III, Section D, or otherwise identified, shall be removed as LMI Subscribers and prohibited from re-applying for any CBRE Project for 3 years.

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 6 months of commercial operations as specified below.

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

Damages for Failure to Achieve Interim LMI Subscriber Percentage. The Interim LMI Shortfall Percentage shall be multiplied by the 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 and month 12, inclusive, after initial commercial operations of the CBRE LMI Project.

2. Effective after 12 months of commercial operations for a CBRE LMI Project, the following shall be placed into effect for the remainder of the term of the CBRE LMI Project.

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- 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.
- c. If the LMI Shortfall Percentage exceeds 15% for any month during the term of the LMI RDG PPA but otherwise has no Unsubscribed RDG, the Subscriber Organization shall be subject to equivalent liquidated damages as specified below. Continued failure to meet the 100% LMI percentage under these circumstances by the Subscriber Organization for more than one year shall be construed as an intent to disregard the requirements of this Rule 29 and could result in termination and removal from the CBRE Program in accordance with Part I, Section K.3.

Damages for Failure to Achieve the 100% LMI Subscriber Percentage. The LMI Shortfall Percentage shall be multiplied by the 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 6 months following initial commercial operations, the Subscriber Organization shall incur no payment reduction if it should fall below its Committed LMI Percentage. Effective after 6 months of commercial operations, the following shall be

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placed into effect for the six-month period (months 7 -12) following initial commercial operations:

- a. If a CBRE Mid-Tier or Large Project fails to maintain at least 60% of its Committed LMI Percentage for its project for any month between month 7 and month 12, inclusive, following initial commercial operations (the “Interim Committed LMI Percentage”). The difference in percentage between the project’s actual LMI Subscriber percentage and the Interim Committed LMI Percentage, multiplied by a factor of 0.10, shall be used to potentially reduce the Subscriber Organization’s allocation of the Lump Sum Payment allocated to Unsubscribed RDG for the month of such shortfall. For illustrative purposes, if a CBRE Mid-Tier or Large Project has a Committed LMI Percentage of 30%, the Interim Committed LMI Percentage is 60% of 30% or 18%. If the project has only 15% LMI Subscribers in any month between months 7-12 after initial commercial operations, the Subscriber Organization is 3% * 0.10 = 0.3% short of the Interim Committed LMI Percentage for that month. This percentage (0.3%) shall be used to assess potential payment reduction or liquidated damages pursuant to sub-parts b. and sub-part c. immediately below.
- b. If the sum of the percentage determined in sub-part a. above plus the percentage deemed to be non-LMI under Part III, Section D.4. (the “Interim Committed LMI Shortfall Percentage”), is greater than 15% for any month between month 7 and month 12, inclusive, after initial commercial operations, then the Subscriber Organization’s allocation of the Lump Sum Payment for Unsubscribed RDG delivered in that month shall be reduced by such Interim Committed LMI Shortfall Percentage.
- c. If the Interim Committed LMI Shortfall Percentage exceeds 15% for any month between month 7 and month 12, inclusive, after initial commercial operations, but the CBRE LMI Project otherwise has no Unsubscribed RDG, the Subscriber Organization shall be subject to equivalent liquidated damages as specified below.

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

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Effective after 12 months of commercial operations for a CBRE Mid-Tier or Large Project with a Committed LMI Percentage, the following shall be placed into effect for the remainder of the term of the project's applicable RDG PPA.

- d. 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.
- e. If the sum of the percentage determined in sub-part a. above plus the percentage deemed to be non-LMI under Part III, Section D.4. (the "Committed LMI Shortfall Percentage"), is greater than 15% for any month during the term of the applicable RDG PPA, then the Subscriber Organization's allocation of the Lump Sum Payment for Unsubscribed RDG delivered in that month shall be reduced by such Committed LMI Shortfall Percentage.
- f. 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 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.

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

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EXHIBIT 4

Redline of Disclosure Checklist

Appendix II
Disclosure Checklist

**Community Based Renewable Energy (CBRE) Phase 42 Program
Subscriber Organization Disclosure Checklist**

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

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

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

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

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

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

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

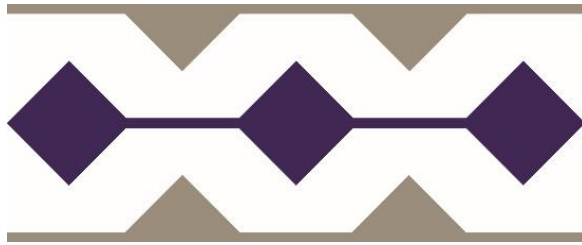
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	which Subscribers may make claims to such recoupment mechanisms		
SO Initials	Disclosure Description	Page # in Agreement	Subscriber Confirmed Initials
	How to obtain a copy of the SO's Standard Form Contract with Hawaiian Electric, Maui Electric,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

CBRE SUBSCRIBER BILL OF RIGHTS			
	Covenant by SO to Subscriber that it will adhere to the State of Hawaii's Division of Consumer Advocacy "CBRE Subscriber Bill of Rights" and provide a copy of such to the Subscriber		

EXHIBIT 5

Draft CBRE Low-and-Moderate-Income (“LMI”) RFP
for the Island of Maui.



**Maui
Electric**

DRAFT

REQUEST FOR PROPOSALS

FOR

COMMUNITY-BASED RENEWABLE ENERGY PROJECTS

FOR

LOW- AND MODERATE-INCOME SUBSCRIBERS

ISLAND OF MAUI

JULY 9, 2020

Docket No. 2015-0389

This Request for Proposals (“RFP”) is a DRAFT only. Maui Electric Company, Ltd. (“Maui Electric” or “Company”) will employ a competitive bidding process to select 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, Maui Electric will file the initial draft RFP with the (PUC). Then, Maui Electric will seek input from prospective Proposers and other stakeholders through a Technical Conference as described in the draft RFP and will modify the draft RFP to the extent feasible to address input received in order to foster a robust competitive process. The proposed final RFP will be submitted to the PUC for approval and is subject to further revision based upon direction received from the PUC. After approval by the PUC, Maui Electric will issue the final RFP.

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Chapter 1: Introduction and General Information

Maui Electric Company, Ltd. (“Maui Electric” or the “Company”) seeks proposals for Community-Based Renewable Energy (“CBRE”) projects, dedicated to Low- and Moderate-Income (“LMI”) subscribers, for the Maui Electric System on the island of Maui 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.

The Company seeks new variable renewable dispatchable generation projects (with or without storage systems) in this RFP. For projects 250 kW or greater in size, up to 2.5 MW, a pre-approved standard form contract will be used in the form of Appendix L for photovoltaic (“PV”) generation projects and Appendix N for wind generation projects (“Standard Form Contract”). The Standard Form Contract treats variable generation facilities as fully dispatchable. For projects greater than 2.5 MW in size, the Company intends to contract for variable renewable dispatchable generation projects through this RFP using its Model Renewable Dispatchable Generation Power Purchase Agreement (“RDG PPA”), which treats variable generation facilities as fully dispatchable. The Company has created a PV version (the “PV RDG PPA”) and a wind version¹ (the “Wind RDG PPA”) of its RDG PPA attached as Appendix K and Appendix M respectively.

Each successful Proposer will provide variable renewable dispatchable generation and optionally energy storage to the Company pursuant to the terms of an RDG PPA or Standard Form Contract. Selected projects greater than 2.5 MW in size will be subject to PUC review and approval by the State of Hawai‘i Public Utilities Commission (“PUC”), while projects selected in this RFP that are 2.5 MW or smaller will not be subject to further regulatory review and approval of the Standard Form Contract.

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, and in the applicable RDG PPA and Standard Form Contract attached as Appendix K, L, M, and N.

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

¹ The Wind RDG PPA is not included in the draft filing, but will be filed at a later date.

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 20, 2020 and Order No. 37139 issued on May 14, 2020 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”).
- 1.1.3 Proposers should review Appendix O, Grid Needs Assessment, to inform Proposers as to the system needs and costs based on inputs and assumptions developed through the Company’s integrated grid planning process, and recent renewable dispatchable generation procurements.² The Grid Needs Assessment is intended to inform the development of their Proposals that best meets the needs of the system.

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 or wind generation technologies. Proposals may be submitted as: 1) Generation only Projects; or 2) Generation paired with energy storage Projects (“Paired Projects”)
- 1.2.3 The subscriber portion of Projects shall be dedicated to LMI customers, which means a member of a household with a household income equal to or less than the income limit 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 website³ to obtain the income limits. 100% of the Project’s capacity shall be reserved for LMI subscribers with unsubscribed compensation subject to the requirements in Article 2 of the RDG PPA or 1.C of the applicable Standard Form Contract.
- 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),

² See <https://www.hawaiianelectric.com/clean-energy-hawaii/our-clean-energy-portfolio/renewable-project-status-board>

³ <https://www.huduser.gov/>.

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 the Island of Maui.
- 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)⁴ and are not located within a Tsunami Evacuation Zone.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.
- 1.2.8 Projects must interconnect to the Company's System at the distribution level (12 kV or lower). Projects interconnecting at the distribution level 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 <https://www.hawaiianelectric.com/products-and-services/customer-renewable-programs/community-solar>.
- 1.2.10 Contracts for Projects selected through this RFP must use the RDG PPA or Standard Form Contract, as described in Section 3.8. Under the RDG PPA and Standard Form Contract, 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.
- 1.2.11 The storage 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, and the storage component can be used to provide energy to the Company during other times that are beneficial to the system. The storage 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 Standard Form Contract.

For example, for a 2 MW facility, the storage component must be able to store and discharge at least 8 MWh of energy in a cycle throughout the term of the RDG PPA or Standard Form Contract.

⁴ 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

⁵ 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").

- 1.2.12 All Paired Projects must be able to be charged from the grid at the direction of the Company after the 5-year Investment Tax Credit (“ITC”) recapture period has lapsed. Paired Projects that are incapable of claiming the ITC must be capable of being 100% charged from the grid from the GCOD.
- 1.2.13 The amount of energy discharged from any energy storage component in a year will be limited to the energy storage contract capacity (in MWh) multiplied by the number of Days in that year.
- 1.2.14 A Proposer’s GCOD set forth in its Proposal will be the GCOD in any resulting RDG PPA or Standard Form Contract 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 PPA or Standard Form Contract, 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.
- 1.2.16 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 Standard Form Contract.
- 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 Standard Form Contract. The 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, or sent through either Email or the Electronic Procurement Platform to registered individuals. 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, Items 6). 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 (“NDA”).
See Appendix E.

- 1.5.5 Except as expressly permitted and in the manner prescribed in the Procedures Manual, any unsolicited contact by a Proposer or prospective Proposer with personnel of the Company pertaining to this RFP is prohibited.

1.6 Company Contact for Proposals

The primary contact for this RFP is:

[TBD]
Energy Contract Manager
Hawaiian Electric Company, Inc.
Central Pacific Plaza Building, Suite 2100
220 South King Street
Honolulu, Hawai‘i 96813

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 NDA provided as Appendix E, the Proposer agrees on behalf of its Representatives (as defined in the NDA) that the Company’s negotiating positions will not be shared with other Proposers or their respective Representatives.

In addition, in submitting a Proposal, a Proposer will be required to provide Company with its legal counsel’s written certification in the form attached as Appendix B Attachment 1 certifying in relevant part that irrespective of any Proposer’s direction, waiver, or request to the contrary, that the attorney will not share a Proposer’s confidential information associated with such Proposer with others, including, but not limited to, such information such as a Proposer’s or Company’s negotiating positions. If legal counsel represents multiple unaffiliated Proposers whose Proposals are selected for

the Final Award Group, such counsel will also be required to submit a similar certification at the conclusion of power purchase agreement negotiations that he or she has not shared a Proposer's confidential information or the Company's confidential information associated with such Proposer with others, including but not limited to, such information as a Proposer's or Company's negotiating positions.

- 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. No hard copies of these Proposals will be accepted by the Company.

It is the Proposer's sole responsibility to ensure that complete and accurate information has been submitted on time and consistent with the instructions of this RFP. With this assurance, Company shall be entitled to rely upon the completeness and accuracy of every Proposal. Any errors identified by the Proposer or Company after the Proposal Due Date has passed may jeopardize further consideration and success of the Proposal. If an error or errors are later identified, Company, in consultation with the Independent Observer, may permit the error(s) to be corrected without further revision to the Proposal, or may require Proposer to adhere to terms of the Proposal as submitted without correction. Additionally, and in Company's sole discretion, if such error(s) would materially affect the Priority List or Final Award Group, Company reserves the right, in consultation with the Independent Observer, to remove or disqualify a Proposal upon discovery of the material error(s). The Proposer of such Proposal shall bear the full responsibility for such error(s) and shall have no recourse against Company's decision to address Proposal error(s), including removal or disqualification. The Energy Contract Manager, in consultation with the Independent Observer, will confirm that Proposals were submitted by milestone (6) Proposal Due Date in Section 3.1 Table 1. The Electronic Procurement Platform automatically closes further submissions after milestone (6) IPP and Affiliate Proposal Due Date in Table 1.

1.8 Proposal Fee

- 1.8.1 IPP and Affiliate proposers are required to tender a non-refundable Proposal Fee of \$1,000 for each Proposal submitted.
- 1.8.2 Proposers may submit multiple Proposal variations for a Project for a single Proposal Fee. If such Proposals are on different Sites or for different generation technologies, a separate Proposal Fee must be paid for each Proposal. The method of submitting multiple Proposals within this RFP is described in Appendix B.
- 1.8.3 Proposers may also submit up to a total of two (2) variations of their Proposal, one variation of which is the base variation of the Proposal. Variations of pricing terms, Facility size, or with/without storage can be offered. All variations within a Proposal must be proposed on the same Site and using the same generation technology to avoid paying a separate Proposal Fee. Whether or not a separate Proposal Fee is required, 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 or equivalent from a U.S.-chartered bank made payable to "Maui Electric Company, Ltd." and must be delivered and received by the Company by 2:00 pm (HST) on the Proposal Due Date shown in the RFP Schedule in Section 3.1. The cashier's check should include a reference to the Proposal(s) for which the Proposal Fee is being provided. 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:

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

If the Proposal Fee is delivered in person, or via an alternative registered, certified delivery service, the Proposer shall use the address specified in Section 1.6.

1.9 Procedures for Affiliate Proposals

- 1.9.1 The Competitive Bidding Framework allows the Company and its Affiliates the opportunity to submit Proposals⁶ 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 Companies will not submit a Proposal to this RFP. The CBRE Code of Conduct will apply to all CBRE Phase 2 RFPs regardless of whether the Company will submit a Self-Build Proposal. 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 with nameplate capacities up to 2.5 MW, 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 an IPP Proposal and must be submitted electronically through the Electronic Procurement Platform by Milestone (6) IPP and Affiliate Proposal Due Date in RFP Table 1.

⁶ A Proposal will also be treated as an Affiliate Proposal if the Affiliate is a partner for the 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.⁷ 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 (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.

⁷ 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.

1.11 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 Standard Form Contract, 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, the technical requirements identified in Appendix I of Rule 14H, and either the requirements of the RDG PPA for proposals greater than 2.5 MW or the applicable Standard Form Contract for proposals between 250 kW and 2.5 MW. This RFP, Rule 14H, and either the RDG PPA or applicable Standard Form Contract set forth the minimum requirements that all Proposals must satisfy to be eligible for consideration in this RFP. If there is a conflict between the Performance Standards in Rule 14H and the RDG PPA or applicable Standard Form Contract, the contract terms will control. 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 storage must be maintained throughout the term of the PPA or Standard Form Contract. To be clear, Proposers may not propose any degradation for either capacity or efficiency in their Proposals.

2.2 Distribution-Level System Information

Proposers are encouraged to use the Locational Value Maps located at: <https://www.hawaiianelectric.com/clean-energy-hawaii/integration-tools-and-resources/locational-value-maps> to determine circuit capacity. However, while the Locational Value Map provides information regarding an initial assessment of the potential MW hosting capacity for distribution level circuits, these numbers should only be used as a screening tool to select a circuit that will provide a higher likelihood of interconnection. This is because the methodology used to develop these hosting capacity numbers is geared towards smaller distributed energy resources (DERs) 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.

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

2.3 Interconnection to the Company System

- 2.3.1 The Proposer must provide all information pertaining to the design, development, and construction of the Interconnection Facilities as specified in Appendix B. Interconnection Facilities includes both: (1) Seller-Owned Interconnection Facilities; and (2) Company-Owned Interconnection Facilities.
- 2.3.2 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.
- 2.3.2.1 In addition to the Performance Standards and findings of the IRS, the design of the Interconnection Facilities, including power rating, Point(s) of Interconnection with the Company System, and scheme of interconnection, must meet Company standards. The Company will provide its construction standards and procedures to the Proposer (Engineer, Procure, Construct Specifications for Hawaiian Electric Power Lines and Substations) if requested via the communication methods identified in Section 1.5 and upon the execution of a CBRE NDA as specified in Section 3.12.1. These specifications are intended to illustrate the scope of work typically required to administer and perform the design and construction of a Maui Electric substation and power line.
- 2.3.2.2 Interconnection Facilities must be designed such that, it meets or exceeds the applicable single line diagram in Appendix H, Attachment 1 or Attachment 2.
- 2.3.2.3 Tariff Rule No. 19, a copy of which is attached as Appendix I, establishes provisions for Interconnection and Transmission Upgrades. 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.

- 2.3.3 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.
- 2.3.4 Proposers are required to include in their pricing proposal all costs for interconnection and equipment expected to be required between their Facility and their proposed Point of Interconnection. 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 (see Appendix H, Attachment 1 or Attachment 2), 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 include in their pricing proposal all costs for distribution-level service interconnection for station power.
- 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 PPA or the Standard Form Contract for proposals 2.5 MW or smaller.

Chapter 3: Instructions to Proposers

3.1 Schedule for the Proposal Process

Table 1 sets forth the proposed schedule for the proposal process (the "RFP Schedule"). The RFP Schedule is subject to PUC approval. The Company reserves the right to revise the RFP Schedule as necessary. Changes to the RFP Schedule prior to the RFP Proposal Due Date will be posted to the RFP website. Changes to the RFP Schedule after the Proposal Due Date will be communicated via Email or via the Electronic Procurement Platform to the Proposers.

**Table 1
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) Final RFP is Issued	October 20, 2020 ⁸
(6) IPP and Affiliate Proposal Due Date	December 22, 2020 at 2:00 pm HST
(7) Selection of Priority List	March 5, 2021
(8) BAFOs Due	March 12, 2021
(9) Selection of Final Award Group	June 25, 2021
(10) Contract Negotiations Start	July 6, 2021

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

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 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.

⁸ Per Section IV.B.6.e.ii of the Competitive Bidding Framework “[t]he utility shall have the right to issue the RFP if the Commission does not direct the utility to do otherwise within thirty (30) days after the Commission receives the proposed RFP and the Independent Observer’s comments and recommendations.” October 20, 2020 assumes the Company issues a Final RFP to comply with Commission guidance received after 30 days. The Final RFP may be issued sooner, but the Company will not issue the Final RFP early without Commission guidance.

3.3 Information Conferences

The PUC has scheduled a Technical Status Conference on July 29, 2020 to discuss the draft RFP. Parties and Participants will then have an opportunity to submit comments on the draft RFP. The Company will then revise the RFP after considering the comments received and file a final RFP for PUC review and approval.

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. 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 applicable Standard Form Contract. 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 1.7.4, 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 agent⁹ of the Proposer.

3.5 Organization of the Proposal

The Proposal must be organized as specified in Appendix B. It is the Proposer's responsibility to ensure the information requested in this RFP is submitted and contained within the defined proposal sections as specified in Appendix B.

3.6 Proposal Limitations

Proposers expressly acknowledge that Proposals are submitted subject to the following limitations:

The RFP does not commit or require the Company to award a contract, pay any costs incurred by a Proposer in the preparation of a Proposal, or procure or contract for products or services of any kind whatsoever. The Company reserves the right, in consultation with the Independent Observer, to accept or reject, in whole or in part, any or all Proposals submitted in response to this RFP, to negotiate with any or all Proposers eligible to be selected for award, or to withdraw or modify this RFP in whole or in part at any time.

- The Company reserves the right, in consultation with the Independent Observer, to request additional information from any or all Proposers relating to their Proposals or to request that Proposers clarify the contents of their Proposals. Proposers who are not responsive to such information requests may be eliminated from further consideration upon consultation with the Independent Observer.
- The Company reserves the right, in consultation with the Independent Observer, to solicit additional Proposals from Proposers after reviewing the initial Proposals. Other than as provided in this RFP, no Proposer will be allowed to alter its Proposal or add new information to a Proposal after the Proposal Due Date.
- 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:

⁹ 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.

- 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 that are greater than 2.5 MW in size will be in the form of the RDG PPA, attached as Appendix K and Appendix M.
- 3.8.2 The Power Purchase Agreement for proposals selected under this RFP that are 250 kW or larger, up to and including 2.5 MW in size, will be in the form of a pre-approved Standard Form Contract, attached as Appendix L and Appendix N. These Standard Form Contracts will be reviewed and pre-approved by the PUC, and as a result will not be negotiable.
- 3.8.3 If selected, any Affiliate Proposers will be required to enter into the RDG PPA or Standard Form Contract with the Company.
- 3.8.4 In general, under the RDG PPA and Standard Form Contract, payment to the Seller consists of a Lump Sum Payment component to cover the costs of the Project. For wind projects the Company will also allow developers to bid a Price for Purchase of Electric Energy component (\$/MWh component) to cover variable operations and maintenance costs, in addition to the lump sum payment. In return, 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 will 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. 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 Standard Form Contract. 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 Standard Form Contract is prohibited.
- 3.9.3 Pricing information must only be identified within specified sections of the Proposal 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 prices for each Proposal (and variation):

- **Lump Sum Payment (\$/year):** Payment amount for full dispatchability of the Facility. Payment will be made in monthly increments.
- **(For Wind Projects Only) Price for Purchase of Electric Energy (\$/MWh):** Payment for delivery of net energy sourced from the variable generation resource, if desired. No Energy Payment will be provided for any energy delivery that is sourced originally from the grid (Company's System).

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 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 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 the Facility's Allowed Capacity and stored in the energy storage component of the Facility should be included in the NEP RFP Projection. Any energy generated outside of the proposed Facility that is used to charge the energy storage 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 energy storage component should not be factored into the NEP RFP Projection. The NEP RFP Projection will be used in the RFP evaluation process and therefore Proposers will be held to their provided value.¹⁰

3.10.2 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

¹⁰ If a Proposal is selected to the Final Award Group and a PPA or Standard Form Contract 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 Standard Form Contract, 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 Standard Form Contract 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 Standard Form Contract. See Article 2 and Attachment U of the RDG PPA or Standard Form Contract.

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.

- 3.10.3 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 land owner and must secure Site Control with such land owner 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 Proposer must submit an executed CBRE NDA in the form attached as Appendix E by the Proposal Due Date specified in the RFP Schedule in Section 3.1. The form of the CBRE NDA is not negotiable. 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 Maui Electric 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 a PPA or Standard Form Contract 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 Standard Form Contract.
- 3.13.2 The Development Period Security and Operating Period Security identified in the RDG PPAs or the Standard Form Contract are minimum requirements. Proposers shall not propose an amount lower than that set forth in the RDG PPAs or the Standard Form Contract.
- 3.13.3 Each Proposer 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 PPAs or the Standard Form Contract.
- 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 PPAs or Standard Form Contract.

Chapter 4: Evaluation Process and Evaluation Criteria

4.1 Proposal Evaluation and Selection Process

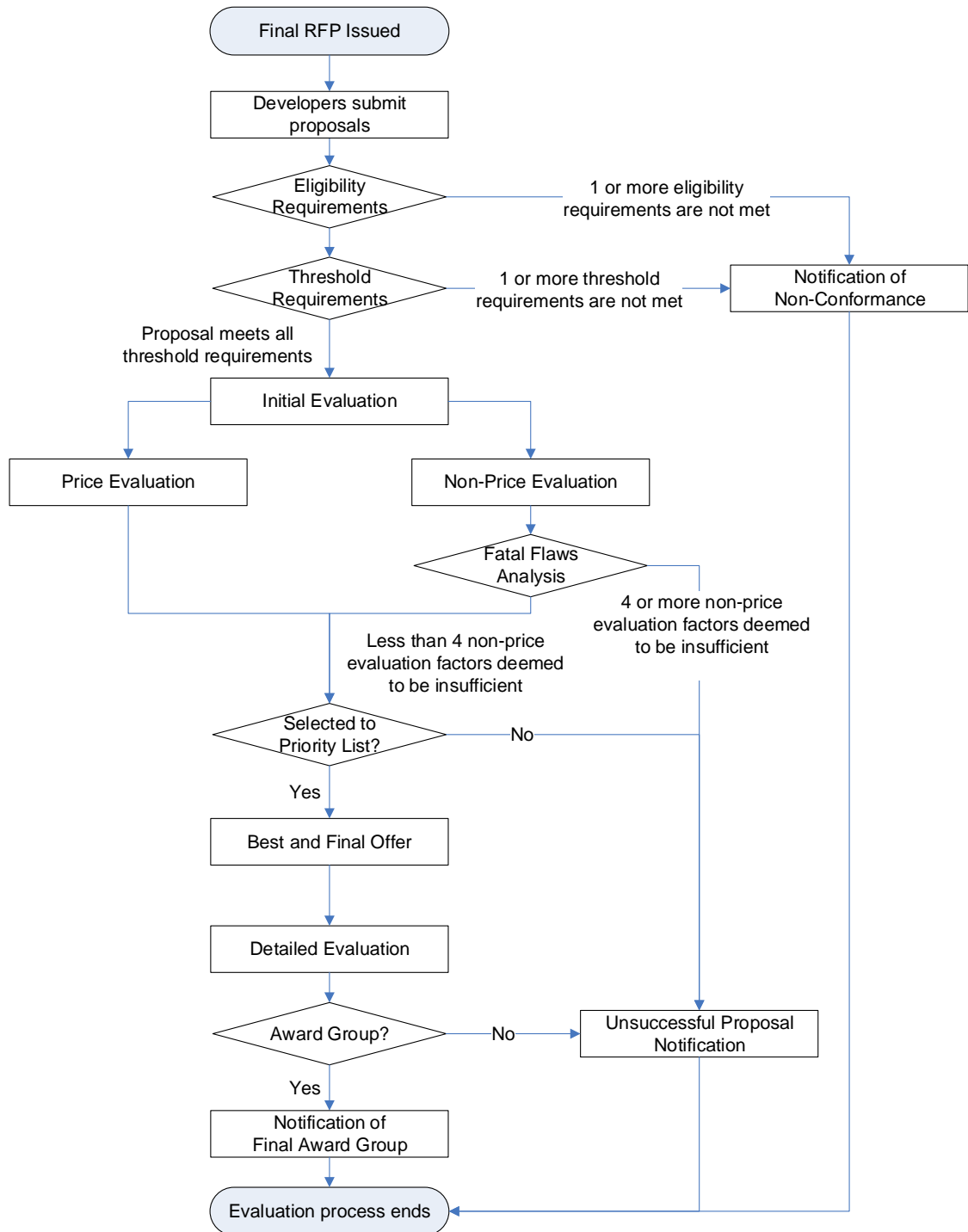
The Company will employ a multi-step evaluation process. Once the Proposals are received, the Proposals will be subject to a consistent and defined review, evaluation, and selection process. This Chapter provides a description of each step of the process, along with the requirements of Proposers at each step. Figure 1 sets forth the flowchart for the proposal evaluation and selection process.

Upon receipt of the Proposals, the Company will review each Proposal submission to determine if it meets the Eligibility Requirements and the Threshold Requirements. The Company, in coordination with the Independent Observer will determine if a Proposer is allowed to cure any aspect of its Proposal or whether the Proposal would be eliminated based on failure to meet either Eligibility or Threshold Requirements.¹¹ 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.¹² 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.

¹¹ 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.

¹² The initial request will be offered 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.

- A 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 with 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 NDA agreement 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 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 Maui.
- Project must be 250 kW or larger.
- Projects interconnecting to a distribution circuit (12 kV or lower) must not exceed 3 MW.
- The subscriber portion of the Project must be dedicated to LMI 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.
- Proposals must meet the grid-charging requirements of [Section 1.2.14](#).
- Proposers 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.

Proposers must provide explanations and supporting information demonstrating how and why they believe the Project they are proposing 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:

- **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 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. 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 Standard Form Contract (“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 a RDG PPA or Standard Form Contract 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 applicable RDG PPA or Standard Form Contract should the Proposal be selected to the Final Award Group.

- **Performance Standards:** The proposed Facility must be able to meet 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.
- **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.
- **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., storage 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.
- **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.

- **Community Outreach and Cultural Resource Impacts:** 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.

Proposers need to also be mindful of the Projects’ potential impacts to historical and cultural resources. Proposers shall identify: the historical resources and cultural resources, practices, and beliefs located within the potentially affected area; the impact of the Project on those resources; and the feasible actions, if any, to be taken to reasonably protect the historical resources and cultural resources, practices, and beliefs identified. Also, Proposers should have already contracted with a consultant with expertise in this field to begin a cultural impact assessment for the Project.

4.4 Initial Evaluation – Price and Non-Price Analysis

Proposals that meet both the Eligibility and Threshold Requirements are Eligible Proposals which will then be subject to a price and non-price assessment. Two teams have been established to undertake the Proposal evaluation process: a Price Evaluation Team and Non-Price Evaluation Team. The results of the price and non-price analysis will be a relative ranking and scoring of all Eligible Proposals. Price-related criteria will account for fifty-one percent (51%) of the total score and non-price-related criteria will account for forty-nine percent (49%) 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, an avoided cost screening approach will be used to rank proposals. Using the forecast and planning assumptions developed for the Company’s Integrated Grid Planning process and evaluation methodology proposed in the Solution Evaluation & Optimization Working Group, a resource portfolio will be developed using a capacity expansion model to identify proxy resources that serve the grid needs and

inform their marginal avoided costs. For each Proposal, the avoided cost of each grid need would be multiplied by the expected ability of the Proposal to provide that service and summed across the services to determine the potential benefit of the Proposal. The benefit would then be normalized by the Net Energy Potential (“NEP”) provided in the Proposal to calculate a Levelized Benefit (“LB”) (\$/MWh).

The Eligible Proposal with the highest LB will receive 510 points. All other Eligible Proposals will receive points based on a proportionate reduction using the percentage by which the Eligible Proposal’s LB is lower than the highest LB. For example, if a Proposal’s LB is ten percent (10%) lower than the highest LB, the Proposal will be awarded 459 points (that is, 510 points less 10%). The result of this assessment will be a ranking and scoring of the Proposals.

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 ten (10) non-price criteria categories set forth below:

- Community Outreach and Cultural Resource Impacts
- State of Project Development and Schedule
- Performance Standards
- Locational Value: Non-Wires Alternative (NWA) and Community Resilience
- CBRE Program
- Environmental Compliance and Permitting Plan
- Experience and Qualifications
- Financial Strength and Financing Plan
- RDG PPA Contract Exceptions
- Guaranteed Commercial Operations Date

Each of the first five criteria – Community Outreach and Cultural Resource Impacts, State of Project Development and Schedule, Performance Standards, Locational Value: NWA and Community Resilience, 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 within each evaluation category. The Proposal in each evaluation category with the highest total non-price score will receive 490 points, and all other Proposals will receive points equal to the Proposal’s score divided by the top score, multiplied by 490.

During the non-price criteria evaluation, a fatal flaws analysis will also be conducted such that any Proposal that is deemed not to meet the minimum standards level for four

(4) or more non-price criteria will be disqualified given that the Proposal has failed to meet a majority of non-price factors that are indicative as to the general feasibility and operational viability of a proposed Project. The Locational Value: NWA and Community Resilience non-price criteria will be excluded from the fatal flaw analysis.

The Companies' 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 Companies assume 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:

- **Community Outreach and Cultural Resource Impacts** – 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. Proposers need to also be mindful of the Project's potential impacts to historical and cultural resources.

Proposals should include a Community Outreach Plan that describes the Proposer's commitment to work with the neighboring community and stakeholders and to provide timely Project information during project development, construction and operation. The Community Outreach Plan shall include, but not be limited to the following:

- 1) Project description. A thorough description including a map of the location of the Project. This information will help the community understand the impact that the Project may have on the community.
- 2) Community scoping. Identify stakeholders (individuals, community leaders, organizations), community issues and concerns, and community sentiment.
- 3) Project benefits. An explanation of the need for the Project. This will help the community to understand how the Project might benefit their community.
- 4) Government approvals. Required government permits and approvals, public hearings and other opportunities for public comment. This information will help the community to understand the level of public scrutiny and participation that might occur for the Project and the opportunities to provide public comments.
- 5) Development process. A Project schedule that identifies key milestones will facilitate the community's understanding of the development process.
- 6) Communications Plan. A communications plan including a detailed community outreach schedule that will keep the affected communities and

stakeholders informed about the Project's outreach efforts during early Project development period through construction and operations.

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 Companies' community engagement expectation whereby all developers will be required to engage in community outreach prior to signing a PPA with the Companies. This process is also outlined in RFP Section 5.3. Further information and details regarding expectations for the Community Outreach Plan are included as Attachment 4, Attachment 5, and Attachment 6 to Appendix B.

Proposers need to also be mindful of the Projects' potential impacts to historical and cultural resources. Proposers shall identify: the historical resources and cultural resources, practices, and beliefs located within the potentially affected area; the impact of the Project on those resources; and the feasible actions, if any, to be taken to reasonably protect the historical resources and cultural resources, practices, and beliefs identified. Also, Proposers should have already contracted with a consultant with expertise in such field to begin a cultural impact assessment for the Project. Preference will be given to Proposals that are further along in the assessment process and are able to provide a mitigation/action plan or are able to provide a date for when a mitigation/action plan will be available that addresses any identified cultural resource issues.

- **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.

- **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 the Standard Form Contract. 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 Standard Form Contract and in this RFP. At a minimum, in addition to meeting the Performance Standards, the Proposals 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.
- **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 and non-wire alternatives and/or community resilience. Non-wires alternatives have been identified for areas with grid needs. For Projects to support community resilience, storage with grid-forming and black start capability is needed in areas identified with potential microgrids or critical customers/facilities following a disruption in service. 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 O have a higher certainty rating
 - Areas with identified community resilience

Table 2: Community Resilience

[DRAFTING NOTE: Community resilience areas to be identified in prior to Final submittal]

- **CBRE Program:** Proposals will be evaluated on several facets of the CBRE program being proposed.
 - **Program Offering:** LMI customer participation in almost all program offerings has been historically very difficult to achieve. LMI customers

are often struggling to meet basic needs and have little or no access to capital. Proposals will be evaluated to give preference to program offerings that are most likely to succeed with and provide the most benefits to LMI customers in particular and residential customers in general. Financing options, upfront fees, payment over time, public funding options, and other creative approaches that have shown success in the LMI and residential market will be preferred along with programs that offer higher expected customer level savings, favorable payback periods and mechanisms, customer protections, and other customer benefits.

- **Marketing and Outreach Plans:** Proposals will be evaluated on the proposed strategies and methods to overcome known barriers to LMI 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. Direct to consumer marketing strategies would need to provide details on how the subscriber organization will reach the traditionally hard to reach LMI market.
- **Subscriber Retention:** Proposals will also be assessed on its stated plans to acquire and retain a market that is historically less financially and socially stable than more upscale 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.
- **Program Experience:** Consideration will be given to Proposers that have demonstrated success in the past with reaching and retaining participation of LMI and residential customers in other community-based renewable energy programs.
- **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 U.S. Fish and Wildlife and the State of Hawai'i Department of Land and Natural Resources' Division of Forestry and Wildlife, to the extent applicable, 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 permits required, i.e., those requiring the submission of documents or other 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 GCOD.

- **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.
- **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.

- **RDG PPA Contract Proposed Modifications** –Proposers are encouraged to accept the contract terms identified in the model agreements in their entirety in order to expedite the overall RFP process and potential contract negotiations. Proposers who accept the model agreements without edits or utilize the Standard Form Contract will receive a higher score and will be the only proposals that can achieve the highest scoring for this non-price evaluation. 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.
- **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 Guaranteed Commercial Operations Date identified in their Proposal. The GCOD will be a Guaranteed Milestone and will be inserted without amendment into the RDG PPAs or Standard Form Contract, as applicable.

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 Eligible Proposal using the 51% price-related criteria / 49% non-price-related criteria weighting outlined above. The price and non-price analysis, and the summation of both price and non-price scores described above, will result in a ranking of Proposals.

The Company will determine a Priority List from the highest scoring Proposals. The Companies will develop the Priority Lists in consultation with the Independent Observer. The Companies reserve the right, in consultation with the Independent Observer, to limit the projects allowed for further consideration in the initial evaluation to projects that fall within 15% of the highest Levelized Benefit. Selection to the Priority List does not assure an eligible Project's inclusion in the selection of the Final Award Group.

4.6 Best and Final Offer (BAFO)

4.6.1 The Company will solicit a Best and Final Offer from Proposers selected to the Priority List. Proposers selected to the Priority List will have the opportunity to update (downward only)¹³ the pricing elements in their Proposal 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 elements:

- Lump Sum Payment (\$/year) amount
- Price for Purchase of Electric Energy (\$/MWh) amount. Payment for delivery of net energy sourced from the variable generation resource (for wind projects only). No Energy Payment will be provided for any energy delivery that is sourced originally from the grid (Company's System).

Proposers will not be allowed to increase their price¹⁴ 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.¹⁵

4.7 Detailed Evaluation

The Best and Final Offers of the Priority List Proposals will be further assessed in the Detailed Evaluation to identify the Proposals selected to the Final Award Group.

The detailed evaluation process will consist of assessment of combinations of Proposals from the Priority List. A capacity expansion model will use the same assumptions as in the Initial Evaluation but replace the generic resource costs and performance characteristics with the specific costs and performance characteristics of the Projects. Due to computational limitations, all Proposals from the Priority List may not be evaluated simultaneously. The ranking developed in the Initial Evaluation can be used to screen the

¹³ 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.)

¹⁴ 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.

¹⁵ 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.

Proposals in the Detailed Evaluation to those that provide the highest potential benefit to the system. A production simulation model will then be used to provide a feasibility check on the final resource portfolio of Projects.

The evaluation will evaluate the benefits and costs of integrating the Project or combination of Projects onto the Company's System which includes:

1. The cost to dispatch the Project or combination of Projects and the energy and storage purchased;
2. The fuel cost savings (benefits) and any other direct savings (IPP savings from dispatchable fossil fuel savings) resulting from the displacement of generation by the Priority List Proposals, including consideration of round-trip efficiencies for facilities with storage;
3. The estimated increase (or decrease) in operating cost, if any, incurred by the Company to maintain system reliability; and
4. The cost of imputed debt, if applicable.

As noted, the Company will take into account the cost of rebalancing its capital structure resulting from any debt or imputed debt impacts associated with each Proposal (including any costs to be incurred by the Company, as described above, that are necessary in implementing the Proposal). The Company proposes to use the imputed debt methodology published by S&P that is applicable to the Proposal being evaluated. S&P views long-term PPAs as creating fixed, debt-like financial obligations that represent substitutes for debt-financed capital investments in generation capacity. By adjusting financial measures to incorporate PPA-fixed obligations, greater comparability of utilities that finance and build generation capacity and those that purchase capacity to satisfy new load are achieved.

During the Detailed Evaluation and before the Proposals advance to the Final Award Group, the Company will perform load flow analyses to determine if certain Projects or combinations of Projects introduce circuit constraints that will factor into the selection process. This is to address the possibility that even though sufficient line capacity was identified for an individual Project, Projects on separate or same circuits that are in close proximity with each other could introduce additional circuit constraints. 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 evaluate the collateral consequences of the implementation of a combination of Projects, including consideration of the geographic diversity, resource

diversity, interconnection complexity, and flexibility and latitude of operation control of the Projects.

The Company may assess additional combinations of Projects if requested by the Independent Observer and 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 Companies 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. Projects selected to the Final Award Group up to 2.5 MW in size will execute a Standard Form Contract with the Company in form of Appendix L or Appendix N. Projects larger than 2.5 MW will enter into RDG PPA in form of Appendix K or Appendix M negotiations. All Proposers will be notified at this stage of the evaluation process whether their Proposal is included in the Final Award Group.

Selection to the Final Award Group and/or entering into contract negotiations does not guarantee execution of a PPA.

Further, if at any time during the evaluation process it is discovered that a Proposer's Proposal contains incorrect or misrepresented information that have a material effect on any of the evaluation processes, including selection of the Priority List or the Final Award Group, the Company reserves the right, at any time prior to submission of the PPA Application with the PUC application, 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 the Final Award Group, either by disqualification noted immediately above, or via any other removal or withdrawal of a proposal, including failure to reach agreement to the 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 the Priority List to determine (1) if another proposal should be added to the Final Award Group; or (2) if the remaining proposals in the Final Award Group should remain unchanged.

Chapter 5: Post Evaluation Process

5.1 Project Interconnection Process

5.1.1 Interconnection Modeling Process

For all projects greater than or equal to 1 MW in size (regardless of whether an IRS is required), a complete package of Project Interconnection Data Request worksheets, Project single line diagram(s), models for equipment and controls, list(s) to clearly identify the components and respective files (for inverters and power plant controller), and complete documentation with instructions shall be submitted with each Proposal within 30 days after selection to the Final Award Group. See Section 2.11.1 of Appendix B. 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. Similar and 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 the Final Award Group, and subject to Rule 14H, the Company will provide an IRS Letter Agreement (in lieu of an Interconnection Modeling Letter Agreement) for each selected project 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 Facilities 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 the 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 Facilities 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 PPA or Standard Form Contract 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. See Section 12.4 of the RDG PPA.

5.2 Contract Negotiation Process

Within five (5) business Days of being notified by the Company of its intent to enter into contract negotiations or execute a Standard Form Contract, Proposers selected for the

Final Award Group will be required to indicate, in writing to the Company's primary contact for this RFP, whether they intend to proceed with their Proposals. Proposers who elect to remain in the Final Award Group will be required to keep their Proposal valid through the award period. Contract negotiations will take place in parallel with the IRS process. The Company intends to execute and file the PPA with the PUC for approval and later amend the 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 PPA (Community Outreach Plan) do not represent the only community outreach and engagement activities that can or should be performed by a Proposer.

The Company will publicly announce the Final Award Group no more than 5 business days after the notification is given to Proposers who are selected to the Final Award Group. Selected Proposers shall not disclose their selection to the public before the Company publicly announces the Final Award Group selection.

On the next business day after the Company notifies a Proposer they were selected, each Proposer shall provide the Company with links to their Project website, which the Company will post on the Company's website. Each Proposer will launch a Project website that will go-live on the day the Company publicly announces the Final Award Group selection. Information on what should be included on the Project website is identified in Appendix B, Attachment 4.

Within 5 business days of notification of selection to the Final Award Group, Proposers must provide the Company with an updated comprehensive Community Outreach Plan to work with and inform neighboring communities and stakeholders and to provide them timely information during all phases of the Project. The Community Outreach Plan shall include but not be limited to the following information: Project description, Project stakeholders, community concerns and Proposer's efforts to address such concerns, Project benefits, government approvals, Project schedule, and a comprehensive communications plan. The Proposer's Community Outreach Plan shall be a public document identified on the Proposer's Project website and made available to the public upon request. Details on the Community Outreach Plan can be found in Appendix B, Attachments 4, 5, and 6.

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) information concerning the process and/or intent for the public's input and engagement, including advising attendees for projects greater than 2.5 MW in size 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. The Proposer shall collect all public comments, and then provide the Company copies of all comments received in their original, unedited form, along with copies of all comments with personal information redacted and ready for filing. If a 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 will provide Proposers with detailed instructions regarding the community meeting requirement after the selection of the Final Award Group. (For example, notice will be published in county or 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 PPA 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's statement of position filed in the docket associated with the Project will contain an attachment including those comments.

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) are selected for the Final Award Group and are greater than 2.5 MW in size 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 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 separate 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 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 PPA is reasonable in light of the potential for GHG emissions, and whether the terms of the PPA are prudent and in the public interest in light of its potential hidden and long-term consequences.

5.5 PUC Approval

Any signed PPA resulting from this RFP, greater than 2.5 MW in size, is subject to PUC approval as described in the RDG PPA, including Article 12 and Section 29.20 thereof. Selected projects that are 2.5 MW or smaller will execute a Standard Form Contract 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 will be moved to the end of the Company's testing queue. 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 PPA or Standard Form Contract milestones if tests are not completed within the original allotted time. Liquidated damages for missed milestones will be assessed pursuant to the PPA or Standard Form Contract.

DRAFT

REQUEST FOR PROPOSALS

FOR

COMMUNITY-BASED RENEWABLE ENERGY PROJECTS

FOR

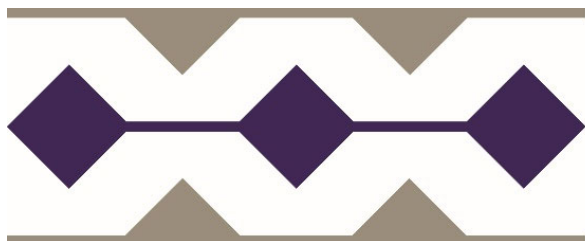
LOW- AND MODERATE-INCOME SUBSCRIBERS

ISLAND OF MAUI

JULY 9, 2020

Docket No. 2015-0389

Appendix A – Definitions



**Maui
Electric**

“Affiliate” means any person or entity that possesses an “affiliated interest” in a utility as defined by section 269-19.5, Hawaii Revised Statutes (“HRS”), including a utility’s parent holding company but excluding a utility’s subsidiary or parent which is also a regulated utility.

“Allowed Capacity” has the meaning set forth in the RDG PPA and Standard Form Contract.

“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.

“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. 2017-0352 on October 23, 2017.

“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 Hawaii 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 Standard Form Contract.

“Community Outreach Plan” is a community outreach and communication plan described in Section 4.3 and 4.4.2 of this RFP.

“Company” means Maui Electric Company, Ltd., a Hawai‘i corporation.

“Company-Owned Interconnection Facilities” has the meaning set forth in the RDG PPA and Standard Form Contract.

“Competitive Bidding Framework” or “Framework” means the Framework for Competitive Bidding contained in Decision and Order No. 23121 issued by the Public Utilities Commission on December 8, 2006, and any subsequent orders providing for modifications from those set forth in Order No. 23121 issued December 8, 2006.

“Consumer Advocate” means the Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs of the State of Hawai‘i.

“Day” means a calendar day, unless the term “business day” is used, which means calendar day excluding weekends and federal and State of Hawai‘i holidays.

“Development Period Security” has the meaning set forth in Section 14.2 of the RDG PPA and Standard Form Contract.

“Dispatchable” means the ability to turn on or turn off a generating resource at the request of the utility’s system operators, or the ability to increase or decrease the output of a generating resource from moment to moment in response to signals from a utility’s Automatic Generation Control

System, Energy Management System or similar control system, or at the request of the utility's system operators.

“Electronic Procurement Platform” means the third-party web-based sourcing platform that will be used for the intake of Proposals and associated electronic information, storage and handling of Proposer information, and communication.

“Eligibility Requirements” has the meaning set forth in Section 4.2 of this RFP.

“Eligible Proposals” means Proposals that meet both the Eligibility and Threshold Requirements.

“Energy Contract Manager” is the primary Company contact for this RFP.

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

“Facility” has the meaning set forth in the RDG PPA and Standard Form Contract.

“Facility Studies” means a study to develop the interconnection facilities cost and schedule estimate including the cost associated with the design and construction of the Company-owned interconnection facilities.

“Final Award Group” means the group of Proposers selected by the Company from the Priority List, with which the Company will begin contract negotiations, based on the results of the Company's detailed evaluation.

“Generation Projects” means a Project proposed that offers only energy generation facilities.

“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 on which a Facility first achieves Commercial Operations.

“Hawaiian Electric” means Hawaiian Electric Company, Inc., a Hawai'i corporation.

“Hawaiian Electric Companies” or “Companies” means Hawaiian Electric Company, Inc. and its subsidiaries, Hawaii Electric Light Company, Inc. and Maui Electric Company, Limited.

“HRS” means the Hawai'i Revised Statutes as of the date of this Request for Proposals.

“Imputed Debt” means adjustments to the debt amounts reported on financial statements prepared under generally accepted accounting principles (“GAAP”). Certain obligations do not meet the GAAP criteria of “debt” but have debt-like characteristics; therefore, credit rating agencies “impute debt and interest” in evaluating the financial ratios of a company.

“Independent Observer” has the meaning set forth in Section 1.4 of this RFP.

“Independent Power Producer” or “IPP” means an entity that owns or operates an electricity generating facility that is not included in the Company’s rate base.

“Interconnection Facilities” means the equipment and devices required to permit a Facility to operate in parallel with, and deliver electric energy to, the Company System (in accordance with applicable provisions of the Commission’s General Order No. 7, Company tariffs, operational practices, interconnection requirements studies, and planning criteria), such as, but not limited to, transmission and distribution lines, transformers, switches, and circuit breakers. Interconnection Facilities includes Company-Owned Interconnection Facilities and Seller-Owned Interconnection Facilities.

“Interconnection Requirements Study” or “IRS” means a study, performed in accordance with the terms of the IRS Letter Agreement, to assess, among other things, (1) the system requirements and equipment requirements to interconnect the Facility with the Company System, (2) the Performance Standards of the Facility, and (3) an estimate of interconnection costs and project schedule for interconnection of the Facility.

“kV” means kilovolt.

“Land RFI” refers to a Request for Information activity conducted by the Company to identify interested parties willing to make land available for utility-scale renewable energy projects and gather relevant property information.

“Levelized Benefit” or “LB” means a calculation (\$/MWh) used for comparison of Proposals based on information provided in the Proposal submission in this RFP.

“Low- and Moderate-Income” or “LMI” customer or subscriber means a member of a household with a household income equal to or less than the income limit established by the U.S. Department of Housing and Urban Development (“HUD”) for an LMI Household.

“Lump Sum Payment” has the meaning set forth in the RDG PPA or Standard Form Contract. It may also be referred to as a monthly Lump Sum Payment to reflect the portion of the payment made each month.

“Maui Electric” means Maui Electric Company, Ltd., a Hawai‘i corporation.

“Maui Electric System” or “System” means the electric system owned and operated by Maui Electric on the island of Maui (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.

“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.

“MW” means megawatt.

“MWh” means megawatt hour.

“NDA” means the Mutual Confidentiality and Non-Disclosure Agreement attached to this RFP as Appendix E.

“NEP” means Net Energy Potential.

“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 Standard Form Contract.

“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 Standard Form Contract, and as described in Chapter 2 of this RFP.

“Point of Interconnection” has the meaning set forth in the RDG PPA and Standard Form Contract.

“Power Purchase Agreement” or “PPA” means an agreement between an electric utility company and the developer of a renewable energy generation facility to sell the power generated by the facility to the electric utility company.

“Price Evaluation Team” means Employees and consultants of the Company who evaluate the Proposal price related criteria as set forth in Section 4.4 of this RFP. Price Evaluation Team members will not include any Shared Resources and will be solely made up of Company RFP Team Members.

“Priority List” means the group of Proposals selected by Maui Electric as described in Section 4.5 of this RFP.

“Project” means a Facility proposed to Maui Electric by a Proposer pursuant to this RFP.

“Proposal” means a proposal submitted to Maui Electric by a Proposer pursuant to this RFP.

“Proposal Due Date” means the date stated in RFP Schedule - Row 6 for 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 Maui Electric pursuant to this RFP.

“Proposer’s Response Package” means the form in which the Proposal should be submitted, which is attached as Appendix B to this RFP.

“PUC” means the State of Hawai‘i Public Utilities Commission.

“RDG PPA” means the Model PV and/or Wind Renewable Dispatchable Generation Power Purchase Agreement that will be used for projects greater than 2.5 MW in size, attached as Appendix K 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 1, Section 3.1 of this RFP.

“Self-Build Option” or “SBO” means a Proposal submitted by the Company that is responsive to the resource need identified in the RFP, as required by Section VI of the Framework.

“Self-Build Team” means agents of the Company who develop Self-Build Option proposals.

“Seller” means the entity that the Company is contracting with, as set forth in the RDG PPA and Standard Form Contract.

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

“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.

“Standard Form Contract” means the pre-approved standard form contract that will be used for projects 250 kW or greater in size, up to 2.5 MW, in the form of Appendix L or N of this RFP.

“Threshold Requirements” has the meaning set forth in Section 4.3 of this RFP.

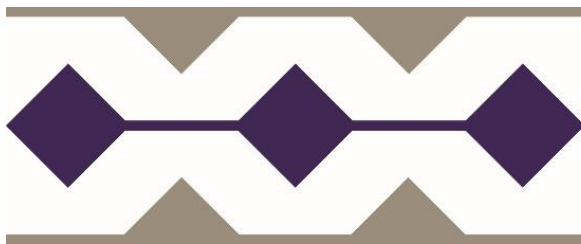
Any capitalized term not defined in this RFP has the meaning set forth in the RDG PPA and Standard Form Contract.

DRAFT
REQUEST FOR PROPOSALS
FOR
COMMUNITY-BASED RENEWABLE ENERGY PROJECTS
FOR
LOW AND MODERATE INCOME SUBSCRIBERS
ISLAND OF MAUI

JULY 9, 2020

Docket No. 2015-0389

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



**Maui
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

To access the RFP event, the Proposer must register as a "Supplier"¹ on Sourcing Intelligence (Electronic Procurement Platform). One Proposal may be submitted with each Supplier registration. Minor variations, as defined in Section 1.8.2 and 1.8.3 of this RFP may be submitted along with the Proposal under the same registration.

If a Proposer is already registered on Sourcing Intelligence, the Proposer may use their current login information to submit their first Proposal. Minor variations of a Proposal will be submitted together with the base variation Proposal, following the instructions outlined in this Appendix. If the Proposer chooses to submit more than one Proposal, the Proposer must register as a new "Supplier" on Sourcing Intelligence for each additional Proposal.

Each registration will require a unique username, unique Email address, and unique Company name. Proposers that require multiple registrations to submit multiple Proposals should use the Company name field to represent

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.

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 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, the messaging feature, the Sourcing Intelligence Quick Start for Suppliers, 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 the RFP event is opened, registered Proposers will have online access to general notices, RFP-related documents, and other communications 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 via the messaging feature in the Electronic Procurement Platform 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.
- “3. Commercial Data:” This tab is NOT USED for this event.
- “4. Technical Data:” This tab is NOT USED for this event.
- “5. Pricing Data:” This tab is 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.
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.
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 or via the PowerAdvocate Messaging tab. 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:

Your Bid Intention: Bidding		
Total Uploaded Files:	18	Last Upload: 02/08/18
Saved Commercial Datasheets:	1 of 1	Last Saved: 02/08/18
Saved Technical Datasheets:	0 of 0	
Saved Pricing Datasheets:	1 of 1	Last Saved: 02/08/18

2.0 PROPOSAL 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, 4.3, 4.4, etc. of this Appendix, as applicable.

To be filled out by ALL Projects:

1	Proposer Name (Company Name)	
2	Parent Company/Owner/Sponsor/Business Affiliation/etc	
3	Project Name	
4	Net AC Capacity of the Facility (MW)	
5	Proposed Facility Location in/near what City/Area	

6	TMK(s) of Facility Location (9 digits)²	
7	Point of Interconnection’s Circuit or Substation Name	
8	Proposal Contract Term (Years)	
9	Proposal Guaranteed Commercial Operations Date (MM/DD/YYYY)	
10	The Proposer hereby certifies that the Project meets all performance attributes identified in Section 2.1 of the RFP? (Yes/No)	
11	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)	
12	The Proposer hereby agrees to provide Development Period Security and Operating Period Security as set forth in the applicable RDG PPA or Standard Form Contract. (Yes/No)	
13	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)	
14	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 with the Company (Yes/No)	
15	Project Generation Technology	
16	Net Energy Potential (NEP) Projection for the Facility (MWh)	
17	Lump Sum Payment (\$/Year)	
18	Price for Purchase of Electric Energy (\$/MWh) (for wind projects only)	
19	Does Project include an Energy Storage Component? (Yes/No)	
If the Project includes an Energy Storage Component:		
20	Project Energy Storage Technology	
21	Energy Storage Capability for the Facility (MW and MWh)	
22	Is the Project capable of being 100% charged from the grid after the 5 year ITC recapture period? (Yes/No)	

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 a representative for the Proposer **authorizing the submission** of the Proposal
- Fully executed **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.)

² 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)

- Completed applicable **Interconnection Requirement Study Data Request form** for the proposed technology and **project single line diagram(s)**. **Models for equipment and controls, list(s)** identifying components and **respective files** (for inverters and power plant controller), and **complete documentation with instructions** as specified in the Data Request form shall be submitted within the respective timeframes specified in Section 5.1 of the RFP.³ (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

2.2.2 **Executive Summary of Proposal.** The executive summary must include an approach and description of the important elements of the Proposal, including additional descriptions if a minor variation to the Proposal 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 variations are proposed, a **table summarizing the differences for the variations shall be included.**

2.2.3 **Pricing information.** Pricing information must be filled out in the Section 2.0 Proposal Summary Table above. If variations are proposed, each variation's pricing summary must be identified in a similar pricing table in Sections 4.2, 4.3, 4.4, etc. as applicable. Provide any 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:

- Facility Generation Size (MW_{AC} and MW_{DC})
- Net Maximum Output Capacity of the Facility at the Point(s) of Interconnection (MW_{AC})
- Identified Available Hosting Capacity of the Distribution-level (12 kV or less) Circuit Facility Interconnecting to (MW_{AC})
- Technology Type
- Number of Generators
- Rated Output of each Generator
- Generator Facility Design Characteristics

For projects that include a storage component:

- Technology Type (i.e. lithium ion battery)
- Discharge Duration (hours)

³ If the Models, lists, respective files and complete documentation are not submitted with the Proposal upload, they shall be submitted via PowerAdvocate's Messaging as attachments within the respective timeframes specified in Section 5.1 of the RFP.

- Storage Capacity (i.e. amount of energy released to fully discharge and amount of energy required to fully charge, in MW and MWh)
- Operational Limitations, such as, but not limited to: number of charge/discharge cycles per day-month-year (see the energy discharge requirement in Section 1.2.12 and 1.2.14 of the RFP).
- Minimum and Maximum Operational Ranges, such as minimum and maximum required state of charge
- Round Trip Efficiency at rated power measured at the Point of Interconnection (i.e. discharge energy divided by charge energy, expressed as a percentage)
- Round Trip Efficiency using full duty cycle for a fixed duration measured at the Point of Interconnection (%)

2.3 FINANCIAL

Provide the following financial information identified below.

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
- Company-Owned Interconnection Facilities
- Land
- Annual O&M

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 Hawaii 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

2.4 CONTRACT EXCEPTIONS AND FINANCIAL COMPLIANCE

2.4.1 If Proposers elect to propose modifications to the Model PPA, **provide a Microsoft Word red-line version of the Model 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 PPA with their Proposal submission will be deemed to have accepted the Model PPA in its entirety.

The Standard Form Contract for projects 250 kW to 2.5 MW will be preapproved by the Commission and as a result, modifications may not be proposed to it.

2.4.2 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.

2.5 SITE CONTROL

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. **Provide documentation set forth in RFP Section 4.3 to prove Site Control.**

2.5.2 Provide a **map of the Project site** that clearly identifies:

- Location of the parcel on which the site is located
- Tax map key number (9-digit format: Island Number (1 digit), Zone Number (1 digit), Section Number (1 digit), Plat Number (3 digits, add leading zeros if less than 3 digits), Parcel Number (3 digits, add leading zeros if less than 3 digits)

- Site boundaries (if the site does not cover the entire parcel)
- Total acreage of the site
- Point(s) of Interconnection
- Relationship of the site to other local infrastructure

2.5.3 Provide a **site layout plan** which illustrates:

- Proposed location of all equipment
- Proposed location of all facilities on the site, including any proposed line extensions

2.5.4 Describe the **Interconnection route** and include:

- Site sketches of how the facility will be interconnected to the Company's System (above-ground and/or underground)
- Identify the approximate latitude and longitude of the proposed Point of Interconnection, in decimal degrees format, to six (6) decimal places.
- Description of the rationale for the interconnection route

2.5.5 Identify **any rights-of-way or easements** that are required for access to the site or for interconnection route:

- Describe the status of rights-of-way or easement acquisition
- Describe the plan for securing the necessary rights-of-way or easement, including the proposed timeline

2.6 ENVIRONMENTAL REVIEW, PERMITTING PLAN, ENVIRONMENTAL COMPLIANCE/IMPACTS

2.6.1 Describe your **overall land use and environmental permits and approvals strategy** and approach to obtaining successful, positive results from the agencies and authorities having jurisdiction, including:

- Explanation of the conceptual plans for siting
- Studies/assessments
- Permits and approvals
- Gantt format schedule which identifies the sequencing of permit application and approval activities and critical path. (Schedule must be in MM/DD/YY format.)

2.6.2 Discuss the **City Zoning and State Land Use Classification**:

- Identify present and required zoning and the ability to site the proposed Project within those zoning allowances.
- Identify present and required land use classifications and the ability to site the proposed Project within those classifications.
- Provide evidence of proper zoning and land use classifications for selected site and interconnection route.
- If changes in the above are required for the proposed Project, provide a plan and timeline to secure the necessary approvals.

2.6.3 Identify all required discretionary and non-discretionary **land use, environmental and construction permits, and approvals** required for development, financing, construction, and operation of the proposed Project, including but not limited to zoning changes, Environmental Assessments, and/or Environmental Impacts Statements.

Provide a **listing of such permits and approvals** indicating:

- Permit Name
- Federal, State, or Local agencies and authorities having jurisdiction over the issuance
- Status of approval and anticipated timeline for seeking and receiving the required permit and/or license
- Explanation of your basis for the assumed timeline
- Explain any situation where a permit or license for one aspect of the Project may influence the timing or permit of another aspect (e.g. a case where one permit is contingent upon completion of another permit or license), if applicable.
- Explain your plans to secure all permits and approvals required for the Project.

2.6.4 Provide a **preliminary environmental assessment of the site** (including any pre-existing environmental conditions) and potential short- and long-term **impacts** associated with, or resulting from, the proposed Project – including direct, indirect, and cumulative impacts associated with development, construction, operation, and maintenance of the proposed Project in every area identified below. Discuss if alternatives have been or will be considered. The assessment shall also include Proposer’s short- and long-term plans to mitigate such impacts and explanation of the mitigation strategies for, but not limited to, each of the major environmental areas as presented below:

- Natural Environment
 - Air quality
 - Biology (Natural habitats and ecosystems, flora/fauna/vegetation, and animals, especially if threatened or endangered)
 - Climate
 - Soils
 - Topography and geology
- Land Regulation
 - Land Uses, including any land use restrictions and/or pre-existing environmental conditions/contamination
 - Flood and tsunami hazards
 - Noise
 - Roadways and Traffic
 - Utilities
- Socio-Economic Characteristics
- Aesthetic/Visual Resources
- Solid Waste
- Hazardous Materials
- Water Quality
- Public Safety Services (Police, Fire, Emergency Medical Services)
- Recreation
- Potential Cumulative and Secondary Impacts

2.6.5 Provide a **decommissioning plan**, including:

- Developing and implementing program for recycling to the fullest extent possible, or otherwise properly disposing of installed infrastructure, if any, and

- Demonstrating how restoration of the Site to its original ecological condition is guaranteed in the event of default by the Proposer in the applicable Site Control documentation.

2.7 CULTURAL RESOURCE IMPACTS

2.7.1 Provide a **plan to address the below requirements** as they pertain to the Project Site and interconnection route including the status of any consultant/s with expertise in this field that have been identified and/or contracted with, and documentation of any assessments or work that has been planned or performed to date. Identify any cultural, historical or natural resources in the area in question. For any impacts identified to the categories listed below, provide a mitigation strategy and the expected impact on the Project schedule. Detail the potential impacts of the Proposal on cultural resources in the short- and long-term and the Proposer's plan to mitigate such impacts. Proposers must provide as much information as possible to allow the Company to understand the considerations.

- Archaeological Resources
- Cultural Practices and Resources

2.8 COMMUNITY OUTREACH

2.8.1 Provide a **detailed Community Outreach Plan** to work with and inform neighboring communities and stakeholders and to provide them timely information during all phases of the Project. The plan shall address, but not be limited to, the following items:

- Project description
- Community scoping
- Project benefits
- Government approvals
- Development process
 - Identification of communities and other stakeholders that may be affected by the proposed Project:
 - How will they be affected?
 - What mitigation strategies will the Proposer implement?
 - Comprehensive communication strategy with affected communities and the general public regarding the proposed Project:
 - Describe frequency of communication
 - Provide source of information
 - Identify communication outlets
 - Describe opportunities, if any for affected communities and general public to provide the developer with feedback and comments on the proposed Project

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).

2.9 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. See Article 5 of the model RDG PPA.

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 Facility⁴ (24 hours x 365 days, 8760 generation profile)** for the provided RFP NEP 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**.

2.10.2 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 Model PPA or Standard Form Contract.

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

⁴ The projected hourly annual energy production profile is the projected output from the generating facility without curtailment and before any energy is directed to an energy storage component, if one will be provided.

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 Model PPA or Standard Form Contract, 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:

- Number of cycles per day, or equivalent 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 For projects greater than or equal to 1 MW in size, provide the appropriate completed **Interconnection Requirement Study Data Request form** for the proposed technology with the Proposal submission. (The forms can be found in the "1. Download Documents" tab as Appx B Att 2 Project Interconnection Data Data Request Form (PV Generation) or Appx B Att 3 Project Interconnection Data Request Form (Wind Generation) MSEXcel files.) Also provide all **project single line diagram(s)** with the Proposal submission. **Models for equipment and controls, list(s)** identifying components and **respective files** (for inverters and power plant controller), and **complete documentation with instructions** shall be submitted within the timeframes specified in Section 5.1 of the RFP.³ Proposers may also download the PSCAD model requirements memo labelled as Appx B Att 4 from the "1. Download Documents" tab also.

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 an **organizational chart** for the Project that lists the project participants and identifies the management structure and responsibilities.

- 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 firm 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 Threshold Requirement and demonstrate the member(s) firm commitment to provide services to the Proposer.

2.13.3 Identify those **members of the team with experience and qualifications**, including affiliates, and their principal personnel who will be involved in the project contracting to sell and deliver energy. If the Proposer consists of multiple parties, such as joint ventures or partnerships, 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.

2.13.4 Provide a **management chart** which lists the key personnel dedicated to this Project and provide **biographies / resumes** of the key personnel, including position, years of relevant experience, and similar project experience. 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 Hawai'i.

2.13.5 Provide a **listing in the table format below, of all renewable energy generation or energy storage projects** the Proposer has successfully developed or that are currently under construction. Describe the Proposer's role and responsibilities associated with these projects (lead developer, owner, investor, etc.). Provide the following information as part of the response:

Project Name	Location (City, State)	Technology (wind, PV, hydro, plus storage, etc.)	Size (MW/ MWh)	Commercial Operation Date	Offtaker (if applicable)	Role & Responsibilities
1.						
2.						
3.						
...						

2.14 STATE OF PROJECT DEVELOPMENT AND SCHEDULE

2.14.1 Provide a **project schedule in GANTT chart format** with complete **critical path activities** identified for the Proposal from the Notice of Selection of the Proposal to the start of Commercial Operations.

- The **schedule** must include:
 - Interconnection Requirement Study (IRS) assumptions
 - Anticipated contract negotiation period assumptions
 - Regulatory assumptions
 - Anticipated submittal and approval dates for permitting (including but not limited to environmental and archaeological compliance)
 - Siting and land acquisition
 - Cultural Resource implications and mitigation activities
 - Community outreach and engagement activities
 - Energy resource assessment
 - Financing
 - Engineering
 - Procurement
 - Facility construction including construction management events
 - Applicable reporting milestone events specified in the Model PPA or Standard Form Contract
 - 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 PPA or Standard Form Contract and/or other agreements.

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

- Identification of contracting/subcontracting plans
- Modular construction
- Safety plans⁵
- 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.

⁵ 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.

- 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 VARIATIONS

Proposers submitting a minor variation to a Proposal must provide the **details of each variation in the below section(s)**. In each proposal variation section below, Proposers must add the applicable tables from Section 2.0 Proposal Summary of this Appendix B. The information in these tables should reflect the information for the variation being proposed. Additionally, Proposers must identify all changes to the information provided in response to Sections 2.1 through 3.0 of this Appendix B for the proposal variation. If differences are not identified for the Section 2.0 Proposal Summary or a particular section in Sections 2.1 through 3.0, the Company will assume that the information contained in the base Proposal also applies to the proposal variation.

Note: Section 2.2.2 above requires a table summarizing the differences among the variations, if variations are proposed.

4.1 PROPOSAL VARIATION 1 (BASE VARIATION)

N/A (All information for the base variation is identified in sections 2.0 through 3.0 above.)

4.2 PROPOSAL VARIATION 2 (AS NECESSARY)

Identified changes to Sections 2.0 through 3.0, as required for the variation.

Appendix B Attachment 1

**Certification of Counsel for Proposer
Hawaiian Electric Company, Inc., Maui Electric Company, Ltd, and Hawai'i Electric Light
Company, Inc.**

Pursuant to Section 1.7.4 of Hawaiian Electric Company, Inc., Hawai'i Electric Light Company, Inc. and Maui Electric Company, Limited's (each a "Company" and collectively, the "Companies") Request For Proposals for Community-Based Renewable Energy Projects for Low- and Moderate-Income Subscribers, Island of Maui ("RFP"), the Companies may require legal counsel who represent multiple unaffiliated proposers to sign a certification that they have not shared confidential information obtained through the representation of one proposer with any other unaffiliated proposer.

Accordingly, by signing below, I hereby acknowledge, agree and certify that:

(1) in connection with the RFP, I represent the following company that has submitted a proposal(s) for the RFP: _____ ("Proposer");

(2) irrespective of any proposer's direction, waiver or request to the contrary, I will not share a proposer's confidential information or the Company's confidential information associated with such proposer, including, but not limited to, a proposer's or Company's negotiating positions, with third parties unaffiliated with Proposer (by contract or organizational structure), including other proposers responding to the RFP;

(3) the Companies may rely on this certification for purposes of the RFP; and

(4) at the conclusion of power purchase agreement negotiations, if any, the Company may require me to sign a certificate certifying that I have not shared a proposer's confidential information or the Company's confidential information associated with such proposer, including, but not limited to, a proposer's or Company's negotiating positions, with third parties unaffiliated with Proposer (by contract or organizational structure), including other proposers responding to the RFP.

Name (print)

Law Firm (if applicable)

Signature

Date

Section 1.7.4 of the RFP provides in relevant part that:

In submitting a Proposal in response to this RFP, each Proposer certifies that the Proposal has been submitted in good faith and without fraud or collusion with any other unaffiliated person or entity. The Proposer shall acknowledge this in the Response Package submitted with its Proposal. Furthermore, in executing the NDA provided as Appendix E, the Proposer agrees on behalf of its Representatives (as defined in the NDA) that the Company's negotiating positions will not be shared with other Proposers or their respective Representatives.

In addition, in submitting a Proposal, a Proposer will be required to provide Company with its legal counsel's written certification in the form attached as Appendix B Attachment 1 certifying in relevant part that irrespective of any proposer's direction, waiver, or request to the contrary, that the attorney will not share a proposer's confidential information associated with such Proposer with others, including, but not limited to, such information such as a Proposer's or Company's negotiating positions. If legal counsel represents multiple unaffiliated proposers whose Proposals are selected for the Final Award Group, such counsel will also be required to submit a

Appendix B Attachment 1

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.

Appendix B Attachment 2

**Project Interconnection Data Request
FOR PV GENERATION**

Updated 5/21/2019

PROJECT: _____

DATE: _____

(Nonexclusive Preliminary List)

ALL ITEMS ARE REQUIRED AND ALL RESPONSES MUST BE FILLED UNLESS NOT APPLICABLE.

	Response
1) Please provide a plan map of the Non-Utility Generation (NUG) facility. Please indicate the interconnection point to the HECO system.	
2) Please provide the following generation and load information for the NUG facility:	
a. Gross and net output of the facility	
b. Expected KW and KVAR loads including, but not limited to, generators' auxiliary load curve, process load(s) profile(s), etc.	
c. Expected minimum and maximum MW and MVAR "import from" AND "export to" HECO.	
3) Please provide Single-Line Diagram(s), Three-Line Diagram(s), and Protective Relay List & Trip Schedule for the generation and interconnection facilities:	
a. The Single-line diagram(s) and Three-line diagram (s) should include:	
i. For main and generator step up transformer(s), please show:	
• Transformer voltage and MVA ratings.	
• Transformer impedance(s).	
• Transformer winding connections and grounding. If neutrals are grounded through impedance, please show the impedance value.	
ii. The protective relaying and metering for the generators, transformers, buses, and all other main substation equipment.	
iii. For the potential transformers, please indicate the type, quantity, ratio, and accuracy rating.	
iv. For the current transformers, please indicate the type, quantity, ratio, and accuracy rating, and thermal rating factor.	
v. Auxiliary power devices (e.g. capacitors, reactors, storage systems, etc.) and their rating(s); additional inquiries may be made to obtain technical data for these devices.	
vi. For the interconnection / tie lines (overhead or underground) and the plant's generation system, please provide the following, as applicable:	
• Installation details such as cross-section(s), plan and profiles, etc.	
• Conductor data such as size, insulation, length etc.	
• Continuous and emergency current ratings.	
• Voltage rating (nominal and maximum KV).	
• BIL rating.	
• Positive, negative, and zero-sequence impedances (resistance, reactance, and susceptance)	
• Capacitance or charging current.	
• Short-circuit current capability.	
vii. Include station power for facility and all applicable details.	
viii. All applicable notes pertaining to the design and operation of the facility.	
b. The Protective relay list & trip schedule should list the protected equipment; the relay description, type, style number, quantity, ANSI Device No., and range; and the breaker(s)/switching device(s) tripped, for both the generator protection and the interconnection facilities protection.	
c. Please provide both a paper and an electronic version (e.g. dgn, dxf, or pdf) of the single-line diagram(s) and the protective relay list & trip schedule.	
d. Single-line diagrams should be provided for both the generation plant and the interconnection substation.	

Appendix B Attachment 2

**Interconnection Requirement Study - Data Request
 FOR PV GENERATION**

Updated 5/21/2019

PROJECT: _____

DATE: _____

(Nonexclusive Preliminary List)

ALL ITEMS ARE REQUIRED AND ALL RESPONSES MUST BE FILLED UNLESS NOT APPLICABLE.

		Response
4)	For the PV Inverter Based Generating Facility, please provide the following data:	
	a. Inverter manufacturer, Type, Size, Impedances. Attach copy of inverter data sheet.	
	b. Power Factor Range Capability	
	c. Inverter Reactive Power Capability Curve	
	d. Auxillary loads (P, Q, Power Factor)	
	e. Ramp rates (up, down) Typical and Measured Proxy Data	
	f. Inverter's Internal Isolation Transformer Grounding Method, if used (i.e. effectively grounded, resonant grounded, low inductance grounded, high-resistance grounded, low-resistance grounded, ungrounded). If the transformer is not solidly grounded, provide the impedance value for the grounding neutral and the impedance for the isolation transformer.	
	g. Diagram for Inverter's internal isolation transformer	
	h. Switching and service restoration practice	
	i. Protection data (voltage ride-through and trip settings, frequency ride-through and trip settings etc.). Include setpoint and clearing time ranges for voltage and frequency settings.	
	j. Details of filters etc. at Point of Interconnection	
	k. Description of harmonic spectrum of inverter injection (order, magnitude)	
	l. Description of PV inverter with respect to varying levels of solar irradiance	
5)	Energy Storage System, if applicable	
	a. Operation characteristics	
	b. Voltage level	
	c. Capacity (how long and how much can the battery support)	
	d. Deployment strategy/schedule	
	e. Energy storage system data sheet	
6)	For the PV plant's collector system, please provide the following, as applicable:	
	a. Conductor data such as size, insulation, etc.	
	b. Continuous and emergency current ratings.	
	c. Voltage rating (nominal and maximum kV).	
	d. BIL rating.	
	e. Positive, negative, and zero-sequence impedances (resistance, reactance, and susceptance).	
	f. Capacitance or charging current.	
	g. Short-circuit current capability.	

Appendix B Attachment 2

**Interconnection Requirement Study - Data Request
 FOR PV GENERATION**

Updated 5/21/2019

PROJECT: _____

DATE: _____

(Nonexclusive Preliminary List)

ALL ITEMS ARE REQUIRED AND ALL RESPONSES MUST BE FILLED UNLESS NOT APPLICABLE.

		Response
7)	Please provide the following software models that accurately represent the Facility:	
	a. Validated PSS/E load flow model up to the point of interconnection. The PSS/E model shall include the main transformer, collection system, generator step-up transformers, inverter systems, and any other components including capacitor banks, energy storage systems, DVAR, etc. An equivalent representation of the collection system, generator step-up transformers, and inverter systems is acceptable. Documentation on the model shall be provided.	
	b. Validated PSS/E dynamic model for the inverter; and other components including energy storage system, DVAR, etc. if applicable. The inverter model shall include the generator/converter, electrical controls, plant-level controller, and protection relays. Generic and Detailed models shall be provided. Documentation on the model(s) shall be provided, including the PSS/E dyre file with model parameters.	
	i. Generic models shall parameterize models available within the PSS/E standard model library.	
	ii. Detailed models shall be supplied by the vendor/manufacturer as user-written models. The uncompiled source code for the user-written model shall be provided to ensure compatibility with future versions of PSS/E. In lieu of the uncompiled source code, a compiled object file and applicable library files shall be provided in PSS/E versions 33 AND 34 format. Updates of the object file compatible with future PSS/E versions must be provided as requested for the life of the project as written in the power purchase agreement. Documentation shall include the characteristics of the model, including block diagrams, values, names for all model parameters, and a list of all state variables.	
	c. Validated PSCAD model of the inverter; and other components including energy storage system, DVAR, auxiliary plant controllers, etc. if applicable. Documentation on the model(s) shall be provided. Refer to PSCAD Technical Memo for model requirements.	
	d. Overlaid plots validating the performance of the three dynamic models for a three-phase fault. Plots shall include voltage, real and reactive power, real and reactive current.	
	e. Voltage plot validating the performance of inverter to meet the Companies' Transient Overvoltage (TrOV-2) policy. Plot shall show the inverter trip and resulting voltage and current waveforms. Refer to Appendix E of Companies' Grid Supportive Utility-Interactive Inverter Qualification Requirements.	
	f. Validated Aspen Oneliner short circuit model that accurately represents the facility (including energy storage system if applicable), and is valid for all faults conditions anywhere on the Utility system. Documentation on the model(s) shall be provided. (OTHERWISE SEE ADDITIONAL TABS FOR REQUIRED INFORMATION TO MODEL INVERTER AS A GENERATOR OR A VOLTAGE CONTROLLED CURRENT SOURCE)	
8)	For the main transformer and generator step-up transformers, please provide:	
	a. Transformer voltage and MVA ratings, and available taps. Attach copy of transformer test report or data sheet	
	b. The tap settings used.	
	c. The LTC Control Scheme.	
	d. Transformer winding connections and grounding used. If the transformer is not solidly grounded, provide the impedance value for the grounding method.	
	e. Positive, negative, and zero sequence impedance values.	
9)	For the circuit breakers and fault-clearing switching devices, including the generator breakers, please provide:	
	a. The voltage, continuous current and interrupting capability ratings.	
	b. The trip speed (time to open).	

Appendix B Attachment 2

**Interconnection Requirement Study - Data Request
 FOR PV GENERATION**

Updated 5/21/2019

PROJECT: _____

DATE: _____

(Nonexclusive Preliminary List)

ALL ITEMS ARE REQUIRED AND ALL RESPONSES MUST BE FILLED UNLESS NOT APPLICABLE.

		Response
10)	For the power fuses, please provide:	
	a. The manufacturer, type, size, and interrupting capability.	
	b. The minimum melt and total clearing curves.	
11)	For the protective relaying, please provide:	
	a. Data for the CTs used with the relaying including the manufacturer, type of CT, accuracy class, and thermal rating factor.	
	b. Data for the PTs used with the relaying including the manufacturer, type of PT, voltage ratings, and quantity.	
12)	Please provide protective relay settings for existing and proposed generators, including but not limited to, reverse power, negative sequence, over and underfrequency, over and under voltage, volts per hertz, etc.	

Appendix B Attachment 2

Instructions:

Please fill in the data in the green blanks below

(Note: This does not include the internal isolation transformer, if used)

[1] Maximum rated output power = kVA

[2] Impedances in **Per Unit** based on kVA from [1]

	R	X
Subtransient =	<input type="text"/>	<input type="text"/>
Transient =	<input type="text"/>	<input type="text"/>
Synchronous =	<input type="text"/>	<input type="text"/>
Negative Sequence =	<input type="text"/>	<input type="text"/>
Zero Sequence =	<input type="text"/>	<input type="text"/>

[3] Neutral impedance (if any) in actual **Ohms**:

R	X
<input type="text"/>	<input type="text"/>

NOTE: These parameters should reflect the inverter response for all types of faults at any point on the electrical system to which the inverter is connected. This includes faults at the inverter output terminals, and also on the 138 kV transmission system. If the stated parameters do not cover this range, please state the adjustments needed to these parameters to accurately represent the inverter response across this range.

These parameters will be used to model the inverter in the Aspen Oneliner program as shown in the sample dialog box below:

Generating Unit Info

ID= Unit rating= MVA

Impedances (pu based on unit MVA)

Subtransient	<input type="text" value="0.1"/>	+j	<input type="text" value="0.1"/>	<input type="button" value="Fill"/>
Transient	<input type="text" value="0.1"/>	+j	<input type="text" value="0.1"/>	
Synchronous	<input type="text" value="0.1"/>	+j	<input type="text" value="0.1"/>	
- sequence	<input type="text" value="0.15"/>	+j	<input type="text" value="0.15"/>	
0 sequence	<input type="text" value="9999"/>	+j	<input type="text" value="9999"/>	

Neutral Impedance (in actual Ohms)

<input type="text" value="0"/>	+j	<input type="text" value="0"/>
--------------------------------	----	--------------------------------

Scheduled generation. Enter MVAR for PQ buses only

MW= <input type="text" value="0"/>	MVAR= <input type="text" value="0"/>
------------------------------------	--------------------------------------

P and Q limits (MW and MVAR)

Pmax= <input type="text" value="9999"/>	Qmax= <input type="text" value="9999"/>
Pmin= <input type="text" value="-9999"/>	Qmin= <input type="text" value="-9999"/>

Appendix B Attachment 2

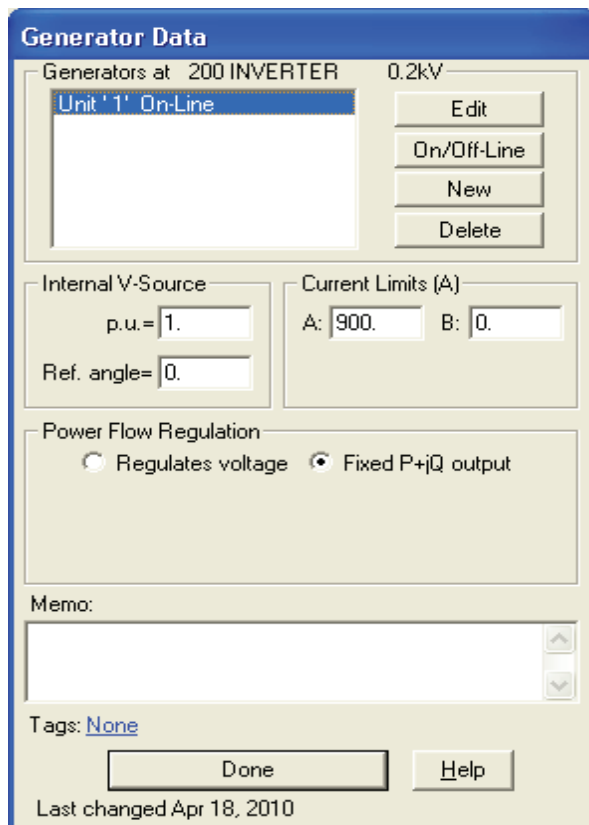
Instructions:

Please fill in the data in the green blanks below

- [1] Internal open circuit voltage
Magnitude = Per Unit
Angle = Degrees
- [2] AC Output Current Limit = Amps

NOTE: These parameters should reflect the inverter response for all types of faults at any point on the electrical system to which the inverter is connected. This includes faults at the inverter output terminals, and also on the 138 kV transmission system. If the stated parameters do not cover this range, please state the adjustments needed to these parameters to accurately represent the inverter response across this range.

These parameters will be used to model the inverter in the Aspen Oneliner program as shown in the sample dialog box below:



Appendix B Attachment 2

Instructions:

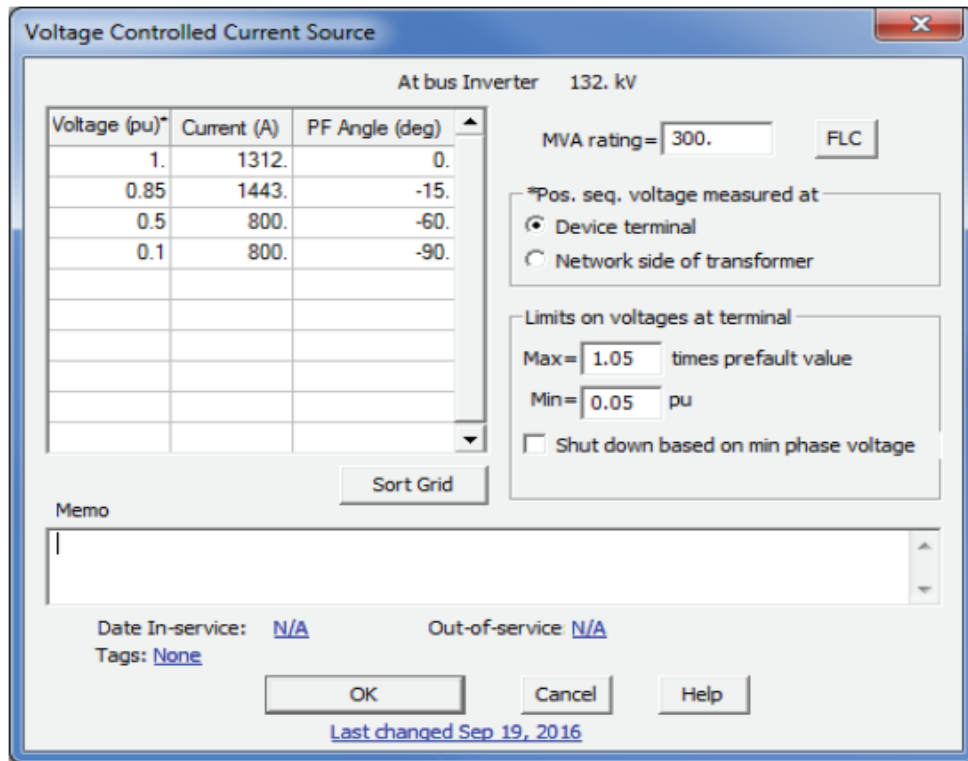
Please fill in the data in the green blanks below

- [1] Inverter MVA Rating: MVA
- [2] Voltage-Current Characteristics:

Voltage PU	Current (A)	PF Angle (deg)
- [3] Location of Voltage Measurement:

	Device Terminal OR
	Network side of Transformer
- [4] Maximum Voltage: Times prefault value
- [5] Minimum Voltage Per Unit

These parameters will be used to model the inverter in the Aspen Oneliner program as shown in the sample dialog box below:



Appendix B Attachment 2

Instructions:

Please fill in the data in the green blanks below

(Note: This is not required if an internal isolation transformer is not used)

[1] Transformer rated power = kVA

[2] Winding Configuration
 Inverter Side = Delta/Wye
 Customer Side = Delta/Wye

[2] Impedances in **Per Unit** based on kVA
 Positive Sequence = R X
 Zero Sequence =

[3] Neutral impedance (if any) in actual **Ohms**:
 R X

These parameters will be used to model the inverter in the Aspen Oneliner program as shown in the sample dialog box below:

2-Winding Transformer Data

100 480 V TERM 0.48kV - 200 INVERTER 0.2kV

Name= INV ISOL TX Ckt ID= 1 MVA1= 0.25 MVA2= 0.25 MVA3= 0.25

MVA base for per-unit quantities= 0.25 Change

Y-D, delta lags (Yd 1)

R= 0.01 X= 0.03
 B= 0.
 Ro= 0.01 Xo= 0.03
 Bo= 0.

480 V TERM 0.48 kV INVERTER 0.2 kV Neutral grounding Z (ohms)

Tap kV= 0.48 Tap kV= 0.2 Zg1= 14. +j 0.

G1*= 0. G2*= 0.
 B1*= 0. B2*= 0.
 G10*= 0. G20*= 0.
 B10*= 0. B20*= 0.

*Based on system MVA Metered at: 480 V TERM 0.48 kV

Memo:

Tags: None

LTC... Swap sides OK Cancel Help

Last changed Apr 18, 2010

Appendix B Attachment 3

HECO FACILITY TECHNICAL MODEL REQUIREMENTS AND REVIEW PROCESS

March 17, 2020

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1 INTRODUCTION

This document summarizes requirements of generation facility technical model submittals for request for proposals for variable renewable dispatchable generation and energy storage and describes the review process for model submittals.

2 FACILITY TECHNICAL MODEL REQUIREMENTS

To fully investigate impacts of the proposed generation facility on Hawaiian Electric's system and correctly identify any mitigation measures, the proposed generation facility technical model, along with related technical documents, will need to be submitted as part of the project interconnection review and prior to the Interconnection Requirements Study (IRS). The generation facility technical model includes:

1. PSCAD model
2. Generic PSS/E power flow model
3. User defined PSS/E dynamic model
4. Generic PSS/E dynamic model, and
5. ASPEN model

Along with the technical models, following documents should also be submitted for review:

6. User manual for all technical models
7. Generation facility one-line diagram
8. Generation unit manufacturer datasheet
9. Generation unit reactive power capability curve
10. Overlaid generation facility technical model output data for three-phase fault and single-phase fault. (Sample plots are shown in Appendix A)

2.1 General requirements for all technical models

All technical models need to represent the whole generation facility, not only a generation unit such as one inverter. At minimum, the following equipment shall be included in the generation facility model:

1. Generation unit, such as inverter with DC side model, rotation machine with model of exciter and governor.
2. Step up transformer
3. Collection system
4. Main interconnection transformer, or GSU, with its tap changer if applicable
5. Grounding transformer
6. Conductor
7. Var compensation device, such as cap bank or STATCOM, if applicable
8. Power plant controller (not for ASPEN model)
9. Documentation
10. Gen-tie line (as applicable)

An equivalent representation of the collection system, generator step-up transformers, and inverter systems is acceptable.

2.2 Requirements for generation facility PSCAD model

In addition to the general requirements mentioned above, the generation facility PSCAD model shall satisfy requirements as described in the document "PSCAD Model Requirements Rev. 9" provided by Hawaiian Electric.

2.3 Requirements for generation facility generic PSS/E power flow model

The generation facility PSS/E power flow model shall be provided for both PSS/E version 33 and version 34. Besides the general requirements mentioned above, the following modeling data shall be provided in the model:

1. Conductor
 - a. Impedance, both positive sequence and zero sequence
 - b. Rating: Rating A – normal rating, and Rating B – emergency rating
2. Transformer
 - a. Nominal voltages of windings
 - b. Impedance data: specified R and X
 - c. Tap ratios
 - d. Min and Max tap position limits
 - e. Number of tap positions
 - f. Regulated bus
 - g. Ratings: Rate A – normal rating; Rate B – emergency rating
 - h. Winding configuration
3. Reactive power compensation, if applicable
 - a. Fixed Shunts: G-Shunt (MW), B-Shunt (MVar)
 - b. Switched Shunts: Voltage limits (V_{hi} and V_{low}), mode of operation (fixed, discrete, continuous), regulated bus, Binit (MVar), steps and step size (MVar)
4. Generation unit
 - a. P_{max}
 - b. P_{min}
 - c. Q_{max}
 - d. Q_{min}
 - e. Name plate MVA
 - f. Transformer data: R_{Tran}, X_{Tran}, and G_{entap}.
 - g. Voltage control point

2.4 Requirements for generation facility user defined PSS/E dynamic model

The submitted user defined PSS/E dynamic model should meet the following requirements:

1. The generation facility PSS/E dynamic model shall be provided for both PSS/E version 33 and version 34.
2. The project shall be modeled at full output per the project's Interconnection Request.
3. User defined dynamic models must accurately model all the relevant control modes and characteristics of the equipment, such as:

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- a. All available voltage/reactive power control modes
 - b. Frequency/governor response control modes
 - c. Voltage and frequency ride-through characteristics
 - d. Power plant controller or group supervisory functionality
 - e. Appropriate aggregate modeling capability
 - f. Charging mode if applicable (e.g., for a battery energy storage device)
4. Dynamic model source code (.flx) or dynamic linked library (.dll), and PSS/E dyr file shall be provided.
 5. User defined dynamic model plant-specific settings shall comply with requirements listed in the Power Purchase Agreement, including ride-through thresholds and other specified control settings if applicable.
 6. User defined dynamic models related to individual units shall be editable in the PSS/E graphic user interface. All model parameters (CONS, ICONS, and VARS) shall be accessible and shall match the description in the model's accompanying documentation.
 7. User defined dynamic models shall have all their data reportable in the "DOCU" listing of dynamics model data, including the range of CONS, ICONS, and VARS numbers. Models that apply to multiple elements (e.g., park controllers) shall also be fully formatted and reportable in DOCU.
 8. User defined dynamic models shall be capable of correctly initializing and run through the simulation throughout the range of expected steady state starting conditions without additional manual adjustments.
 9. User defined dynamic models shall be capable of allowing all documented (in the model documentation) modes of operation without error.
 10. User defined dynamic model shall be accompanied by the following documentation:
 - a. A user's guide for each model
 - b. Appropriate procedures and considerations for using the model in dynamic simulations
 - c. Technical description of characteristics of the model
 - d. Block diagram for the model, including overall modular structure and block diagrams of any sub-modules
 - e. List of plant-specific settings, which may include:
 - i. Ride-through thresholds and parameters
 - ii. Plant-level voltage controller settings
 - iii. Power ramp rate settings
 - iv. ICON flag parameters for specific control modes
 - v. Deadbands
 - vi. Initial State of Charge (SOC)
 - f. Values, names and detailed explanation for all model parameters
 - g. List of all state variables, including expected ranges of values for each variable

2.5 Requirements for generation facility generic PSS/E dynamic model

The submitted generic PSS/E dynamic model should meet the following requirements:

1. All generic PSS/E dynamic models must be standard library models in PSS/E.

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2. The generation facility PSS/E dynamic model shall be provided for both PSS/E version 33 and version 34.
3. The project shall be modeled at full output per the project's Interconnection Request.
4. Generic dynamic models must accurately model all the relevant control modes and characteristics of the equipment, such as:
 - a. All available voltage/reactive power control modes
 - b. Frequency/governor response control modes
 - c. Voltage and frequency ride-through characteristics
 - d. Power plant controller or group supervisory functionality
 - e. Appropriate aggregate modeling capability
 - f. Charging mode if applicable (e.g., for a battery energy storage device)
5. PSS/E dyr file shall be provided.
6. Generic dynamic models' plant-specific settings should comply with requirements listed in the Power Purchase Agreement, including ride-through thresholds and other specified control settings if applicable.
7. Generic dynamic models shall be capable of correctly initializing and run through the simulation throughout the range of expected steady state starting conditions without additional manual adjustments.
8. Generic dynamic models shall be accompanied by the following documentation:
 - a. A user's guide for each model
 - b. Appropriate procedures and considerations for using the model in dynamic simulations
 - c. Technical description of characteristics of the model
 - d. List of plant-specific settings, which may include:
 - i. Ride-through thresholds and parameters
 - ii. Plant-level voltage controller settings
 - iii. Power ramp rate settings
 - iv. ICON flag parameters for specific control modes
 - v. Deadbands
 - vi. Initial State of Charge (SOC)

2.6 Requirements for generation facility ASPEN model

Besides the general requirements, validation results of single phase and three-phase fault current from the generation unit represented in the generation facility ASPEN model shall be provided.

3 GENERATION FACILITY TECHNICAL MODEL REVIEW PROCESS

To review the generation facility technical model, the following procedures are performed in the PSCAD and PSS/E environment. A review of the results will be documented and provided to the Customer for confirmation of model acceptance or further model updates.

3.1 Model review in PSCAD

- 1) Review model data against “Technical memo PSCAD requirements V5.pdf” provided by Hawaiian Electric. In this step, it will be determined whether the model is complete, generation facility settings are according to the Power Purchase Agreement, and if the model can be compiled and run without any error.
- 2) Initialization test:
In this step, the generation facility PSCAD model will be determined whether the model initialization is acceptable. Hawaiian Electric requires that:
 - a. The PSCAD model shall initialize as quickly as possible (e.g. <1-3 seconds) to user defined terminal conditions.
 - b. Project PSCAD model shall initialize properly and that the same power flow and voltage conditions shall be observed between the PSCAD and PSS/E models after initialization.
- 3) Voltage and frequency ride-through tests:
In this step, the generation facility PSCAD model ride-through performance will be reviewed by performing voltage and frequency ride-through simulations in PSCAD. The review will focus on the generation facility model dynamic response during and after ride-through and generation facility trip time.
- 4) Fault simulation tests:
Two types of fault tested at the Point of Interconnection bus of the generation facility will be performed in this step.
 - i) 3-phase to ground fault with 6-cycle clearing time (same as the PSS/E ring down model test described in the following section).
 - ii) 1-phase to ground fault simulation with 6-cycle clearing time.

In this test, fault current contribution from the generation facility observed in the simulation will be reviewed by comparing it against the generation facility technical document.

3.2 Model review in PSS/E

- 1) Model data review:
Review model data based on the requirements for PSS/E power flow and dynamic model provided by Hawaiian Electric. In this step, the review determines whether the model is complete, generation facility settings is according to the PPA, and model can be compiled and run without any error.
- 2) Flat start test:

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PSS/E models shall initialize correctly and be capable of successful “flat start” testing using the 20 Second No-Fault simulation: This test consists of a 20 second simulation with no disturbance applied.

3) Ring down test:

PSS/E models shall initialize correctly and be capable of successful “ring down” testing using the 60 Second Disturbance Simulation: This test consists of the application of a 3-phase fault for 6 cycles at POI bus, followed by removal of the fault without any lines being tripped. The simulation is run for 60 seconds to allow the dynamics to settle.

4) Voltage and frequency ride-through tests:

In this step, the generation facility PSS/E model ride-through performance will be reviewed by performing voltage and frequency ride-through simulation in PSS/E. The review will focus on the generation facility model dynamic response during and after ride-through and generation facility trip time.

4 TYPICAL ISSUES IDENTIFIED FROM THE FACILITY MODEL SUBMITTALS DURING THE PAST RFP PROCESS

1. Missing documentation

Only generation technical facility models are submitted, but no model user manual or any other documentation. Without model documentation, it is very difficult to know the correct procedures of using the technical models and identifying issues during the review.

2. Model incompleteness

Often, the model of a single generation unit, such as an inverter, is submitted instead of model of the whole generation facility, which is insufficient. The model of the generation facility should include models for all equipment listed in the section of "General requirements for all technical models".

3. Settings in the model

Type issues in this category are:

- The PSCAD and PSS/E model ride-through settings are not consistent with the settings defined in the Power Purchase Agreement.
- Generation MW is not set as defined.
- Model is set for 50 Hz instead of 60 Hz

4. Model function issues

Some models do not function as expected during different test scenarios. For example:

- Fault current contribution from the generation facility is higher than what is described in the generation facility datasheet
- Generation level is not stable as settings during the initialization test
- Long time oscillation observed in the ringdown test
- Ride-through performance does not reach requirements defined in the Power Purchase Agreement

REFERENCE

- [1] New England Iso Planning procedure – Interconnection planning procedure for generation and elective transmission upgrades
- [2] ERCOT Planning Guide, 2019
- [3] PJM MOD-032 Steady State, Dynamics, and Short Circuit Modeling Data Requirements and Reporting Procedures Document

APPENDIX A: SAMPLE OVERLAID GENERATION FACILITY TECHNICAL MODEL OUTPUT PLOT FOR THREE-PHASE FAULT

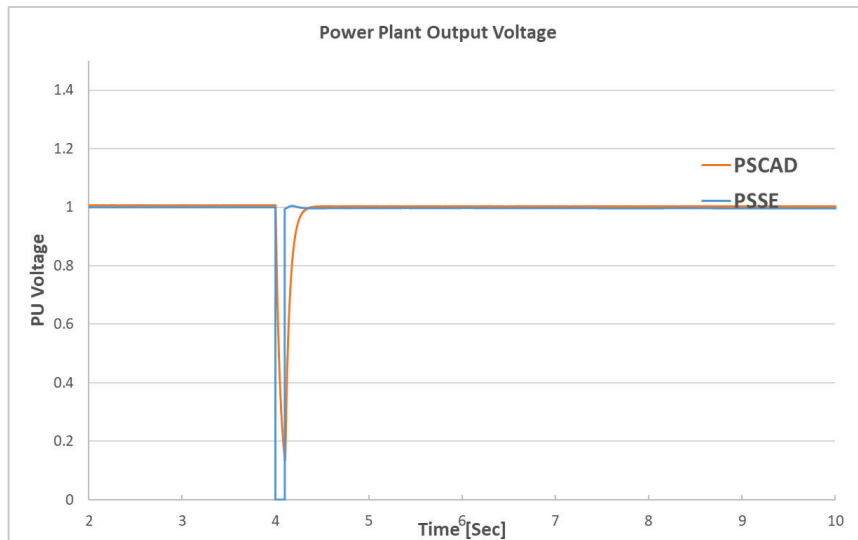


Figure 1: Overlaid plot for power plant voltage

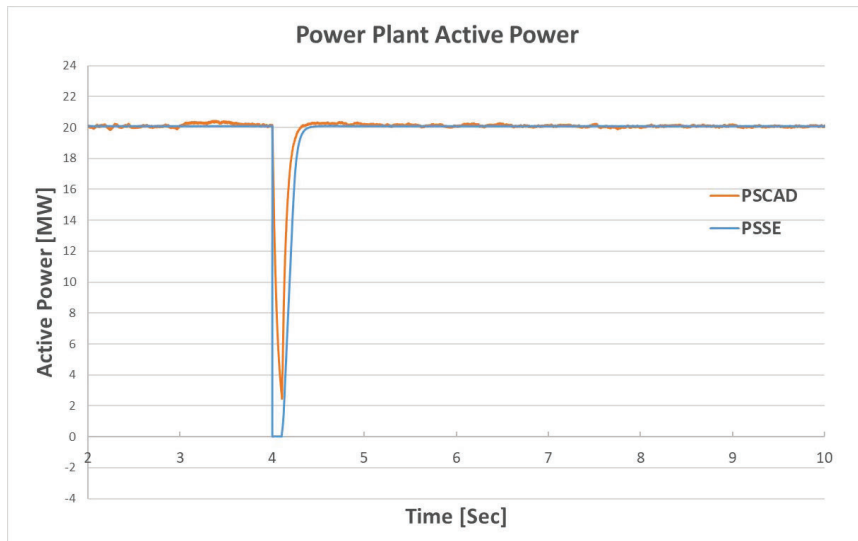


Figure 2: Overlaid plot for power plant active power generation

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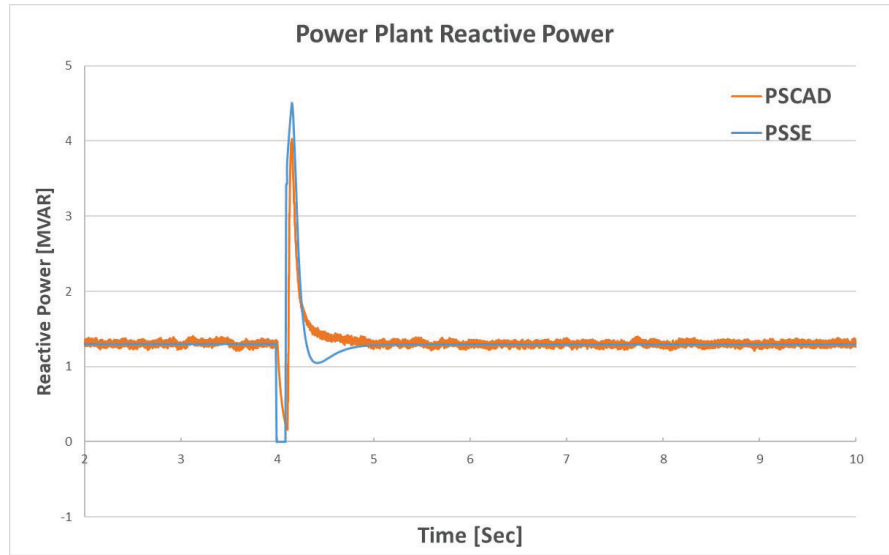


Figure 3: Overlaid plot for power plant reactive power generation

APPENDIX B: SAMPLE TEST SYSTEM TOPOLOGY INFORMATION

On weak grids such as island systems, it is important to test the models using a representative high Thevenin equivalent impedance.

A typical topology of testing circuit which represents Hawaiian Electric system for 46 kV project is shown in Figure 4. Sample 46 kV Thevenin equivalent impedance is available upon request for model testing.

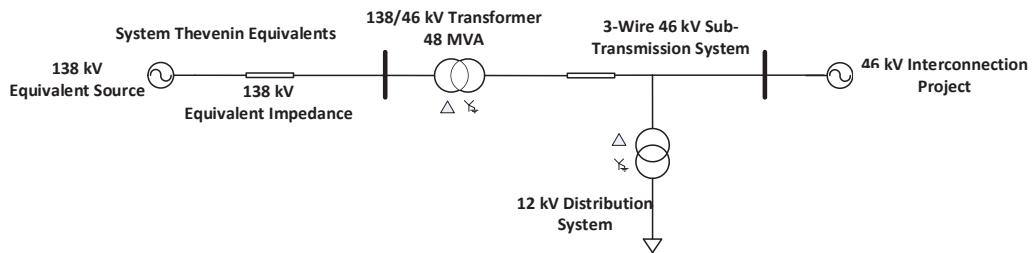


Figure 4: Testing circuit single line diagram for 46 kV project

A typical topology of testing circuit which represents Hawaiian Electric system for 138 kV project is shown in Figure 5. Sample 138 kV Thevenin equivalent impedance is available upon request for model testing.

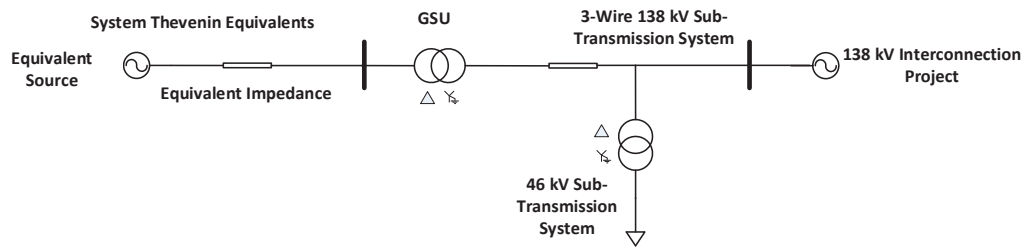


Figure 5: Testing circuit single line diagram for 138 kV project

PSCAD Model Requirements Rev. 9

Date: May 8, 2020
Prepared By: Andrew L. Isaacs
Lukas Unruh
Garth Irwin

This document includes the following attachments:

Attachment #1: PSCAD Model Test Checklist

Attachment #2: PSCAD Model Requirements Supplier Checklist

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Introduction

Specific model requirements for a PSCAD study depend on the type of study being done. A study with a scope covering weak system interconnections, ride-through evaluation, short term¹ event response, and fast control interaction with nearby devices (for example) would require a model which has the following characteristics. Some specialty studies may require other features. Refer to “Attachment #1: PSCAD Model Test Checklist” and “Attachment #2: PSCAD Model Requirements Supplier Checklist”, appended to this document, for additional information on how these requirements may applied.

Model Accuracy Features

For the model to be sufficiently accurate, it must:

- A. *Represent the full detailed inner control loops of the power electronics.* The model cannot use the same approximations classically used in transient stability modeling, and should fully represent all fast inner controls, as implemented in the real equipment. Models which embed the actual hardware code into a PSCAD component are currently wide-spread, and this is the recommended type of model.²
- B. *Represent all control features pertinent to the type of study being done.* Examples include external voltage controllers, plant level controllers, customized PLLs, ride-through controllers, SSCI damping controllers and others. As in point A, actual hardware code is recommended to be used for most control and protection features. Operating modes that require system specific adjustment should be user accessible. Plant level voltage control should be represented along with adjustable droop characteristics. If multiple plants are controlled by a common controller, this functionality should be included.
- C. *Represent all pertinent electrical and mechanical configurations.* This includes any filters and specialized transformers. There may be other mechanical features such as gearboxes, pitch controllers, or others which should be modelled if they impact electrical performance within the timeframe of the study. Any control or dynamic features of the actual equipment which may influence behaviour in the simulation period which are not represented or which are approximated should be clearly identified.

¹ Example analysis periods could be 2 to 10 seconds from fault inception. Some studies could require longer periods.

² The model must be a full IGBT representation (preferred), or may use a voltage source representation that approximates the IGBT switching but maintains full detail in the controls. A three phase sinusoidal source representation is not acceptable. Models manually translated block-by-block from MATLAB or control block diagrams may be unacceptable because the method used to model the electrical network and interface to the controls may not be accurate, or portions of the controls such as PLL circuits or protection circuits may be approximated or omitted. Note that firmware code may be directly used to create an extremely accurate PSCAD model of the controls. The controller source code may be compiled into DLLs or binaries if the source code is unavailable due to confidentiality restrictions.

It is not recommended to assemble the model using standard blocks available in the PSCAD master library, as approximations are usually introduced, and specific implementation details for important control blocks may be lost. In addition, there is a significant risk that errors will be introduced in the process of manually assembling the model. For this type of manually assembled model, (not using a direct “real code” embedding process), extra care is required, and validation is required.

- D. *Have all pertinent protections modeled in detail for both balanced and unbalanced fault conditions.* Typically this includes various OV and UV protections (individual phase and RMS), frequency protections, DC bus voltage protections, converter overcurrent protections, and often other inverter specific protections. As in point A, actual hardware code is recommended to be used for these protection features.
- E. *Be configured to match expected site-specific equipment settings.* Any user-tunable parameters or options should be set in the model to match the equipment at the specific site being evaluated, as far as they are known. Default parameters may not be appropriate.

Model Usability Features

In order to allow study engineers to perform system analysis using the model, the PSCAD model must:

- F. *Have control or hardware options which are pertinent to the study accessible to the user.* Examples of this could include protection thresholds, real power recovery ramp rates, or SSCI damping controllers.³ Diagnostic flags (eg. flags to show control mode changes or which protection has been activated) should be visible to aid in analysis.
- G. *Be accurate when running at a simulation time step of 10 μ s or higher.* Often, requiring a smaller time step means that the control implementation has not used the interpolation features of PSCAD, or is using inappropriate interfacing between the model and the larger network. Lack of interpolation support introduces inaccuracies into the model at larger simulation time-steps. In cases where the IGBT switching frequency is so high that even interpolation does not allow accurate switching representation at 10 μ s (eg. 40 kHz), an average source approximation of the inverter switching may be used to allow a larger simulation time step².
- H. *Operate at a range of simulation time steps.* The model should not be restricted to operating at a single time step, but should be able to operate within a range (eg. 10 μ s – 20 μ s)
- I. *Have the ability to disable protection models.* Many studies result in inadvertent tripping of converter equipment, and the ability to disable protection functions temporarily provides study engineers with valuable system diagnostic information.
- J. *Include documentation and a sample implementation test case.* Test case models should be configured according to the site-specific real equipment configuration up to the Point of Interconnection. This would include (for example): aggregated generator model, aggregated generator transformer, equivalent collector branch, main step up transformers, gen tie line, and any other static or dynamic reactive resources. Test case should use a single machine infinite bus representation of the system, configured with an appropriate representative SCR, such as 2.5. Access to technical support engineers is desirable.
- K. *Have an identification mechanism for configuration.* The model documentation should provide a clear way to identify the specific settings and equipment configuration which will be used in any

³ Care should be taken to ensure that any user-settable options are not changed in a way that is not implementable in the real hardware, and that any selectable options are actually available at the specific site being considered. Discussion is recommended with the manufacturer prior to any changes being made in model configuration.

- study, such that during commissioning the settings used in the studies can be checked. This may be control revision codes, settings files, or a combination of these and other identification measures.
- L. *Accept external reference variables.* This includes real and reactive power ordered values for Q control modes, or voltage reference values for voltage control modes. Model should accept these reference variables for initialization, and be capable of changing these reference variables mid-simulation, ie. dynamic signal references.
 - M. *Be capable of initializing itself.* Once provided with initial condition variables, the model must initialize and ramp to the ordered output without external input from simulation engineers. Any slower control functions which are included (such as switched shunt controllers or power plant controllers) should also accept initial condition variables if required.
 - N. *Have the ability to scale plant capacity.* The active power capacity of the model should be scalable in some way, either internally or through an external scaling transformer⁴. This is distinct from a dispatchable power order, and is used for modeling different capacities of plant or breaking a lumped equivalent plant into smaller composite models.
 - O. *Have the ability to dispatch its output to values less than nameplate.* This is distinct from scaling a plant from one unit to more than one, and is used for testing plant behaviour at various operating points.
 - P. *Initialize quickly.* Model must reach its ordered initial conditions as quickly as possible (for example <5 seconds) to user supplied terminal conditions.

Study Efficiency Features

In addition, the following elements are required to improve study efficiency, model compatibility, and enable other studies which include the model to be run as efficiently as possible. If these features are not supported, additional discussion is required⁵:

- Q. Model should be compatible with Intel Fortran compiler version 12 and higher.
- R. Model should be compatible with PSCAD version 4.5.3 and higher.
- S. Model supports multiple instances of its own definition in the same simulation case.
- T. Model supports the PSCAD “timed snapshot” feature accessible through project settings.
- U. Model supports the PSCAD “multiple run” feature.
- V. Model does not use or rely upon global variables in the PSCAD environment.
- W. Model should not utilize multiple layers in the PSCAD environment, including ‘disabled’ layers.

⁴ A free publicly available scaling transformer suitable for this purpose is available in the E-Tran library.

⁵ Electrenix has parallelization tools available (E-Tran Plus for PSCAD) which can circumvent compatibility concerns in some cases.

Attachment #1: PSCAD Model Test Checklist

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Purpose

This document is a test checklist meant to accompany “PSCAD Model Requirements Rev. 9” provided above and “Attachment #2: PSCAD Model Requirements Supplier Checklist”. The procedures provided in this document are intended to provide an indication of the core model accuracy, performance, and usability features specified in the model requirements. These procedures cannot ultimately prove that the model is compliant with all requirements, as black box models usually hide the details of the equipment controls and protection. It is recommended that the equipment manufacturer supply additional confirmation that the model meets each individual requirement. The requirements in this document do not necessarily represent interconnection criteria for specific individual systems, and may be supplemented or adjusted based on interconnection region.

The tests outlined here are considered “basic”, and may be supplemented by more rigorous testing, including various fault types, depths, and durations, as well as more extensive protection testing and benchmarking against phasor models. This document is not intended to be a guide for thorough benchmarking between PSCAD, PSS/E, and actual equipment, and is subject to revision as the state of the art in EMT modeling evolves.

<i>Model test Summary</i>	
Model Test date:	
Project Name:	
Manufacturer:	
Equipment type: (eg. PV or Wind)	
Equipment version:	
Documentation file:	
Model Files supplied:	

Verification Procedure and Checklist

		Pass/Fail	Comments
<i>Vendor and site specific model verification</i>			
1a	The Vendor's name and the specific version of the model should be clearly observable in the .psc model file.		
1b	Documentation and supporting model filenames should not conflict with model version shown in the .psc model file.		
1c	Model is supplied with a test circuit which is configured for the site specific application. ⁶		
<i>"Real Code" model verification</i>			
2a	Controls are black-boxed, and no PSCAD master library control blocks are visible within control circuits. ⁷ If the model is not based on "real code", a separate validation report is required showing model comparison against hardware tests. ⁸		
<i>Model usability verification</i>			
3a	Model uses a timestep greater than 10 μs ⁹		
3b	Model allows a variation in simulation timestep		
3c	Model compiles using Intel FORTRAN version 12		
3d	Model initializes in 5 seconds or less with a POI level SCR of 2.5. Real power, reactive power, and RMS voltage should reach steady state by this time.		
3e	Model allows multiple instances of itself to be run together in the same case ¹⁰		
<i>Model electrical configuration verification</i>			
4a	Plant level electrical single line diagram (SLD) is included.		

⁶ The test circuit should model all relevant electrical components of the plant and contain a system equivalent. Parameters will be assumed to be site-specific, unless there are obvious indications otherwise, such as an incorrect grid base frequency.

⁷ Black-boxing of controls to a high level does not guarantee that real-code is embedded into the model, however the visibility of PSCAD master-library control blocks in the inner control loops (PLL, inner current controllers, etc.) suggest that the model is generic in nature. Model documentation may contain information on use of real-code in the model.

⁸ All aspects of the controller operation are required to be validated by utilizing a "hardware in loop" platform or other hardware test systems. Model should not be validated against other software models. Validations should include control responses to various types of faults, changes in power and voltage references, changes in system frequency, testing frequency response in sub and super-synchronous ranges, and testing of protection operation. Tests should also be performed under a variety of system strengths, including very weak systems. Other tests may also be required. The validation report is required along with any model updates that result from the more rigorous validation tests.

⁹ Models with timesteps less than 10 μs may be acceptable in situations where a small timestep does not significantly increase the runtime of the total simulation

¹⁰ Depending on specific application and whether E-Tran Plus for PSCAD is allowed to be used to overcome the limitation, this requirement may be waived.

4b	Generator step-up transformer(s) included, with impedance between 5 and 10% on generator base, and matches SLD. ¹¹		
4c	Lumped collector equivalent(s) included, with total charging equal to between 0.5 and 5% of plant rating, and matches SLD. ¹¹		
4d	Substation transformer(s) included, rated appropriately for plant size, and impedance between 6 and 12% on transformer base, and matches SLD. ¹¹		
4e	Model can be scaled to represent any number inverters/turbines, either using a scaling transformer or internal scaling.		
4f	All external devices included in the plant (such as STATCOMs) include appropriate models.		
<i>Plant controller verification</i>			
5a	Model includes power plant controller (PPC)		
5b	PPC accepts an external active power setpoint.		
5c	PPC accepts a voltage setpoint.		
5d	PPC has a mechanism to implement a settable voltage droop.		
5e	Overall plant responds to frequency changes by increasing or decreasing its active power as appropriate. This may be accomplished either at an inverter level or via the PPC. ¹²		
5f	Model initializes to the setpoints specified in the PPC. If droops or deadbands are utilized, the initial values may differ from the setpoints. ¹³		
5g	If external voltage control devices (STATCOM/DVAR, SVC, MSCs) are included in the plant, ensure that the voltage control of these devices is coordinated with the PPC, with no potential for VAR looping or oscillations.		
<i>Basic performance verification¹⁴</i>			
6a	Instantaneous voltage and current waveforms have minimal distortion, and no oscillations are observed.		

¹¹ Impedance range is for sanity checking only. Impedances outside this range may be allowed.

¹² Non-compliance with this item may not require model revision as frequency response may not be required in PSCAD models by some utilities. In this case, a description of the under/over frequency response capabilities of the actual equipment should be provided by the manufacturer.

¹³ If voltage control with droop is implemented, it is preferred that the PPC model requests an initial Q value to match the voltage setpoint. If no initial Q is requested, the voltage setpoint can be biased by the initial Q before it is sent to the PPC. If a non-zero deadband is included in the voltage controller, the deadband can also be considered in the voltage setpoint sent to the PPC.

¹⁴ Performance testing is recommended with a POI level SCR of 2.5 as this is a representative system condition seen during weak system studies. Testing may be performed at higher SCRs if the stable operating SCR of a model is known to be above 2.5.

6b	Model is able to ride-through and recover from a temporary (no line outage or drop in SCR), 6-cycle, zero-impedance, three-phase fault at the high side of the station transformer, with a POI level SCR of 2.5.		
6c	Model responds to a step change in PPC voltage setpoint, reaching 90% of the new value between 1 and 10 seconds in a test system with POI level SCR of 2.5. (Various systems may have specific speed requirements, which should be met)		
6d	Model responds to a step change in PPC active power setpoint, reaching 90% of the new value between 1 and 10 seconds in a test system with POI level SCR of 2.5. ¹⁵		
<i>Basic protection verification</i> ¹⁶			
7a	Protection settings are implemented. These could be available as inputs in the model, or hard-coded in the black-boxed controls. ¹⁷		
7b	Option to disable protection models is present. ¹⁸		
7c	Model trips or blocks when terminal voltage rises above 1.3 pu for 1.5 second. ¹⁹		
7d	Model trips or blocks when terminal voltage falls below 0.2 pu for 1.5 second. ¹⁹		
7e	Model clearly displays trip / diagnostic signals indicating the status of all pertinent protection elements		
<i>Documentation</i>			
8a	Model documentation states compliance with "PSCAD Model Requirements Rev. 9 Rev. 9" ²⁰ , or is supplied with a completed PSCAD Model Requirements Supplier Checklist.		
8b	Model documentation includes instructions for setup and running of the model, including the recommended range of simulation timesteps. Documentation should give a clear description of trip / operation code signals produced by model.		

¹⁵ Different response time criteria may apply depending on specific interconnection region.

¹⁶ There are many protection functions which should be modelled, per footnote 1, and these basic tests will not be proof that these are modelled.

¹⁷ If settings are not visible in model or documentation, verification that protection settings are implemented in the PSCAD model should be received from the manufacturer.

¹⁸ Non-compliance may not require model revision as many studies do not require testing with protection settings disabled.

¹⁹ Non-compliance with this item should result in verification of protection settings implementation from the manufacturer, as some models may have capabilities beyond what is listed here.

²⁰ Non-compliance may be waived in systems which do not require compliance with the model requirements document.

Attachment #2: PSCAD Model Requirements Supplier Checklist

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Purpose

This document is a model requirements checklist which should be completed by the supplier of the model and submitted alongside each PSCAD model. This document accompanies the “PSCAD Model Requirements Rev. 9” document above (PMR), which should be used for further reference to describe the requirements associated with each point. Generic testing of the model may be done using “Attachment #1: PSCAD Model Test Checklist”, which may be used as a reference.

Model supplier must review every item in the checklist and indicate compliance for each item. If the supplied model does not meet any of the requirements an explanation of the deficiency should be provided in the comments column.

<i>Model Submission Summary (to be completed by model supplier)</i>	
Submission date:	
Project Name:	
Primary contact information for model related questions:	
Secondary contact information for model related questions:	
Manufacturer:	
Equipment type: (eg. PV or Wind)	
Equipment version:	
Documentation file(s):	
Model Files supplied:	

Model Requirements Checklist		PMR Reference	Model Complies? (Yes/No)	Comments
1 Model Accuracy Features				
1.1	Power electronic controls are modelled by interfacing with actual firmware code from the inverter (“real code” model), or includes detailed validation report.	A, B		
1.2	Operating modes which require system specific adjustment are accessible.	B		
1.3	Plant level controller is included. ²¹	B		
1.4	Model is capable of controlling frequency ²²	B		
1.5	Includes pertinent electrical and mechanical features, such as gearboxes, pitch controllers, or other features which impact the plant performance in the simulation period. ²³	C		
1.6	All protections which could impact ride-through performance are modelled in detail.	D		
1.7	Model is configured for the specific site being evaluated, as far as they are known.	E		
2 Model and Project Documentation				
2.1	Model includes documentation.	J		
2.2	Documentation includes instruction for setup and running the model.	J		

²¹ If the plant is part of a multi-plant control scheme, a description of the overall scheme should be provided, and corresponding PPC models should be configured to control multiple plants accordingly.

²² Frequency control model requirements may vary by region. Example response time may be less than 10 seconds.

²³ Simulation period may vary depending on the model use, but 10 seconds of simulation following an event such as a fault is a typical period.



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2.3	Model is supplied with a sample test case including site specific plant representation.	J		
2.4	Plant single line diagram is provided, and aligns with model	J		
2.5	Model documentation provides a clear way to identify site-specific settings and equipment configuration.	K		
3	<i>Model Usability Features</i>			
3.01	Control or hardware options are accessible to the user as applicable.	F		
3.02	Diagnostic flags are visible to the user.	F		
3.03	Model uses a timestep greater than 10 μs.	G		
3.04	Model allows a range of simulation timesteps (ie. not restricted to a single timestep).	H		
3.05	Protection model may be disabled for troubleshooting	I		
3.06	Model accepts external reference variables for active and reactive power and voltage setpoint, and these may be changed dynamically during the simulation.	L		
3.07	Model is capable of initializing itself.	M		
3.08	Active power capacity is scalable.	N		
3.09	Active power is dispatchable.	O		
3.10	Model reaches setpoint P, Q, and V in 5 seconds or less	P		
3.11	Model compatible with Intel FORTRAN version 12 and higher.	Q		
3.12	Model compiles using PSCAD version 4.5.3 or higher.	R		
3.13	Model supports multiple instances of its own definition in a single PSCAD case.	S		
3.14	Model supports PSCAD “snapshot” feature.	T		

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3.15	Model supports the PSCAD “multiple run” feature.	U	
3.16	Model does not use PSCAD global variables.	V	
3.17	Model does not use PSCAD layer functionality	W	

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Transmission and Distribution Planning Division - Interconnection Services Department
Simulation Tests
CBRE RFP Interconnection Requirement Study-System Impact Study
Date: July 7, 2020

1. Introduction

This document describes the simulation tests that Hawaiian Electric IRS study consultants will perform to check the models submitted for CBRE IRS. Results of these tests, combined with other checks on project input data and model parameters, will determine if the models are acceptable for the IRS studies. The models to be tested are PSS E user-written model, PSCAD model and ASPEN short-circuit model for each project.

It is recommended that the model submitters should also perform these tests to self-check on your models, so that your models will become acceptable for the IRS study in a timely manner.

2. Separate Models Required for Grid Following Mode and Grid Forming Mode

For the CBRE IRS, modeling of inverter Grid Forming capabilities may be required. For each project, separate models should be submitted: one with the project in Grid Forming (GFM) mode (if applicable), and the other with the project in Grid Following (GFL) mode. This requirement applies to all models mentioned above.

3. General Requirements

All submitted models should be accompanied by proper documentation.

There should be a reasonable match between the PSS E user-written model and the PSCAD model responses for the simulation tests performed for both models.

4. List of Simulation Tests

4.1 GFL Mode Simulation Tests

4.1.1 Tests to be performed for PSS E models

- a. Flat run in a two-machine system (one machine is a synchronous machine, e.g., GENCLS model, and the other machine is a project's model.)
- b. Ringdown (3ph-ground fault simulation test) in a two-machine system.



GFL-Tests to be performed for PSS E models - continued

- c. Voltage ride-through and response in a two-machine system.
- d. Frequency ride-through and response in a two-machine system.
- e. Weak grid operation in a two-machine system
Gradually increase/decrease MVA of the synchronous machine within a range and check if the project's model is able to work with the studied MVA range.
- f. Simulation in a relevant HECO island system model for a couple of selected faults
The purpose here is to identify potential issues with a project's PSS E model ahead of dynamic stability analysis to limit study delays due to model issues.

Note: also refer to "Siemens PTI Model Review process_200317.pdf".

4.1.2 Tests to be performed for PSCAD models only (includes model adequacy and documentation checks)

- g. Tests and checks outlined in "PSCAD Requirements Rev 9 May 2020.pdf", inclusive of ringdown, voltage and frequency ride-through tests.



4.2 GFM Mode Simulation Tests

4.2.1 Tests to be performed for both PSS E and PSCAD models

Test notes:

- Applicable for projects which include grid-forming BESS only
- Assumption is that BESS has available energy and is dispatched suitably for the tests (i.e. Not at current limit)

- a. Able to black start and operate in island mode

Test sequence: energize main power transformer from project side, then connect project to a load, then apply a bus fault at the POI, then remove the fault. Results: voltage and frequency should be stable and settle back to close to their nominal values after the disturbances.

- b. Loss of the last synchronous machine

Test system will be a three-machine system including: a synchronous machine modeled by GENROU with a simple excitation system model (e.g., SCRX) and a simple governor model (e.g., TGOV1), a load with both real and reactive components, and duplicates of a project's model. Duplicates of a project's model are utilized here to check if the project is able to share real and reactive power properly with other generators. Test event: trip the synchronous generator. Results: voltage and frequency should be stable and settle back to close to their nominal values after the disturbance.

- c. Weak grid operation

Test system is the two-machine system. Gradually increase/decrease MVA of the synchronous machine within a range and check if the project's model is able to work with the studied MVA range.

- d. Able to operate in harmony with other converter resources and synchronous machines

Test system is the three-machine system including: a synchronous machine modeled by GENROU with a simple excitation system model and a simple governor model, a load with both real and reactive components, and duplicates of a project's model. Simulation tests to be performed may include load step up/down, ringdown, voltage ride through and frequency ride-through tests. Results: voltage and frequency should be stable and settle back to close to their nominal values after the disturbances.



GFM Mode Simulation Tests – Tests to be performed for both PSS E and PSCAD models - continued

Particularly related to frequency control characteristics, we will test for configurable frequency droop control and configurable deadband characteristics. The frequency deadband should be settable in the range from +/- 0.01 Hz to +/- 1.0 Hz and the frequency droop shall be settable in the range of 0.1% to 10% with a typical value of 4%. A sample characteristic of frequency droop control with deadband is shown in Figure 1.

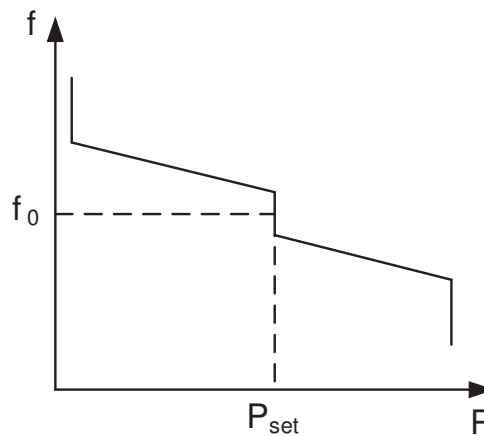


Figure 1 – Frequency Droop Control Characteristic with Deadband

- e. Switching between GFL mode and GFM mode

Test system is the two-machine system. Test sequence: energize main power transformer from project side, then connect project to a load. At this point, the project will be operating in island mode, performing frequency control. Then switch in the synchronous generator; the project will be operating in power/frequency droop control mode. Results: voltage and frequency should be stable and settle back to close to their nominal values after the disturbances.

4.2.2 Tests to be performed for PSS E models only

- a. Reduction in frequency deviation in GFM mode

Test system will be a relevant HECO island system model. Test event is loss of a large generator. Project model will be in GFL mode and GFM mode. Result: less degree of frequency deviation is expected when project is in GFM mode than when the project is in GFL mode.



4.3 ASPEN Model Check

A review of the ASPEN models will be performed. As mentioned above, two models are expected for each project: one model for GFL mode, and the other for GFM mode. Documentation associated with the models should be provided. The model review will check if the components of a project are modeled properly, such as transformers, equivalent collector system, equivalent generator, etc., and that the model data are consistent to the PSS E and PSCAD model data. A fault simulation test will also be performed in a two-machine system. Total current at the fault location and contribution from each machine will be reviewed and documented.



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Date: March 17, 2020

From: Osazuwa Oriakhi, Wenchun Zhu and Kavita Shenoi, Siemens PTI

RE: HECO IRS Model Review Process

Message from Interconnection Services: This document shows you an example of the model data review and tests that a study consultant performs on your model data submittal under the Interconnection Requirement Study, System Impact Study (IRS SIS Agreement). The Test Package that you are receiving is repeated for the IRS. By performing these tests as a Do-it-Yourself (DIY), model data submittals when we receive them for the IRS SIS are understood to be accurate and have usability and efficiency features to integrate the facility model data with the Company's system model data and commence the IRS SIS analyses in a prompt and efficient manner.

Siemens PTI performs the following data checks and tests as a part of our Model review process.

A. Steady State Data Review

Siemens PTI will review the ratings and impedances of all equipment in the ASPEN, PSS®E and PSCAD models and check for discrepancies. Table 1 below shows the comparison of power flow data for all equipment in the PSS®E and PSCAD models.

Table 1. Steady State Data Review

Equipment	Comments
Gen-Tie line	PSS®E, PSCAD and ASPEN models should match
Main Power Transformer Impedance	PSS®E, PSCAD and ASPEN models should match
Main Power Transformer Configuration	PSCAD and ASPEN models should match
PV Collector System Data	PSS®E, PSCAD and ASPEN models should match
BESS Collector System Data	PSS®E, PSCAD and ASPEN models should match
Inverter Pad Mount Transformer Impedance	PSS®E, PSCAD and ASPEN models should match
Inverter Pad Mount Transformer Configuration	PSCAD and ASPEN models should match
Inverter Power Flow Data	PSS®E and PSCAD models should match
Voltage Control Point	PSS®E and PSCAD models should match

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B. Dynamic Model Data Review

There are three types of models which show the transient/dynamic behavior of the generation facility:

1. A PSS®E user-written dynamic model which is a detailed model of the specific inverters and controls provided by the manufacturer.
2. A PSS®E generic model which utilizes PSS®E library models to specify the dynamic behavior of the facility.
3. A PSCAD model which is a detailed transient model of the inverters and controls

Siemens PTI will compare the various dynamic model parameters across the three models and note any discrepancies in the data fields shown in Table 2.

Table 2. Comparison of Dynamic Model Parameters

Parameters	Comments
Power Plant Controller (PPC)	Review number of PPCs
Control Flags	PSS®E and PSCAD control flags should match.
Control Bus/Point of Measurement	Control buses should match in PSS®E and PSCAD models.
Frequency Control Dead Band	The frequency thresholds for primary and secondary control should match in the PSCAD and PSS®E models.
Initial State of Charge (SOC)	Make sure the initial state of charge is set up correctly to prevent initialization issues.
Voltage and Frequency Ride Through Settings	The voltage and frequency ride through settings should match in the PSS®E user-written, PSS®E generic and PSCAD models.
P/Q priority data	The P/Q priority flags should match in the PSS®E user-written, PSS®E generic and PSCAD models

C. Model tests

Siemens PTI will perform the following tests to check the active power, reactive power, voltage and frequency responses of the generation facility and review if the three models (PSS®E user-written, PSS®E generic and PSCAD models) show consistent responses.

1. **Flat Run Test:** This is a no-disturbance simulation to check a model's initialization. This test is applicable to all three types of models.
2. **Ring Down Test:** In this simulation, a fault is placed at the facility's POI for a duration of 6-cycles. The fault is subsequently cleared, and the post-disturbance response of the facility is observed. This test is applicable to all three types of models.
3. **High and Low Frequency Response Test:** In these simulations, the system frequency is varied to test the facility's responses to grid's frequency excursions. In the PSS®E tests, high and low frequency excursions are simulated to mimic the frequency ride through thresholds specified in the PPA and the response of the facility is observed. Both the frequency ride-through capability of the facility and its active power response to frequency excursions are tested in the PSS®E simulations.

In the PSCAD simulations, the focus is on testing the facility's active power responses to frequency excursions, and not on testing the frequency ride-through capability. However, it should be noted that the duration of the frequency excursions in the PSCAD tests are well-

Appendix B Attachment 3

within the no-trip zones according to the PPA, and so the facility is not expected to trip during these simulations. Table 3 and Table 4 show the frequency excursions that were simulated in the PSCAD tests.

Table 3 Frequency Excursions for PSCAD High Frequency Response Test

Frequency level (Hz)	Duration (secs)
60.1	2.0
63.0	2.0

Table 4 Frequency Excursions for PSCAD Low Frequency Response Test

Frequency level (Hz)	Duration (secs)
59.9	2.0
56.0	2.0

4. **High and Low Voltage Ride-through and Response Tests:** In these simulations, the POI voltage is varied to test the facility's ride-through capabilities and responses to POI voltage excursions. In the PSS[®]E simulations, two sets of tests are performed: one for testing the ride-through capabilities and the other for testing the responses to voltage excursions. These two sets of tests are similar, except that the grid equivalent representation is different. For the ride-through tests, the grid equivalent is represented by a generator with a very large MVA, which connects to the POI bus directly. For the voltage excursion response tests, the grid equivalent is represented by a 500 MVA generator which connects to the POI through a branch with a reactance of 0.1 p.u.

In the PSCAD simulations, the focus is on testing the facility's reactive power responses to POI voltage excursions, and not on testing the voltage ride-through capability. However, it should be noted that the duration of the voltage excursions in the PSCAD tests are well-within the no-trip zones according to the PPA, and so the facility is not expected to trip during these simulations.

Table 5 shows the voltage excursions that will be simulated in the PSCAD tests.

Table 5 POI Voltage Excursions for PSCAD Voltage Response Test

POI Voltage level (pu)	Duration (secs)
1.20	0.8
1.10	2.0
0.88	2.0
0.70	2.0

Each of the above discussed tests were performed for the following three generation dispatches:

- **PV output only:** In this dispatch, the PV unit is at maximum output and the BESS unit is online at 0 MW.
- **BESS output only:** In this dispatch, the BESS unit is discharging at maximum output and the PV unit is online at 0 MW.

Appendix B Attachment 3

- **PV charging BESS:** In this dispatch, the PV unit is at its maximum output and is charging the BESS at its minimum level.

D. Expected Model Performance

1. Matching steady-state model parameters between the PSS®E user-written, generic models and the PSCAD model.
2. Matching control options between the three types of models.
3. Matching voltage and frequency ride-through parameters between the three types of models. The settings should meet the ride-through requirements specified in the PPA.
4. Flat run results do not show any movement for any of the three models.
5. Ring-down simulation results show stable and proper responses, and the responses from the three models should show reasonable matches.
6. Ride-through simulation results should show stable and proper responses, and the responses should show reasonable matches. The ride through performance should meet the PPA requirements.

E. Model Review Reporting Requirements

1. Simulation tests should be performed using the python scripts provided by Siemens PTI, and should be readily reproducible.
2. Discuss model review results.
3. Include simulation plots for the simulation tests discussed above.
4. Related to high and low frequency ride through tests, document frequency response droops shown in the simulations.

PSCAD Model Requirements Rev. 9

Date: May 8, 2020
Prepared By: Andrew L. Isaacs
Lukas Unruh
Garth Irwin

This document includes the following attachments:

Attachment #1: PSCAD Model Test Checklist

Attachment #2: PSCAD Model Requirements Supplier Checklist

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Introduction

Specific model requirements for a PSCAD study depend on the type of study being done. A study with a scope covering weak system interconnections, ride-through evaluation, short term¹ event response, and fast control interaction with nearby devices (for example) would require a model which has the following characteristics. Some specialty studies may require other features. Refer to “Attachment #1: PSCAD Model Test Checklist” and “Attachment #2: PSCAD Model Requirements Supplier Checklist”, appended to this document, for additional information on how these requirements may applied.

Model Accuracy Features

For the model to be sufficiently accurate, it must:

- A. *Represent the full detailed inner control loops of the power electronics.* The model cannot use the same approximations classically used in transient stability modeling, and should fully represent all fast inner controls, as implemented in the real equipment. Models which embed the actual hardware code into a PSCAD component are currently wide-spread, and this is the recommended type of model.²
- B. *Represent all control features pertinent to the type of study being done.* Examples include external voltage controllers, plant level controllers, customized PLLs, ride-through controllers, SSCI damping controllers and others. As in point A, actual hardware code is recommended to be used for most control and protection features. Operating modes that require system specific adjustment should be user accessible. Plant level voltage control should be represented along with adjustable droop characteristics. If multiple plants are controlled by a common controller, this functionality should be included.
- C. *Represent all pertinent electrical and mechanical configurations.* This includes any filters and specialized transformers. There may be other mechanical features such as gearboxes, pitch controllers, or others which should be modelled if they impact electrical performance within the timeframe of the study. Any control or dynamic features of the actual equipment which may influence behaviour in the simulation period which are not represented or which are approximated should be clearly identified.

¹ Example analysis periods could be 2 to 10 seconds from fault inception. Some studies could require longer periods.

² The model must be a full IGBT representation (preferred), or may use a voltage source representation that approximates the IGBT switching but maintains full detail in the controls. A three phase sinusoidal source representation is not acceptable. Models manually translated block-by-block from MATLAB or control block diagrams may be unacceptable because the method used to model the electrical network and interface to the controls may not be accurate, or portions of the controls such as PLL circuits or protection circuits may be approximated or omitted. Note that firmware code may be directly used to create an extremely accurate PSCAD model of the controls. The controller source code may be compiled into DLLs or binaries if the source code is unavailable due to confidentiality restrictions.

It is not recommended to assemble the model using standard blocks available in the PSCAD master library, as approximations are usually introduced, and specific implementation details for important control blocks may be lost. In addition, there is a significant risk that errors will be introduced in the process of manually assembling the model. For this type of manually assembled model, (not using a direct “real code” embedding process), extra care is required, and validation is required.

- D. *Have all pertinent protections modeled in detail for both balanced and unbalanced fault conditions.* Typically this includes various OV and UV protections (individual phase and RMS), frequency protections, DC bus voltage protections, converter overcurrent protections, and often other inverter specific protections. As in point A, actual hardware code is recommended to be used for these protection features.
- E. *Be configured to match expected site-specific equipment settings.* Any user-tunable parameters or options should be set in the model to match the equipment at the specific site being evaluated, as far as they are known. Default parameters may not be appropriate.

Model Usability Features

In order to allow study engineers to perform system analysis using the model, the PSCAD model must:

- F. *Have control or hardware options which are pertinent to the study accessible to the user.* Examples of this could include protection thresholds, real power recovery ramp rates, or SSCI damping controllers.³ Diagnostic flags (eg. flags to show control mode changes or which protection has been activated) should be visible to aid in analysis.
- G. *Be accurate when running at a simulation time step of 10 μ s or higher.* Often, requiring a smaller time step means that the control implementation has not used the interpolation features of PSCAD, or is using inappropriate interfacing between the model and the larger network. Lack of interpolation support introduces inaccuracies into the model at larger simulation time-steps. In cases where the IGBT switching frequency is so high that even interpolation does not allow accurate switching representation at 10 μ s (eg. 40 kHz), an average source approximation of the inverter switching may be used to allow a larger simulation time step².
- H. *Operate at a range of simulation time steps.* The model should not be restricted to operating at a single time step, but should be able to operate within a range (eg. 10 μ s – 20 μ s)
- I. *Have the ability to disable protection models.* Many studies result in inadvertent tripping of converter equipment, and the ability to disable protection functions temporarily provides study engineers with valuable system diagnostic information.
- J. *Include documentation and a sample implementation test case.* Test case models should be configured according to the site-specific real equipment configuration up to the Point of Interconnection. This would include (for example): aggregated generator model, aggregated generator transformer, equivalent collector branch, main step up transformers, gen tie line, and any other static or dynamic reactive resources. Test case should use a single machine infinite bus representation of the system, configured with an appropriate representative SCR, such as 2.5. Access to technical support engineers is desirable.
- K. *Have an identification mechanism for configuration.* The model documentation should provide a clear way to identify the specific settings and equipment configuration which will be used in any

³ Care should be taken to ensure that any user-settable options are not changed in a way that is not implementable in the real hardware, and that any selectable options are actually available at the specific site being considered. Discussion is recommended with the manufacturer prior to any changes being made in model configuration.

- study, such that during commissioning the settings used in the studies can be checked. This may be control revision codes, settings files, or a combination of these and other identification measures.
- L. *Accept external reference variables.* This includes real and reactive power ordered values for Q control modes, or voltage reference values for voltage control modes. Model should accept these reference variables for initialization, and be capable of changing these reference variables mid-simulation, ie. dynamic signal references.
 - M. *Be capable of initializing itself.* Once provided with initial condition variables, the model must initialize and ramp to the ordered output without external input from simulation engineers. Any slower control functions which are included (such as switched shunt controllers or power plant controllers) should also accept initial condition variables if required.
 - N. *Have the ability to scale plant capacity.* The active power capacity of the model should be scalable in some way, either internally or through an external scaling transformer⁴. This is distinct from a dispatchable power order, and is used for modeling different capacities of plant or breaking a lumped equivalent plant into smaller composite models.
 - O. *Have the ability to dispatch its output to values less than nameplate.* This is distinct from scaling a plant from one unit to more than one, and is used for testing plant behaviour at various operating points.
 - P. *Initialize quickly.* Model must reach its ordered initial conditions as quickly as possible (for example <5 seconds) to user supplied terminal conditions.

Study Efficiency Features

In addition, the following elements are required to improve study efficiency, model compatibility, and enable other studies which include the model to be run as efficiently as possible. If these features are not supported, additional discussion is required⁵:

- Q. Model should be compatible with Intel Fortran compiler version 12 and higher.
- R. Model should be compatible with PSCAD version 4.5.3 and higher.
- S. Model supports multiple instances of its own definition in the same simulation case.
- T. Model supports the PSCAD “timed snapshot” feature accessible through project settings.
- U. Model supports the PSCAD “multiple run” feature.
- V. Model does not use or rely upon global variables in the PSCAD environment.
- W. Model should not utilize multiple layers in the PSCAD environment, including ‘disabled’ layers.

⁴ A free publicly available scaling transformer suitable for this purpose is available in the E-Tran library.

⁵ Electrenix has parallelization tools available (E-Tran Plus for PSCAD) which can circumvent compatibility concerns in some cases.

Attachment #1: PSCAD Model Test Checklist

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Purpose

This document is a test checklist meant to accompany “PSCAD Model Requirements Rev. 9” provided above and “Attachment #2: PSCAD Model Requirements Supplier Checklist”. The procedures provided in this document are intended to provide an indication of the core model accuracy, performance, and usability features specified in the model requirements. These procedures cannot ultimately prove that the model is compliant with all requirements, as black box models usually hide the details of the equipment controls and protection. It is recommended that the equipment manufacturer supply additional confirmation that the model meets each individual requirement. The requirements in this document do not necessarily represent interconnection criteria for specific individual systems, and may be supplemented or adjusted based on interconnection region.

The tests outlined here are considered “basic”, and may be supplemented by more rigorous testing, including various fault types, depths, and durations, as well as more extensive protection testing and benchmarking against phasor models. This document is not intended to be a guide for thorough benchmarking between PSCAD, PSS/E, and actual equipment, and is subject to revision as the state of the art in EMT modeling evolves.

<i>Model test Summary</i>	
Model Test date:	
Project Name:	
Manufacturer:	
Equipment type: (eg. PV or Wind)	
Equipment version:	
Documentation file:	
Model Files supplied:	

Verification Procedure and Checklist

		Pass/Fail	Comments
<i>Vendor and site specific model verification</i>			
1a	The Vendor's name and the specific version of the model should be clearly observable in the .psc model file.		
1b	Documentation and supporting model filenames should not conflict with model version shown in the .psc model file.		
1c	Model is supplied with a test circuit which is configured for the site specific application. ⁶		
<i>"Real Code" model verification</i>			
2a	Controls are black-boxed, and no PSCAD master library control blocks are visible within control circuits. ⁷ If the model is not based on "real code", a separate validation report is required showing model comparison against hardware tests. ⁸		
<i>Model usability verification</i>			
3a	Model uses a timestep greater than 10 μ s ⁹		
3b	Model allows a variation in simulation timestep		
3c	Model compiles using Intel FORTRAN version 12		
3d	Model initializes in 5 seconds or less with a POI level SCR of 2.5. Real power, reactive power, and RMS voltage should reach steady state by this time.		
3e	Model allows multiple instances of itself to be run together in the same case ¹⁰		
<i>Model electrical configuration verification</i>			
4a	Plant level electrical single line diagram (SLD) is included.		

⁶ The test circuit should model all relevant electrical components of the plant and contain a system equivalent. Parameters will be assumed to be site-specific, unless there are obvious indications otherwise, such as an incorrect grid base frequency.

⁷ Black-boxing of controls to a high level does not guarantee that real-code is embedded into the model, however the visibility of PSCAD master-library control blocks in the inner control loops (PLL, inner current controllers, etc.) suggest that the model is generic in nature. Model documentation may contain information on use of real-code in the model.

⁸ All aspects of the controller operation are required to be validated by utilizing a "hardware in loop" platform or other hardware test systems. Model should not be validated against other software models. Validations should include control responses to various types of faults, changes in power and voltage references, changes in system frequency, testing frequency response in sub and super-synchronous ranges, and testing of protection operation. Tests should also be performed under a variety of system strengths, including very weak systems. Other tests may also be required. The validation report is required along with any model updates that result from the more rigorous validation tests.

⁹ Models with timesteps less than 10 μ s may be acceptable in situations where a small timestep does not significantly increase the runtime of the total simulation

¹⁰ Depending on specific application and whether E-Tran Plus for PSCAD is allowed to be used to overcome the limitation, this requirement may be waived.

4b	Generator step-up transformer(s) included, with impedance between 5 and 10% on generator base, and matches SLD. ¹¹		
4c	Lumped collector equivalent(s) included, with total charging equal to between 0.5 and 5% of plant rating, and matches SLD. ¹¹		
4d	Substation transformer(s) included, rated appropriately for plant size, and impedance between 6 and 12% on transformer base, and matches SLD. ¹¹		
4e	Model can be scaled to represent any number inverters/turbines, either using a scaling transformer or internal scaling.		
4f	All external devices included in the plant (such as STATCOMs) include appropriate models.		
<i>Plant controller verification</i>			
5a	Model includes power plant controller (PPC)		
5b	PPC accepts an external active power setpoint.		
5c	PPC accepts a voltage setpoint.		
5d	PPC has a mechanism to implement a settable voltage droop.		
5e	Overall plant responds to frequency changes by increasing or decreasing its active power as appropriate. This may be accomplished either at an inverter level or via the PPC. ¹²		
5f	Model initializes to the setpoints specified in the PPC. If droops or deadbands are utilized, the initial values may differ from the setpoints. ¹³		
5g	If external voltage control devices (STATCOM/DVAR, SVC, MSCs) are included in the plant, ensure that the voltage control of these devices is coordinated with the PPC, with no potential for VAR looping or oscillations.		
<i>Basic performance verification¹⁴</i>			
6a	Instantaneous voltage and current waveforms have minimal distortion, and no oscillations are observed.		

¹¹ Impedance range is for sanity checking only. Impedances outside this range may be allowed.

¹² Non-compliance with this item may not require model revision as frequency response may not be required in PSCAD models by some utilities. In this case, a description of the under/over frequency response capabilities of the actual equipment should be provided by the manufacturer.

¹³ If voltage control with droop is implemented, it is preferred that the PPC model requests an initial Q value to match the voltage setpoint. If no initial Q is requested, the voltage setpoint can be biased by the initial Q before it is sent to the PPC. If a non-zero deadband is included in the voltage controller, the deadband can also be considered in the voltage setpoint sent to the PPC.

¹⁴ Performance testing is recommended with a POI level SCR of 2.5 as this is a representative system condition seen during weak system studies. Testing may be performed at higher SCRs if the stable operating SCR of a model is known to be above 2.5.

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6b	Model is able to ride-through and recover from a temporary (no line outage or drop in SCR), 6-cycle, zero-impedance, three-phase fault at the high side of the station transformer, with a POI level SCR of 2.5.		
6c	Model responds to a step change in PPC voltage setpoint, reaching 90% of the new value between 1 and 10 seconds in a test system with POI level SCR of 2.5. (Various systems may have specific speed requirements, which should be met)		
6d	Model responds to a step change in PPC active power setpoint, reaching 90% of the new value between 1 and 10 seconds in a test system with POI level SCR of 2.5. ¹⁵		
<i>Basic protection verification</i> ¹⁶			
7a	Protection settings are implemented. These could be available as inputs in the model, or hard-coded in the black-boxed controls. ¹⁷		
7b	Option to disable protection models is present. ¹⁸		
7c	Model trips or blocks when terminal voltage rises above 1.3 pu for 1.5 second. ¹⁹		
7d	Model trips or blocks when terminal voltage falls below 0.2 pu for 1.5 second. ¹⁹		
7e	Model clearly displays trip / diagnostic signals indicating the status of all pertinent protection elements		
<i>Documentation</i>			
8a	Model documentation states compliance with "PSCAD Model Requirements Rev. 9 Rev. 9" ²⁰ , or is supplied with a completed PSCAD Model Requirements Supplier Checklist.		
8b	Model documentation includes instructions for setup and running of the model, including the recommended range of simulation timesteps. Documentation should give a clear description of trip / operation code signals produced by model.		

¹⁵ Different response time criteria may apply depending on specific interconnection region.

¹⁶ There are many protection functions which should be modelled, per footnote 1, and these basic tests will not be proof that these are modelled.

¹⁷ If settings are not visible in model or documentation, verification that protection settings are implemented in the PSCAD model should be received from the manufacturer.

¹⁸ Non-compliance may not require model revision as many studies do not require testing with protection settings disabled.

¹⁹ Non-compliance with this item should result in verification of protection settings implementation from the manufacturer, as some models may have capabilities beyond what is listed here.

²⁰ Non-compliance may be waived in systems which do not require compliance with the model requirements document.

Attachment #2: PSCAD Model Requirements Supplier Checklist

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Purpose

This document is a model requirements checklist which should be completed by the supplier of the model and submitted alongside each PSCAD model. This document accompanies the “PSCAD Model Requirements Rev. 9” document above (PMR), which should be used for further reference to describe the requirements associated with each point. Generic testing of the model may be done using “Attachment #1: PSCAD Model Test Checklist”, which may be used as a reference.

Model supplier must review every item in the checklist and indicate compliance for each item. If the supplied model does not meet any of the requirements an explanation of the deficiency should be provided in the comments column.

<i>Model Submission Summary (to be completed by model supplier)</i>	
Submission date:	
Project Name:	
Primary contact information for model related questions:	
Secondary contact information for model related questions:	
Manufacturer:	
Equipment type: (eg. PV or Wind)	
Equipment version:	
Documentation file(s):	
Model Files supplied:	

Model Requirements Checklist				Model Complies? (Yes/No)	Comments
1 Model Accuracy Features					
1.1	Power electronic controls are modelled by interfacing with actual firmware code from the inverter (“real code” model), or includes detailed validation report.	A, B			
1.2	Operating modes which require system specific adjustment are accessible.	B			
1.3	Plant level controller is included. ²¹	B			
1.4	Model is capable of controlling frequency ²²	B			
1.5	Includes pertinent electrical and mechanical features, such as gearboxes, pitch controllers, or other features which impact the plant performance in the simulation period. ²³	C			
1.6	All protections which could impact ride-through performance are modelled in detail.	D			
1.7	Model is configured for the specific site being evaluated, as far as they are known.	E			
2 Model and Project Documentation					
2.1	Model includes documentation.	J			
2.2	Documentation includes instruction for setup and running the model.	J			

²¹ If the plant is part of a multi-plant control scheme, a description of the overall scheme should be provided, and corresponding PPC models should be configured to control multiple plants accordingly.

²² Frequency control model requirements may vary by region. Example response time may be less than 10 seconds.

²³ Simulation period may vary depending on the model use, but 10 seconds of simulation following an event such as a fault is a typical period.

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2.3	Model is supplied with a sample test case including site specific plant representation.	J	
2.4	Plant single line diagram is provided, and aligns with model	J	
2.5	Model documentation provides a clear way to identify site-specific settings and equipment configuration.	K	
3	<i>Model Usability Features</i>		
3.01	Control or hardware options are accessible to the user as applicable.	F	
3.02	Diagnostic flags are visible to the user.	F	
3.03	Model uses a timestep greater than 10 μ s.	G	
3.04	Model allows a range of simulation timesteps (ie. not restricted to a single timestep).	H	
3.05	Protection model may be disabled for troubleshooting	I	
3.06	Model accepts external reference variables for active and reactive power and voltage setpoint, and these may be changed dynamically during the simulation.	L	
3.07	Model is capable of initializing itself.	M	
3.08	Active power capacity is scalable.	N	
3.09	Active power is dispatchable.	O	
3.10	Model reaches setpoint P, Q, and V in 5 seconds or less	P	
3.11	Model compatible with Intel FORTRAN version 12 and higher.	Q	
3.12	Model compiles using PSCAD version 4.5.3 or higher.	R	
3.13	Model supports multiple instances of its own definition in a single PSCAD case.	S	
3.14	Model supports PSCAD "snapshot" feature.	T	

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3.15	Model supports the PSCAD “multiple run” feature.	U	
3.16	Model does not use PSCAD global variables.	V	
3.17	Model does not use PSCAD layer functionality	W	

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APPENDIX B ATTACHMENT 4

**COMMUNITY OUTREACH PLAN
 GENERAL INSTRUCTIONS TO PROPOSERS**

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.

Section 5.3 of the RFP requires all Proposers to provide to the Company an updated comprehensive Community Outreach Plan to work with and inform neighboring communities and stakeholders, and to provide communities and stakeholders timely information during all phases of the Project. The Company requires all Proposers provide the below table of information onto their website described in Section 5.3 to provide communities Project information that is of interest to them in a standard format. 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. The below information is already required by the RFP instructions and should be included in all Proposals (albeit in various sections).

PROJECT SUMMARY AND COMMUNITY OUTREACH PLAN

*	Proposer Name (Company name)	
*	Parent Company/Owner/Sponsor/etc.	
*	Project Name	
*	Net AC Capacity of the Facility (MW) (must match Proposal information)	
*	Proposed Facility Location in/near what City/Area	
*	TMK(s) of Facility Location (must match Proposal information)	
*	Point of Interconnection’s Circuit or Substation Name (must match Proposal information)	
*	Project Description (in 200 words or less)	<i>(A description that includes information about the project that will enable the community to understand the impact that the Project might have on the community.)</i>
*	Project site map	<i>(provide a map similar to what was provided in Section 2.5.2)</i>

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*	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, Impacts 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 (provide link to Section 2.8)		
*	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>

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***All information in this table must be included on each Proposer's project website and in all community presentations.**

APPENDIX B ATTACHMENT 5

DETAILED INSTRUCTIONS FOR COMMUNITY OUTREACH PLAN

- The Community Outreach Plan should be as current and explanatory as possible.
 - The Community Outreach Plan information must be included in the information Proposer selected to the Final Award Group make available on their website when the website is posted publicly.
- Proposer selected to the Final Award Group must develop a public Project website, which shall include all the information on the Community Outreach Plan table for their Project.
- Proposer must develop Project presentations that include all the information on the Community Outreach Plan table (sample template provided).
- Due to the uncertainty of the duration of the COVID-19 pandemic, all Proposer are required to plan for both in-person and virtual community meetings. As we near the dates that community meetings are scheduled, in the interest of public health and safety, the conditions at the time will determine if in-person meetings or virtual meetings will be required.
 - Virtual community meetings can either be community televised, or online, but must incorporate technology that allows for live engagement and interaction between the Proposer and community participants.
- Proposer must communicate important information about the Project with stakeholders in advance of community meetings.
- Proposer must perform media outreach (earned media) and advertising (paid media) to raise community awareness of any public meeting. Media advisories (sample attached) must be issued to the following media and organizations a minimum of 30 days prior to a public meeting. Media advisories do not need to be reviewed and approved by Hawaiian Electric, but must be shared with Hawaiian Electric for awareness.
 - For Oahu Projects
 - Star Advertiser
 - Civil Beat
 - Hawaii News Now
 - KHON2 News
 - KITV4 News
 - Neighborhood Boards
 - For Maui Projects
 - Maui News
 - Maui Now
 - Civil Beat
 - Hawaii News Now
 - KHON2 News
 - KITV4 News
 - For Hawaii Island Projects
 - Hawaii Tribune Herald
 - West Hawaii Today
 - Civil Beat
 - Hawaii News Now
 - KHON2 News
 - KITV4 News
- Advertisements must be placed in area community publications.
 - Guidance from the Company can be provided upon request
 - Information in the ads must be consistent with the media advisory
- Public comments in support and in opposition to the proposed Project must be compiled and filed verbatim with the Public Utilities Commission.
- Proposer must work with and inform neighboring communities and stakeholders to provide community members timely information during ALL phases of the project, which must include,

APPENDIX B ATTACHMENT 5

but not be limited to the Power Purchase Agreement negotiation period, the permitting process periods, and throughout construction.

- Should any COVID-19 related events interfere with the Proposer's ability to perform the listed actions, Proposer should inform the Company immediately of such effects for Company's consideration and guidance, and possible proposal of alternate actions.

CONTACT: **NAME, 808.XXX.XXXX** **FOR IMMEDIATE RELEASE**
Email address Date

Media Advisory: Title

Project description to be drafted by developer. Description must include the location of proposed project and supporting background information.

Date: TBD

Time: TBD

Location: TBD

Purpose: To share information about a **TYPE (e. g. CBRE solar, etc.)** renewable energy project proposed to be developed in **COMMUNITY** near **AREA REFERENCE** and to solicit public comments to be filed with the Public Utilities Commission.

Contact: For more information, call **808.XXX.XXXX** or visit **(website/social media)**

###

Project Name

Proposer Name

Project Benefits

- Details

APPENDIX B ATTACHMENT 6

Community Benefits

- Details

Proposed Facility Location in/near what City/Area

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

Project Description

- Details

Site Layout Plan

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

APPENDIX B ATTACHMENT 6

Interconnection Route

- Map

Required Government Permits and Approvals

- Preliminary Schedule
- Opportunities for public comment

Environmental Impacts

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

Cultural Impacts

- Identify any cultural, historic or natural resources that will be impacted by the project
- Describe the potential impacts on these resources
- Identify measures to mitigate such impacts.

Where to Find More Information

- Project website
- Proposer email and contact information

APPENDIX B ATTACHMENT 6

How to Provide Comments

DRAFT

REQUEST FOR PROPOSALS

FOR

COMMUNITY-BASED RENEWABLE ENERGY PROJECTS

FOR

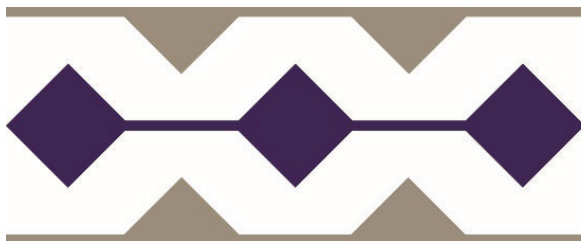
LOW- AND MODERATE-INCOME SUBSCRIBERS

ISLAND OF MAUI

JULY 9, 2020

Docket No. 2015-0389

Appendix C – Code of Conduct Procedures Manual



**Maui
Electric**

I. INTRODUCTION

The Framework for Competitive Bidding ("Framework") adopted on December 8, 2006, by the Public Utilities Commission of the State of Hawaii (the "Commission") pursuant to Decision and Order No. 23121 (Docket No. 03-0372, Instituting a Proceeding to Investigate Competitive Bidding for New Generating Capacity in Hawaii) requires that the utility develop and follow a Code of Conduct whenever a utility or its affiliate seeks to advance an energy generation resource proposal in response to a request for proposals ("RFP") issued by the Company. Section III.A.4 of the Framework required the utility to submit to the Commission for review and approval (subject to modification if necessary) a code of conduct prior to the commencement of any competitive bid process under the Framework. The proposed *Code of Conduct Pertaining to the Implementation of a Competitive Bidding Process for Community-Based Renewable Energy* (the "Code of Conduct") requires the Companies to also propose this *Code of Conduct Procedures Manual* (the "Procedures Manual") to implement the requirements of the Framework and the Code of Conduct.

This Procedures Manual has been developed to outline the procedures to be followed and the policies that have been developed surrounding the implementation of the Companies' competitive bidding process for system resources. This Code of Conduct Procedures Manual has been developed for the Companies' Community-Based Renewable Energy RFPs and in accordance with the requirements of Section IV.H.9.a(iii) of the Framework and outlines requirements (1), (3) and (4) of such section, namely: (1) the protocols for communicating with Proposers, the Company Self-Build team, and others; (3) the documentation forms, including logs for any communications with proposers; and (4) other information consistent with the requirements of the solicitation process. Requirement (2) of the section, the evaluation process in detail and the methodologies for undertaking the evaluation process for the RFP are described in detail in the Community-Based Renewable Energy RFP. The bid evaluation process and methodology will consider both price/system impacts and non-price criteria in accordance with Section IV.E of the Framework and Tariff Rule 19.

The procedures and policies set forth herein have been designed to ensure that the procurement process is undertaken in a fair and equitable manner and that each Proposer is afforded an equal opportunity to participate and compete within the RFP requirements.

This Procedures Manual is intended to be followed by Company personnel in connection with implementing the Companies' solicitation process and to manage communications between Company personnel and consultants participating in the RFP processes covered by the Framework. Necessary additions, deletions, and/or changes depending on the circumstances surrounding the RFP and directions from the IO may be required.

II. DEFINITIONS

- Affiliate – Any person or entity that possesses an “affiliated interest” in a utility as defined by section 269-19.5, Hawaii Revised Statutes (“HRS”), including a utility’s parent holding company but excluding a utility’s subsidiary or parent which is also a regulated utility.
- Affiliate Team – Employees and consultants of an Affiliate of the Company who prepare a proposal to be submitted to the Company in response to a Company RFP.
- ATRs – The Affiliate Transaction Requirements, issued by the Commission, applicable to the Companies and Affiliates, attached as Exhibit B to Order No. 36112 issued on January 24, 2019 in Docket No. 2018-0065.
- Code of Conduct – The *Code of Conduct Pertaining to the Implementation of a Competitive Bidding Process for Community-Based Renewable Energy* developed by Hawaiian Electric Company, Inc., Maui Electric Company, Limited and Hawaii Electric Light Company, Inc. (each, a “Company” and collectively, the “Companies”) to ensure the fairness and integrity of the competitive bidding process, in particular where the host utility or its affiliate seeks to advance its own system resource proposal in response to an RFP. The Code of Conduct follows the requirements described in Section IV.H.9.c of the Framework.

- Code of Conduct Acknowledgement – The Competitive Bidding Code of Conduct Acknowledgement of Receipt form acknowledging review of, and agreeing to abide by, the Code of Conduct and this Procedures Manual.
- Communications Log – A written record to note activities and/or information shared between the Company RFP Team or Company Self-Build Team with Shared Resources or Unassigned Company Resources, accessed via the RFP Communication Tool Kit SharePoint Site.
- Companies' Executive in Charge – The Companies' executive responsible for ensuring compliance with this Code of Conduct and serving as the point of contact for the Independent Observer for reporting any violations by the Companies' of the Code of Conduct. The Companies' Corporate Compliance Officer shall remain responsible for the Companies' independent corporate code of conduct and may support compliance matters and questions arising with employees, agents and other representatives of the Companies, e.g., conflicts of interest, with respect to this Code of Conduct.
- Company RFP Team – The Company personnel and outside consultants responsible for the development of the Company's RFPs conducted under the Framework and the evaluation of bids submitted in response to these RFPs. Subject to the transfer rules specified herein, the Company RFP Team will have fixed team members who will not have any involvement with the Company Self-Build Team for the subject RFP.
- Company Self-Build Team – The Company personnel and outside consultants responsible for the development of the Company's self-build responses to the RFP. Subject to the transfer rules specified herein, the Company Self-Build Team will have fixed team members who will not have any involvement with the Company RFP Team for the subject RFP.
- Confidential Information – Any non-public information developed and provided by the Company (i.e., proprietary system information, etc.) or Proposers during the RFP process (such non-public information may include, for example, the identity of competing Proposers, and their technical, trade or financial information). This term includes any material non-public information regarding the RFP process developed for and used during the competitive bidding solicitation process, such as the evaluation process or criteria. Confidential Information does not include

public information, such as information in the Company's public filings with the Commission.

- Director of Renewable Acquisition – The supervisor of the Division that will oversee the Company's competitive bidding process.
- Eligible Proposer – A Proposer who has met the minimum requirements and threshold requirements in the RFP necessary to remain eligible to compete in the process.
- Energy Contract Manager – The staff position(s) within the Company's Renewable Acquisition Division responsible for managing the Company RFP Team(s). The Energy Contract Manager shall be a member of the Company RFP Team he/she manages.
- Framework – The Framework for Competitive Bidding contained in Decision & Order No. 23121 issued by Commission on December 8, 2006, to establish rules for competitive bidding in response to a request for proposals when a utility seeks to acquire new generation resources.
- Independent Observer ("IO") – The neutral person or entity appointed by either the Commission or utility to monitor the utility's competitive bidding process, and to advise the utility and Commission on matters arising out of the competitive bidding process, as described in Part III.C of the Framework.
- Manager of Energy Procurement - The supervisor of the department within the Company's Renewable Acquisition Division responsible for directing the resources responsible for the implementation of the competitive bidding process pursuant to the Framework. The Manager of Energy Procurement will report to the Director of Renewable Acquisition on the status of the competitive bidding process and shall be a member of the Company RFP Team.
- Non-Price Evaluation Team – Employees and consultants of the Company who evaluate the Proposal non-price related criteria as set forth in these RFPs. Non-Price Evaluation Team members will not include any Shared Resources and will be solely made up of Company RFP Team Members.
- Non-Wires Alternative - An electricity grid project that uses non-traditional transmission and distribution (T&D) solutions, such as distributed generation (DG), energy storage, energy efficiency (EE), demand response (DR) and grid software and controls, to defer or avoid the need for conventional transmission and/or

distribution infrastructure investments.

- Price Evaluation Team – Employees and consultants of the Company who evaluate the Proposal price related criteria set forth in these RFPs. Price Evaluation Team members will not include any Shared Resources and will be solely made up of Company RFP Team Members.
- Proposer – Entity who submits or plans to submit a proposal in response to a Company-issued RFP. An Affiliate of the Company or a Company Self-Build Team participating in the RFP and submitting a proposal shall be considered a Proposer.
- RFP – A written request for proposals issued by one of the Companies to publicly solicit bids to supply future system resources to the Company pursuant to the competitive bidding process established in the Framework.
- Roster – A consolidated list of members that comprise the Company RFP Team, Company Self-Build Team, Shared Resources and Unassigned Company Resources located in the RFP Communication Tool Kit SharePoint Site. Company employee names and titles and consultants in their designated role will be identified.
- Shared Resource – Company employees and consultants who, because of the scarcity of their expertise within the Company, are designated and authorized to provide information or input to both the Company RFP Team and the Company Self-Build Team (but not any Affiliate Team) and is not a resource dedicated to either team. For example, Shared Resources may include an environmental attorney and members of the Company’s Risk Management Department.
- Unassigned Company Resource – Company employees unassigned to an essential team that may be called upon by the Company RFP Team and/or the Company Self-Build Team (but not any Affiliate Team) to assist in meeting unforeseen tasks for the RFP or the self-build proposal. For example, the Company RFP Team may be unable to evaluate an unforeseen technical specification included in a bid. In that event, the Company RFP team would need to request assistance from a Company employee or a consultant that is not already assigned to an essential team and possesses the specific expertise. Such personnel are intended to assist the requesting team only in an ad hoc manner, limited in scope and purpose to the particular task required.

III. STATEMENT OF OBJECTIVES

On April 9, 2020, the Commission issued Order 37070, commencing Phase 2 of the Community-Based Renewable Energy Program ("Phase 2"). Phase 2 requires the Companies to implement competitive bidding to procure CBRE projects on all islands served by the Companies. These procurements will be concurrent and overlapping. Subsequent phases of CBRE may require further procurements through competitive bidding. Accordingly, under the Framework and the Code of Conduct, for each of the competitive procurements under the program, the Companies will undertake a detailed multi-stage review and evaluation process whereby eligible proposals will be selected based upon their ability to most cost-effectively and reliably satisfy the CBRE program requirements.

Given that multiple RFPs for CBRE, including and in addition to other RFPs currently being administered by the Companies, will be active at the same time, and because the Companies must work expeditiously, in order to consistently ensure the competitive benefits of the procurement process while continuing to provide equitable and fair consideration for all proposals, the Companies will endeavor to create, designate and maintain the Roster at all times for quicker and more decisive implementation across all active RFPs. Subject to the transfer rules specified herein, the Roster will be maintained for the durations of the RFPs. The Companies also intend that the evaluation process will be well-documented so that the results of the evaluation can be fully reviewed by an IO to confirm that all proposals were treated in a fair and consistent manner.

The Code of Conduct and this Procedures Manual address (1) communication requirements and procedures associated with the relationship between utility employees (Company RFP Team, Company Self-Build Team, Shared Resources and Unassigned Company Resources); (2) communication requirements and procedures associated with the relationship between the Company RFP Team, the Company Self-Build Team and Proposers; and (3) communication requirements associated with the relationship between Company management and the Company RFP Team.

The Code of Conduct and this Procedures Manual also include procedures for the sharing of resources, where appropriate, by the Company RFP Team and the Company

Self-Build Team for the purposes of completing their efforts to effectively evaluate an RFP or to submit a bid in response to an RFP. The small size of the Companies and limitation of resources will require specialized services, information exchange and sharing of resources in certain limited circumstances. Company personnel and consultants identified as "Shared Resources" shall be designated by the Companies for this specific purpose.

IV. ORGANIZATION AND COMMUNICATION RESPONSIBILITIES

This section outlines the RFP organizational structure for the development of the RFP and the Company self-build options and the organization's responsibilities to ensure that communications between Company personnel and consultants working on their respective RFPs or self-build projects are conducted in a fair, consistent, and equitable basis so that the Company Self-Build Team does not enjoy any unfair advantage over other Proposers responding to an RFP.

A. Organization

The Companies shall identify and maintain two separate teams to facilitate the independence and objectivity of the Company resources working on an RFP and ensure an arms-length relationship with the resources working on the Company's self-build project to avoid any real or perceived inequity in an RFP process. The two essential teams shall be the "Company RFP Team" and the "Company Self-Build Team."

Other limited Company resources, such as select staff from various functional areas of the Company that are in short supply and thus cannot be dedicated solely to either team, may be designated as "Shared Resources" to perform services for the Company RFP Team and Company Self-Build Team. Shared Resource employees are allowed to carry on with both their RFP (for either the Company RFP Team and/or the Company Self-Build Team) and regular functions throughout the resource planning process (including the development of any Company Parallel or Contingency Plan as defined in the Framework), which may require communications with or services performed for the Company Self-Build Team. Shared Resource employees, however, will not participate in the evaluation and selection process of proposals submitted in response to

an RFP. Rules for communications between Shared Resources and the essential teams are specified below.

Company employees unassigned to an RFP may be called upon by the Company RFP Team, Company Self-Build Team, or both for help to meet unforeseen tasks. After completing the Code of Conduct training, these "Unassigned Company Resources" are eligible to assist on an ad hoc basis with the requirement that all communications as an Unassigned Company Resource must be memorialized and logged in the same manner as communications with Shared Resources on the Communication Log. If an Unassigned Company Resource is called upon repeatedly for a substantial amount of assistance by a particular team, the employee should be assigned to such team or evaluated for designation as a shared resource.

B. Essential Teams

1. Company RFP Team. The Company RFP Team, tasked with preparing the RFP and evaluating the responses and bids in response to the RFP, will consist primarily of Director/Manager-level and other experienced employees together with possible outside consultants, with backgrounds in a number of disciplines necessary to conduct a thorough evaluation of each proposal. The Company RFP Team will be comprised of a Price Evaluation Team and a Non-Price Evaluation Team and will be prepared to evaluate proposals on the basis of their price and non-price aspects pertaining to their level of expertise. Members of the Company RFP Team will include professionals with experience in the following areas of expertise: engineering, siting/land use, environmental, transmission planning, fuel procurement, legal, financial planning, system operations, integrated resource planning, generation planning, production cost analysis, and others as needed.

The Price Evaluation Team and the Non-Price Evaluation Team will conduct their sections of the bid evaluation process separately and will not share the results of their evaluation with members of the other sub-team. Each team will submit their evaluation results to an oversight team, which will be responsible for compiling the results of the evaluations and selecting the short-list.

The Energy Contract Manager will be responsible for directing the evaluation efforts of the Company RFP Team when the proposals are received. The Energy Contract Manager will be responsible for maintaining the documentation underlying the evaluation of each proposal as well as all communications with Proposers.

2. The Company Self-Build Team. The Company Self-Build Team, tasked with preparing any Company proposal to be submitted by the Company in response to a Company RFP, will consist primarily of Company employees, along with possible outside consultants with backgrounds in a number of disciplines necessary to complete a competitive proposal in response to a Company RFP. The members of the team will include professionals with experience in the following areas of expertise: engineering, siting/land use, environmental, transmission planning, fuel procurement, legal, financial planning, system operations, integrated resource planning, generation planning, production cost analysis, and others as needed.

3. Affiliate Team. Any Affiliate Team will be comprised solely of employees and consultants of the Affiliate and no Company employee or consultant shall serve as a member of an Affiliate Team; provided, however, that a consultant may perform services for an Affiliate and the Company so long as appropriate "walls" are established satisfactory to the Company that ensures that employees of the consultant working for the Affiliate Team do not also perform work for the Company nor communicate with employees of the consultant performing work for the Company, and vice versa. The Company will inform consultants providing services for the Company RFP Team of these separation requirements, and will seek confirmation in writing from any consultant performing services for an Affiliate and the Company that such separation requirements will be met. Affiliate Teams will be considered and treated as separate independent third-party Proposers for all purposes within any RFP and shall have no access to, interaction or communications with Shared Resources or Unassigned Company Resources for the purpose of completing a proposal in response to any RFP. Affiliate Teams shall also be subject at all times to the terms, conditions and restrictions specified in the Company's ATRs.

4. Transfers between Teams. As members of both the Company RFP

Team and the Company Self-Build Team are intended to be fixed, transfers between teams should not be permitted. However, there will be instances where a member of a particular team (whether Company RFP or Company Self-Build) transfers to a position in which he/she may be requested, as part of his/her new job responsibilities, to participate as a member of the other team. Such employee shall not be permitted to transfer from one team to the other during the pendency of any particular RFP (or stage or phase of a particular RFP). After completion of the RFP (or stage or phase of a particular RFP) under which the employee recently participated, the employee may transfer to the other team under the following conditions: (a) the employee is prohibited from disclosing any Confidential Information known to such employee as a result of being a member of his/her former team with members of the new team he/she is joining; and (b) for a period of one (1) year, such employee shall not participate or be involved in the evaluation of any subsequent stage(s) or phase(s) of a prior RFP which such employee participated in with his/her former team.

Transfers of employees between the Company and any Affiliate and their subsequent work on RFPs shall be subject to the terms, conditions and restrictions specified in the ATRs.

C. Communications Protocols

1. Overview and General Requirements.

The Company has developed policies and procedures governing communication between the Company RFP Team, the Company Self-Build Team, Shared Resources, the Proposers, the IO, and with the Commission regarding RFP design and bid evaluation. Bid information and evaluation data and information shall not be communicated between members of the Company RFP Team, outside parties and other employees within the Companies except to those with a business need to know.

To ensure that the competitive bidding process is fair and unbiased, that all Proposers have access to the same information so that no Proposer has an unfair advantage, and that any Company self-build and/or Affiliate proposals do not have any unfair competitive advantage over third-party bids, the Companies shall follow the Code

of Conduct whenever the utility or its Affiliate is seeking to advance a resource proposal as provided in Section IV.H.9.b of the Framework.

Each employee or consultant on the Company RFP Team, Company Self-Build Team and Shared Resources shall read, acknowledge and sign the Code of Conduct Acknowledgement. Unassigned Company Resources who are called upon by the Company RFP Team or Company Self-Build Team for help to meet unforeseen tasks shall also read, acknowledge and sign the Code of Conduct Acknowledgement.

The Company issuing the RFP will establish a shared drive on its corporate computer network designed to maintain the bid evaluation documentation and other information associated with the bidding process. Only Company RFP Team members will have access to all the files on the shared drive.

In cases where staffing and resources are limited or constrained, the Company may identify Shared Resources or those employees eligible to provide information or serve as a resource to both the Company RFP Team and the Company Self-Build Team. Specific rules to log communications with the Company RFP Team or the Company Self-Build Team are described below.

Shared Resources will not have access to the Company's shared drive established for the RFP process which will include the documentation of the bid evaluation results.

Team members should clearly mark all e-mails, documents, or other communications that contain Confidential Information and make clear which team should not receive it with the following header or a substantially similar message: "This communication contains self-build information that must be kept confidential. DO NOT copy, forward, or discuss the contents with Company RFP Team members" OR "This communication contains Company RFP Team information that must be kept confidential. DO NOT copy, forward, or discuss the contents with Company Self-Build Team members."

2. Communications Between the Company RFP Team and

Proposers, including the Company Self-Build Team and any Affiliate Team.

During the RFP process, the Energy Contract Manager shall serve as the primary contact person for all RFP communications with Proposers. This is important from the standpoint of maintaining consistency and confidentiality of information between Proposers and the Company. For documentation and oversight purposes, all communications from Proposers must be submitted to an established website link provided by the Company (the "Company RFP website"). The IO will monitor all communications through the Company RFP website. To ensure fair and equal access to information, any Company Self-Build Team and/or Affiliate Team shall be considered a Proposer for communication purposes and any request for information from the Company Self-Build Team or Affiliate Team to the Company RFP Team shall be through the Company RFP website.

Subject to confidentiality obligations, it is the objective of the Code of Conduct that all Proposers, including the Company Self-Build Team and any Affiliate Team, receive access to information released by the Company RFP Team, whether in response to a question from a Proposer or not, at the same time.

The communications process for addressing questions and requests for information from Proposers, and for the Company RFP Team to provide information to Proposers, is provided below:

- a. Other than during Company sponsored conferences, Proposers must submit all questions to the Company RFP website or the designated RFP email address (if the Company RFP website has not been opened yet for the RFP).
- b. Questions will be reviewed and responses will be coordinated with the appropriate functional area within the Company for a response. Every reasonable effort will be made to provide responses in a timely manner.

- c. All responses, including the classification of such response, i.e., whether non-confidential or confidential as described below, will be provided to the IO for monitoring purposes via email or the PowerAdvocate messaging system. The IO may choose to comment on any response at its discretion.

- d. Depending on the questions received, responses may involve Confidential Information of the Company and/or Proposers. Release of any Company Confidential Information must be approved in advance by the Company executive authorized to release the Confidential Information. Any release of Company Confidential Information shall be accompanied by appropriate confidentiality and non-disclosure agreements, protective orders or other means required to maintain the confidentiality of the Company Confidential Information while still permitting its disclosure under circumstances deemed appropriate by the responsible Company executive. Other non-Company Confidential Information will not be shared without the prior written consent of the owner of such Confidential Information and the execution of appropriate confidentiality and non-disclosure agreements by all recipients of such Confidential Information. Responses will be categorized as follows:
 - i. Non-Confidential Responses: Questions and responses will either be posted directly on the Company RFP website (process-related questions or simple, non-substantive information) or a description of the information that can be made available will be posted and Proposers will be instructed to submit a request to the Company via the Company RFP website to receive a copy.

 - ii. Confidential Responses: Questions and a description or notice of a Confidential Information response will be posted on

the Company RFP website and Proposers will be instructed to submit a request to the Company via the Company RFP website to receive instructions on how to access the Confidential Information. The Confidential Information will only be provided to the requestor after receipt of an executed confidentiality and non-disclosure agreement. Only those who have qualified to submit a bid (i.e., Eligible Proposers) and have executed a confidentiality and non-disclosure agreement will be considered for receipt of Confidential Information.

iii. Process for Distribution of Confidential Information: Confidential Information provided in response to questions from proposers may be made available only to parties as indicated above via the following:

A. Confidential Information that is approved for exchanging on a secured access site: (1) Confidential Information may be made available on a secured website with an individual password provided to each approved Proposer; and (2) Confidential Information in documents may be transmitted to approved recipients through the Company's secure email system.

B. Confidential Information that can be made available for inspection only, but cannot be copied: There may be some types of Confidential Information that the Company may consider making available for inspection only with no copies allowed. This type of Confidential Information will be made available on Company premises for inspection only. Proposers will be advised via the Company RFP website to make arrangements with Company staff to view the Confidential Information.

C. Confidential Information that may not be released:

In the event that Proposers submit questions that require responses that the Company feels are not appropriate to provide for reasons which may include, but not be limited to, safety, security, protection of trade secrets or intellectual property rights, Proposers will be advised as such via the Company RFP website.

- e. Prior to and during the RFP, and outside of the Company RFP website protocol, developers may direct questions to the Company prior to submitting a Proposal to discuss specific questions regarding their specific Proposal. Questions shall be directed to the Company Contact for Proposals listed in the particular applicable RFP. Questions and responses that do not contain Confidential Information and which are deemed relevant to all Proposers will be published without identifying information via the Company RFP website.
- f. Once bids are received, the Company may submit information requests to Proposers to clarify their proposals or request additional information. All contacts with Proposers will be through the Company RFP website. All contacts and information exchanged will be under the oversight of the IO.
- g. A single exception to the communication process outlined above shall be instituted for the purpose of facilitating the verification of proposed project models and documentation required to perform the IRS. For this limited scope, the Company's Manager of Interconnection Services will serve as the primary contact person for all such interconnection communications with the Proposers on the Priority List, provided that all necessary confidentiality and

non-disclosure agreements are in place. The Manager of Interconnection Services and personnel in the Interconnection Services Department shall be members of the Company RFP Team. Interconnection communications will be limited to a Proposer's bid and no more information other than as necessary to facilitate such communications will be permitted. Discussion of locations of proposed projects shall be limited to that necessary only to determine the interconnection requirements of such project. The IO shall have the right to monitor all such communications in his/her discretion.

3. Communications Between the Companies and the Commission.

The Company's Regulatory Affairs staff will be responsible for initiating communication with the Commission regarding the RFP or the Companies' evaluation process. Regular updates may be provided to the Commission regarding the RFP process if requested.

4. Communications Between the Company RFP Team and the IO.

Communications between the Company RFP Team and the IO will be required for many aspects of the evaluation process. The IO is also required to maintain confidentiality of any Confidential Information. The IO will coordinate all activities through the Energy Contract Manager. The IO will be invited to participate in any meetings or discussions between the Company RFP Team and the Proposers and other communications as noted above. Sufficient notice will be provided whenever possible and teleconference and/or web conference alternatives may be utilized.

5. Communications Between the Company RFP Team and the Company Self-Build Team or any Affiliate Team.

Any communication between the Company RFP Team and the Company Self-Build Team or any Affiliate Team with respect to the RFP shall be handled no differently than with Proposers and other outside parties. Accordingly, the Company Self-Build Team or any Affiliate Team will be required to submit any questions or information requests to the Company RFP Team via the Company RFP website and all responses will be provided in the same manner as to other Proposers. Accordingly, as stated in Section 2 above, responses will be provided to the IO for monitoring purposes via email or the PowerAdvocate messaging system. Members of the Company RFP Team are prohibited from providing any input into the development of the self-build option by the Company or an Affiliate. Company RFP Team members are prohibited from sharing any Confidential Information (i.e., detailed evaluation criteria, other proposals, etc.) with any Company Self-Build or Affiliate Teams except in accordance with the procedures in the Code of Conduct, this Manual or the RFP.

Company RFP Team members and Company Self-Build Team members may continue to work with each other on projects not related to the RFP. Further, members of each respective team do not have to be physically separated from each other, but members of each team must make reasonable efforts to keep all Confidential Information (including electronic data) secure and inaccessible to the other team.

Company RFP Team members and Affiliate Team members may continue to work with each other on matters not related to the RFP as permitted under the ATRs.

6. Communications among the Company RFP Team, the Company Self-Build Team and Shared Resources.

Shared Resources may provide services to the Company RFP Team and the Company Self-Build Team (but not any Affiliate Team). Shared Resources shall be limited as much as possible to instances where Company resources cannot provide a dedicated member to the Company RFP Team and the Company Self-Build Team at the same time and still provide the necessary functions of its area to the Company as a whole. Shared

Resources are expressly prohibited from providing any information developed on behalf of the Company RFP Team to the Company Self-Build Team or any information developed on behalf of the Company Self-Build Team with the Company RFP Team, except through the formal communication process outlined above, i.e., through the Company RFP website.

Additionally, a written record of the time, date and substance of all conversations, data and written material directly or indirectly exchanged with the Company RFP Team or the Company Self-Build Team that pertain to the RFP shall be maintained on the Communications Log. The RFP Communication Tool Kit SharePoint Site will be set up and managed by the Energy Contract Manager to provide an easy to use and understand mechanism to log and memorialize these conversations.

Shared Resources will not have direct access to the Company's shared drive developed for the RFP process which will include documentation of the bid evaluation results.

7. Communications between the Company RFP Team, the Company Self-Build Team and any Unassigned Company Resource or consultant that is not a Shared Resource.

There may be times where a Company RFP or Company Self-Build team (but not an Affiliate Team) member may need ancillary or other ministerial or administrative assistance that requires communication and/or assistance from Company personnel who are neither on any team nor considered a Shared Resource. Under those circumstances, such personnel may assist the requesting team member on an ad hoc basis upon the following conditions:

- a. The essential team member making the request must inform the Company personnel that sharing of the requested information or assistance with the other team, be it the Company RFP or Company Self-Build Team, is expressly prohibited under the Code of Conduct.

b. The assisting Company personnel shall complete the Code of Conduct training and sign the Code of Conduct Acknowledgement.

c. The assisting Company personnel shall be directed to the Roster provided by such requesting team member to determine and/or confirm the restrictions on communication with the other team members. The essential team member making the request will ensure the Roster is updated by the Energy Contract Manager to include the assisting Company personnel.

d. A written record of the time, date and substance of all conversations, data and written material directly or indirectly exchanged with the Company RFP Team or the Company Self-Build Team that pertain to the RFP shall be maintained on the Communication Log. The RFP Communication Tool Kit SharePoint Site will be set up and managed by the Energy Contract Manager to provide an easy to use and understand mechanism to log and memorialize these conversations.

e. If assistance from an Unassigned Company Resource becomes more than occasional or more substantive than ancillary, ministerial or administrative services, the Unassigned Company Resource should be considered for inclusion on the team that he/she has been assisting on such basis. Additionally, the Unassigned Company Resource may also be considered for inclusion as a Shared Resource. Members of the Company RFP Team and/or Company Self-Build Team shall consult with the Company executive for resolution.

8. Communications between the Company RFP Team, the Company Self-Build Team and Company Management.

The Company RFP Team and the Company Self-Build Team will necessarily require management approval of the RFP and the Company Self-Build Team proposal. Because of the size of the Company, it may be possible that a single employee (at whatever level) (the "Approver") may have approval responsibility for matters affecting the RFP and the Company Self-Build Team proposal. Approvers in this situation must use their best judgment in making decisions reviewing and approving matters for the respective teams. The Code of Conduct must be adhered to in these situations and the Approver must not communicate matters learned from the Company RFP Team with the Company Self-Build Team.

If an Approver feels that he/she cannot manage this potential conflict, the Approver is recommended to consult with his/her immediate supervisor to determine whether such higher authority could be appointed with the task of reviewing and approving matters for a designated team, either the Company RFP Team or the Company Self-Build Team. In matters where a team of employees (including one or more Approvers) is responsible for reviewing and approving matters for the respective teams, approving employees (from whatever level, including executives) with information from reporting personnel beneath them from both the Company RFP Team and the Company Self-Build Team may consider recusing himself/herself from the decision making if such employee cannot objectively make a decision on the matter.

Finally, an Approver may be a member of the Company RFP Team and have a subordinate reporting to him/her that is a member of the Company Self-Build Team (or vice versa). In such situations, because the Code of Conduct prohibits communication between the teams, the Approver must recuse himself/herself from the decision making and request his/her manager to review and approve the matter in his/her place.

In all instances, it is possible that any particular situation above may be addressed and/or resolved by the terms and conditions of the Company's internal code of conduct implemented for all employees and consultants of the Company. As appropriate, an Approver or any other team member, Energy Contract Manager or Company executive in Charge may involve the Company's Corporate Compliance Officer for input and possible

resolution under the Company's internal corporate code of conduct.

V. WHEN THE CODE OF CONDUCT BECOMES EFFECTIVE

A. Prior to development of the requirements for any particular RFP, the Code of Conduct for that RFP will be activated. However, if the Company Self-Build Team determines at any time that it will not pursue a self-build option for a particular RFP, the Code of Conduct may be de-activated.

B. Upon the activation of the Code of Conduct, members of the Company RFP Team and the Company Self-Build Team must then conduct activities on the RFP or self-build process in compliance with the Code of Conduct. Once identified and having commenced work, no information may be shared outside the respective team members with respect to the RFP or a self-build option except through the formal communication processes outlined above.

C. Immediately upon assignment to a Company team (RFP or Self-Build), designation as a Shared Resource, or request to assist as an Unassigned Company Resource, each such employee or consultant must review this Manual, and sign the Code of Conduct Acknowledgement.

D. Within the RFP process, after a member has been assigned to a particular Company team (RFP or Self-Build), he or she will not be able to transfer to the other Company team during the pendency of any particular RFP (or stage or phase of a particular RFP). It is the responsibility of each team to fill vacant team positions with employees that have not been previously assigned as a team member for a team until the PPA negotiations have been concluded and the final contracts are executed.

E. Each employee and consultant working on the RFP shall review the Code of Conduct and sign the Code of Conduct Acknowledgement attesting to his/her compliance with the Code of Conduct until the employee is no longer working in the position he/she was in while working on the RFP.

F. The Energy Contract Manager will be responsible for maintaining the Roster and the signed Code of Conduct Acknowledgements. The Company Executive in Charge shall be responsible for ensuring compliance with the Code of Conduct and shall have the written authority and obligation to enforce the Code of Conduct.

VI. IMMEDIATE ACTIONS UPON ACTIVATION OF THE CODE OF CONDUCT

The following items are required to be completed as soon as possible after activation of the Code of Conduct, but no later than the designated events specified for each item below.

A. Prior to development of the requirements for any particular RFP, a Roster listing employee (with their title) and consultants in their designated role; Company RFP Team, Company Self-Build Team, Shared Resource or Unassigned Company Resource. When the IO is appointed, this Roster shall be provided to him/her. The Roster shall be placed in the RFP Communication Tool Kit SharePoint Site so that any Company personnel can access the database to determine the identity of the respective teams and Shared Resources.

B. Upon the finalization of the Roster for the RFP, the Energy Contract Manager shall verify that all employees (whether full-time, part-time, temporary, or contract) and consultants involved in the competitive bidding process, such as members of the Company RFP Team, the Company Self-Build Team, Shared Resources or Unassigned Company Resources, have acknowledged receipt of the Code of Conduct and his or her responsibility to comply with the Code of Conduct by submitting the Code of Conduct Acknowledgement (with electronic acknowledgment being acceptable). If an employee or consultant is later added to a team, the Energy Contract Manager shall also verify that such employee or consultant has submitted the Code of Conduct Acknowledgment.

C. Prior to any solicitation for comments or questions to the RFP, establishment of the Company email address to accept requests for information from Proposers, including the Company Self-Build Team or any Affiliate Team.

D. Prior to the drafting of any documents for any particular RFP, establishment of the Company-secured site that houses the accessible database (such as SharePoint).

VII. WHEN THE CODE OF CONDUCT TERMINATES

- A. The Code of Conduct for a specific RFP will terminate after the following two conditions are met when:
- a. the final contract(s) for RFPs conducted under the Framework with the successful proposer(s) is/are executed, or when written notice of termination of the RFPs to be conducted under the Framework is provided by the Manager of Energy Procurement or his/her designee to the IO and the Commission, and
 - b. a certification of Code of Conduct compliance by all employees participating in the specific RFP process is submitted by affidavit by the Company Executive in Charge.

VIII. DOCUMENTATION FORMS

The following documentation forms may be utilized by those Company personnel involved in the RFP. These forms may be amended from time to time as necessary. Additional forms may also be developed as determined necessary.

- Code of Conduct Acknowledgement
- Communications Log
- Roster

IX. APPLICABILITY OF THE ATRs

Except as specifically made applicable under Section V.C.1.i of the ATRs with respect to wholesale power procurement from Affiliates, the ATRs shall not apply to RFP matters covered by the Framework, the Code of Conduct and this Procedures Manual as it relates to the Companies' interactions between the Company RFP Teams and Affiliate Teams. Reference to the ATRs in the Code of Conduct and/or this Manual are specifically

for matters outside the Companies' administration of the RFP; provided, however, that such applicability may be revised as necessary and as may be directed by the Commission for any RFP.¹

¹ See Decision and Order No. 35962, filed on December 19, 2018, in Docket 2018-0065, at 56-57.

DRAFT

REQUEST FOR PROPOSALS

FOR

COMMUNITY-BASED RENEWABLE ENERGY PROJECTS

FOR

LOW- AND MODERATE-INCOME SUBSCRIBERS

ISLAND OF MAUI

JULY 9, 2020

Docket No. 2015-0389

Appendix D – PowerAdvocate User Information



**Maui
Electric**



Sourcing Intelligence Quick Start for Suppliers

Logging In

1. Launch a web browser and go to www.poweradvocate.com
2. Click the orange **Login** button.
3. Enter your account **User Name** and **Password** (both are case-sensitive) and click **Login**.
4. Click the **Events** tab if it is not already displayed.

Dashboard

Your Dashboard lists the events you have been invited to. A line divides currently accessible events from others.

Click to view Events

Click to view the event's Status tab

Buyer filter

Navigation bar

Buying entity

Number of unread/total messages

Click to view the event's Messaging tab

Click numbers to view event tabs

Datashheet available

No datashheet available

- Click an event name to view its Status tab, which displays a summary of your activity and key event dates. To view specific details of an event, click the buttons 1-5 to view the corresponding tab.
- To return to the Dashboard, click **Dashboard** in the navigation bar at the top of the window.
- An event will not appear on your Dashboard until you have been added as a participant.



Downloading Bid Packages

All of the Buyer's bid package documents (if any) are centrally stored on the PowerAdvocate Platform. To view bid documents, click "1" on your Dashboard or on the **1. Download Documents** tab from within the event.

Document Description	Issue Date	Ref ID	File Name	File Size	Download
<input type="checkbox"/> Pre Bid Test Doc	01/15/18		Pre_Bid_Test_Doc.docx	11.63 KB	

- You can access the **Bid** sub-tab after the event opens. You can access Buyer documents before the event is opened from the **Pre-Bid** sub-tab, if the Buyer utilizes this feature.
- To view or download a document, click the file name.
- To download multiple documents:
 1. Select the checkbox in the Download column for each document you wish to download or click **Select All**.
 2. Click **Download Selected Files**.

Uploading Documents

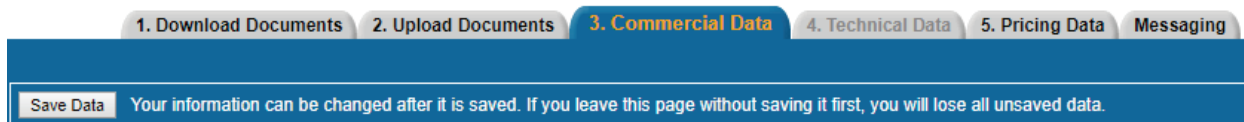
To upload your documents, click "2" on your Dashboard, or on the **2. Upload Documents** tab from within the event.

- Do not upload any files to the Pre-Bid tab.
- To upload a document to the Bid tab:
 1. Specify a **Document Type** (Reference ID can be left blank).
 2. Click **Choose File**, navigate to and select the document, and then click Open; multiple files can also be compressed into one .zip file for upload.
 3. Click **Submit Document**.



Datasheets

Datasheets will not be used in this RFP event. All Proposal information will be uploaded for submission through the 2. Upload Documents tab above. Buttons/tabs are grayed out (e.g., 4) if the event is not using a particular type of datasheet.

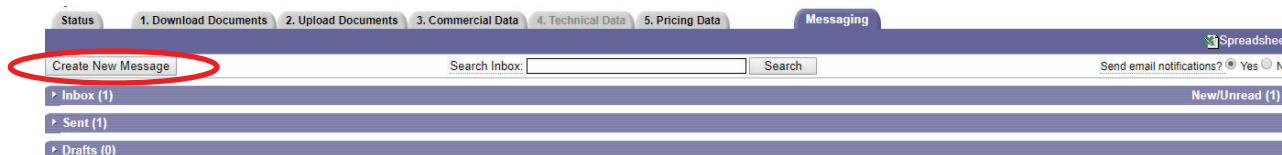


Communicating with the Bid Event Coordinator /Company Contact

Suppliers should use the PowerAdvocate Messaging tool to contact the Bid Event Coordinator (BEC) while the bid event is open.

PowerAdvocate Messaging

To send a message to the BEC, go to the **Messaging** tab and click **Create New Message**. To read or reply to a message from the BEC, click the message subject.



- You can send messages to the BEC and Buyer Team
- The Independent Observer can view all messages in the bid event.
- You can receive external e-mail notification of new PowerAdvocate messages by selecting “Yes” to “Send email notifications?” in the Messaging tab.

Getting More Information

- Click **Help** on the navigation bar to display online help.



- Supplier documentation can be downloaded from the online help system.
- Call PowerAdvocate Support at 857-453-5800 (Mon-Fri, 8 a.m. to 8 p.m. Eastern Time) or e-mail support@poweradvocate.com.

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REQUEST FOR PROPOSALS

FOR

COMMUNITY-BASED RENEWABLE ENERGY PROJECTS

FOR

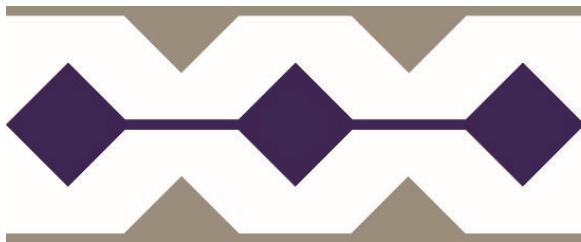
LOW- AND MODERATE-INCOME SUBSCRIBERS

ISLAND OF MAUI

JULY 9, 2020

Docket No. 2015-0389

*Appendix E – Mutual Confidentiality and
Non-Disclosure Agreement*



**Maui
Electric**

APPENDIX E
MUTUAL CONFIDENTIALITY AND NON-DISCLOSURE AGREEMENT
Independent Power Producers – (“IPPs”)

This Mutual Confidentiality and Non-Disclosure Agreement (this “Agreement”) is effective as of _____, 20____ (the “Effective Date”) between [INSERT NAME OF IPP], a [State of incorporation/organization] [type of entity] (“IPP”) and Hawaiian Electric Company, Inc., Maui Electric Company, Limited, and Hawaii Electric Light Company, Inc., each a Hawaii corporation (collectively, the “Companies”). In consideration of the mutual promises contained in this Agreement, including the provision of Confidential Information (as defined below) by either party to the other hereunder, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

1. Background

The Companies have or intend to issue a Request for Proposals (“RFP”) for Community-Based renewable energy projects. The IPP has or intends to submit one or more proposals for a nominal [] MW [TYPE OF FACILITY] facility located at [LOCATION] on the island of Maui, State of Hawai‘i (“Proposal”).

In connection with the IPP’s proposed project, the Companies may conduct an interconnection requirements study (“IRS”) to establish the requirements for interconnection of the IPP’s proposed project to the Companies’ electric grid. The RFP process may also result in the award of a potential power purchase agreement, the terms of which must be agreed upon by the parties (“PPA Negotiations”). For purposes of this Agreement the term “Project” refers to the RFP, Proposal, potential IRS and PPA Negotiations.

In order to evaluate the Project, either party may from time to time provide to the other party certain Confidential Information. The parties are willing to provide such Confidential Information to each other upon the terms and conditions of this Agreement.

2. Confidential Information

Except as set forth in Section 3 (Exclusions from Confidential Information) below, “Confidential Information” means all non-public, confidential or proprietary information disclosed by either party (the “Provider”) to the other party (a “Recipient”) its affiliates and its and their directors, officers, employees, agents, advisors, consultants (including, without limitation, financial advisors, counsel and accountants) and controlling entities or individuals (collectively, “Representatives”) whether disclosed orally or disclosed or accessed in written, electronic or other form of media, and whether or not marked or otherwise identified as “confidential,” including, without limitation:

(a) all information concerning the Provider and its affiliates’, and their customers’, suppliers’ and other third parties’ past, present and future business affairs including, without limitation, finances, customer information, supplier information, products, services, designs,

processes, organizational structure and internal practices, forecasts, sales and other financial results, records and budgets, business, marketing, development, sales and other commercial information and strategies;

(b) information concerning the Companies' generation, transmission, and distribution systems (e.g., engineering and operating characteristics of the Companies' transmission lines and substations) ("Critical Infrastructure Confidential Information");

(c) the Provider's unpatented inventions (whether or not they are patentable), ideas, methods and discoveries, techniques, formulations, development plans, trade secrets, know-how, unpublished patent applications and other confidential intellectual property;

(d) all designs, specifications, documentation, components, source code, object code, images, icons, audiovisual components and objects, schematics, drawings, protocols, processes, and other visual depictions, in whole or in part, of any of the foregoing;

(e) any third-party confidential information included with, or incorporated in, any information provided by the Provider to the Recipient or its Representatives; and

(f) all notes, analyses, compilations, reports, forecasts, studies, samples, data, statistics, summaries, interpretations and other materials ("Notes") prepared by or for the Recipient or its Representatives that contain, are based on, or otherwise reflect or are derived from, in whole or in part, any of the foregoing.

3. Exclusions from Confidential Information

Except as required by applicable federal, state, or local law or regulation, the term "Confidential Information" as used in this Agreement shall not include information that:

(a) at the time of disclosure is, or thereafter becomes, generally available to and known by the public other than as a result of, directly or indirectly, any violation of this Agreement by the Recipient or any of its Representatives; provided, however, that Confidential Information shall not be disqualified as Confidential Information (i) merely because it is embraced by more general or generic information which is in the public domain or available from a third party, or (ii) if it can only be reconstructed from information taken from multiple sources, none of which individually shows the whole combination (with matching degrees of specificity);

(b) at the time of disclosure is, or thereafter becomes, available to the Recipient on a non-confidential basis from a third-party source, provided that such third party is not and was not prohibited from disclosing such Confidential Information to the Recipient by a contractual or other obligation to the Provider;

(c) was known by or in the possession of the Recipient or its Representatives, as established by documentary evidence, prior to being disclosed by or on behalf of the Provider pursuant to this Agreement;

(d) was or is independently developed by the Recipient, as established by documentary evidence, without reference to or use of, in whole or in part, any of the Provider's Confidential Information; or

(e) was or is learned of established entirely from public sources, as established by documentary evidence, without reference to or use of, in whole or in part, any of the Provider's Confidential Information.

The parties acknowledge and understand that the confidentiality obligations of this Agreement apply only to the Confidential Information shared in connection with the Project. The parties may share other information with each other under other agreements, provisions or understandings which are not related to the Project. Such information sharing shall be subject to the provisions of the agreements and confidentiality provisions associated thereto and this Agreement shall not be construed to infringe upon or apply to such agreements or provisions.

4. Non-Disclosure of Confidential Information

Unless otherwise agreed to in writing by the Provider, the Recipient agrees as follows:

(a) except as required by law, not to disclose or reveal any Confidential Information to any person or entity other than its Representatives who are actively and directly participating in the evaluation of the Project or who otherwise need to know the Confidential Information for the purpose of evaluating the Project.

(b) not to use Confidential Information for any purpose other than in connection with its evaluation of the Project or the consummation of the Project.

(c) except as required by law, not to disclose to any person or entity (other than those of its Representatives who are actively and directly participating in the evaluation of the Project or who otherwise need to know for the purpose of evaluating the Project) any information about the Project, or the terms or conditions or any other facts relating thereto, including, without limitation, the fact that discussions are taking place with respect thereto or the status thereof, or the fact that Proprietary Information has been made available to the Recipient or its Representatives.

(d) to use diligent efforts to safeguard and protect the confidentiality of the Confidential Information, including, at minimum, implementing the same commercial measures that the Recipient uses to protect its own confidential information. Before disclosing the Confidential Information to any Representative, the Recipient will inform such Representative of the confidential nature of such information, their duty to treat the Confidential Information in accordance with this Agreement and shall ensure that such Representative is legally bound by the terms and conditions of this Agreement or subject to confidentiality duties or obligations to the Recipient that are no less restrictive than the terms and conditions of this Agreement.

(e) Any provision herein to the contrary notwithstanding, the Companies may disclose Confidential Information to the State of Hawai‘i Public Utilities Commission (“Commission”) and/or the State of Hawai‘i Division of Consumer Advocacy (including their respective staffs) provided that such disclosure is made under a protective order entered in the docket or proceeding with respect to which the disclosure will be made or any general protective order entered by the Commission.

5. Required Disclosure and Notice

If the parties or any of their Representatives become legally compelled (by deposition, interrogatory, request for documents, subpoena, civil investigative demand, court order, or similar process) to disclose any of the Confidential Information, the compelled party shall undertake reasonable efforts to provide the other party with notice within three (3) business days of such requirement or advice prior to disclosure so that the other party may (a) seek a protective order or other appropriate remedy, (b) consult with the other party with respect to the compelled party taking steps to resist or narrow the scope of such requirement or advice, and/or (c) waive compliance, in whole or in part, with the terms of this Agreement. If such protective order or other remedy is not obtained, or the other party waives compliance with the provisions hereof, the compelled party agrees to furnish only that portion of the Confidential Information which it is legally required to so furnish and, at the request of the other party, to use reasonable efforts to obtain assurance that confidential treatment will be accorded such Confidential Information, it being understood that such reasonable efforts shall be at the cost and expense of the party whose Confidential Information has been sought. In any event, neither the IPP nor any of its Representatives will oppose action by the Companies to obtain an appropriate protective order or other reliable assurance that confidential treatment will be accorded the Confidential Information.

6. Return or Destruction of Confidential Information

At any time during or after the term of this Agreement, at the Provider’s written request, and in any event, upon the termination of the Agreement, the Recipient shall certify within ten (10) business days that it has destroyed all Confidential Information by using industry standard data elimination methods used to prevent unauthorized disclosure of information, and for Personally Identifiable Information (defined as personally identifiable information of individuals, and any information that may be used to track, locate or identify such individuals (or which is otherwise protected by privacy laws), including any automatically generated information (such as IP addresses and other customer identifiers) that identifies or is unique or traceable to a particular individual or computer or other electronic device capable of accessing the internet, including without limitation, name, address, telephone number, social security number, credit card account numbers, email addresses, user identification numbers or names and passwords, which is disclosed to the Recipient or its subcontractors in connection with this Agreement by the Provider, which products and services are used or intended to be used for personal, family or household purposes), such methods shall be consistent with Hawaii Revised Statutes Chapter 487-R; provided, however, that with respect to Confidential information in tangible form, the Recipient may return such Confidential Information to the Provider within ten (10) business days in lieu of destruction. The Recipient’s sole obligation with respect to the disposition of any

Notes shall be to redact or otherwise expunge all such Confidential Information from such Notes and certify to the Provider that it has so redacted or expunged the Confidential Information. Notwithstanding the foregoing, with respect to any Confidential Information stored in Recipient's disaster recovery backups or other electronic archives, Recipient is not required to destroy such Confidential Information if it would impose a material cost or burden; provided, however, such Confidential Information shall be destroyed when such archives are destroyed in accordance with Recipient's records retention policies.

7. Authority

Each party represents and warrants that it has full power and authority to enter into and perform this Agreement, and the person signing this Agreement on behalf of each has been properly authorized and empowered to enter into this Agreement, understands it and agrees to be bound by it.

8. No Representations or Warranties

Neither the Provider nor any of its Representatives make any express or implied representation or warranty as to the accuracy or completeness of any Confidential Information disclosed to the Recipient hereunder, and the Recipient agrees that it is not entitled to rely on the accuracy or completeness of any Confidential Information. Neither the Provider nor any of its Representatives shall be liable to the Recipient or any of its Representatives relating to or arising from the use of any Confidential Information or for any errors therein or omissions therefrom. Notwithstanding the foregoing, the Recipient shall be entitled to rely solely on such representations and warranties regarding Confidential Information as may be made to it in any final agreement relating to the Project, subject to the terms and conditions of such agreement.

9. No Other Obligations

Neither this Agreement nor the disclosure of the Confidential Information shall result in any obligation on the part of either party to enter into any further agreement with the other with respect to the subject matter hereof or otherwise, to purchase any products or services from the other, or to require either party to disclose any further information to the other. Nothing in this Agreement shall be deemed to constitute either party hereto as partner, agent or representative of the other party or to create any fiduciary relationship between the parties. Either party may offer products or services which are competitive with products or services now offered or which may be offered by the other. Subject to the express terms and conditions of this Agreement, neither this Agreement nor discussions and/or communications between the parties will impair the right of either party to develop, make, use, procure, and/or market any products or services, alone or with others, now or in the future, including those which may be competitive with those offered by the other. Whether or not the Project is consummated, neither party shall issue a press release or release any information to the general public concerning such transaction or the absence thereof without the express prior written consent of the other, and the parties agree that neither party will use the other's name whether by including reference to the other in any press release, list of customers advertising that its services are used by Companies or otherwise, without written authorization by the respective party's authorized representative.

10. Property Rights in Confidential Information

All Confidential Information shall remain the sole and exclusive property of the Provider and nothing in this Agreement, or any course of conduct between the parties shall be deemed to grant to the Recipient any license or rights in or to the Confidential Information of the Provider, or any part thereof. Unless otherwise expressly agreed in a separate license agreement, the disclosure of Confidential Information to the Recipient will not be deemed to constitute a grant, by implication or otherwise, of a right or license to the Confidential Information or to any patents or patent applications of the Provider.

11. Publicly Traded

The IPP acknowledges that the Companies' holding company is a publicly traded company, and that Confidential Information of the Companies may constitute material, non-public information with respect to the Companies. The IPP understands, and will advise its Representatives to whom Confidential Information of the Companies is disclosed, of the restrictions imposed by the United States securities laws on (a) the purchase or sale of securities by any person in possession of material, non-public information with respect to such securities, and (b) the communication of material, non-public information with respect to securities to a person who may purchase or sell such securities in reliance upon such information.

12. Remedies

(a) Each party acknowledges and agrees that any breach or threatened breach of this Agreement may give rise to an irreparable injury to the Provider or its Representatives, for which compensation in damages is likely to be an inadequate remedy. Accordingly, in the event of any breach or threatened breach of this Agreement by the Recipient or its Representatives, the Provider shall be entitled to seek equitable relief, including in the form of injunctions and orders for specific performance, in addition to all other remedies available at law or in equity.

(b) In the event that the Recipient learns of dissemination, disclosure, or use of the Confidential Information which is not permitted by this Agreement, the Recipient shall notify the Provider immediately in writing and shall use reasonable efforts to assist the Provider in minimizing damages from such disclosure. Such remedy shall be in addition to and not in lieu of any other rights or remedies available to the Provider at law or in equity.

13. Cumulative Remedies

No rights or remedy herein conferred upon or reserved to either party hereunder is intended to be exclusive of any other right or remedy, and each and every right and remedy shall be cumulative and in addition to any other right or remedy under this Agreement, or under applicable law, whether now or hereafter existing.

14. Notice

(a) By delivering written notice, either party may notify the other that it no longer wishes to receive or provide Confidential Information. Any further information received or provided by the party who received such notice following receipt of such notice, shall not be subject to the protection of this Agreement.

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

(1) Companies:

By Mail:

Hawaiian Electric Company, Inc.
P.O. Box 2750
Honolulu, Hawaii 96840
Attn: Manager of Procurement, Renewable Acquisition Division

Delivered By Hand or Overnight Delivery:

Hawaiian Electric Company, Inc.
Central Pacific Plaza
220 South King St, 21st Floor
Honolulu, HI 96813
Attn: Manager of Procurement, Renewable Acquisition Division

By E-mail:

Hawaiian Electric Company, Inc.
Attn: Manager of Procurement, Renewable Acquisition Division
Email: renewableacquisition@hawaiianelectric.com

With a copy to:

By Mail:

Hawaiian Electric Company, Inc.
Legal Department
P.O. Box 2750
Honolulu, Hawaii 96840

Delivered By Hand or Overnight Delivery:

Hawaiian Electric Company, Inc.
American Savings Bank Tower
1001 Bishop Street, Suite 1100
Honolulu, Hawaii 96813
Attn: Legal Department

By E-mail:

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

(2) [IPP]

By Mail:

[INSERT ADDRESS/CONTACT]

Delivered By Hand or Overnight Delivery:

[INSERT ADDRESS/CONTACT]

By E-mail:

[INSERT ADDRESS/CONTACT]

With a copy to:

By Mail:

[INSERT ADDRESS/CONTACT]

Delivered By Hand or Overnight Delivery:

[INSERT ADDRESS/CONTACT]

By E-mail:

[INSERT ADDRESS/CONTACT]

15. No Waiver

Except as otherwise provided in this Agreement, no delay or forbearance of a party in the exercise of any remedy or right will constitute a waiver thereof, and the exercise or partial exercise of a remedy or right shall not preclude further exercise of the same or any other remedy or right.

16. Governing Law

This Agreement is made under, governed by, construed and enforced in accordance with, the laws of the State of Hawaii. Any action brought with respect to the matters contained in this Agreement shall be brought in the federal or state courts located in the State of Hawaii. Each party agrees and irrevocably consents to the exercise of personal jurisdiction over each of the parties by such courts and waives any right to plead, claim or allege that the State of Hawaii is an inconvenient forum or improper venue.

17. Attorneys' Fees and Costs

If there is a dispute between the parties and either party institutes a lawsuit, arbitration, mediation or other proceeding to enforce, declare, or interpret the terms of this Agreement, then the prevailing party in such proceeding shall be awarded its reasonable attorneys' fees and costs.

18. Assignment Prohibited

This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors, legal representatives, and permitted assigns. Neither party shall have the right to assign any of its rights, duties or obligations under this Agreement, by operation or law or otherwise, without the prior written consent of the other party. Any purported assignment in violation of this section shall be null and void.

19. No Third Party Beneficiaries

Nothing expressed or referred to in this Agreement will be construed to give any person or entity other than the parties any legal or equitable right, remedy, or claim under or with respect to this Agreement or any provision of this Agreement. This Agreement and all of its provisions and conditions are for the sole and exclusive benefit of the parties and their successors and permitted assigns.

20. Entire Agreement

This Agreement constitutes the entire agreement between the parties relating to the subject matter hereof, superseding all prior and contemporaneous agreements, understandings or undertakings, oral or written with respect to the subject matter. Any amendment or modification of this Agreement or any part hereof shall not be valid unless in writing and signed by the Parties. Any waiver hereunder shall not be valid unless in writing and signed via by the party against whom waiver is asserted.

21. Term and Survival

This Agreement shall remain in full force and effect for a period of two (2) years from the Effective Date. All confidentiality obligations within this Agreement shall survive following expiration or termination of this Agreement.

22. Severability

If any term or provision of this Agreement, or the application thereof to any person, entity or circumstances is to any extent invalid or unenforceable, the remainder of this Agreement, or the application of such term or provision to persons, entities or circumstances other than those as to which it is invalid or unenforceable, shall not be affected thereby, and each term and provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law, and the parties will take all commercially reasonable steps, including modification of the Agreement, to preserve the economic “benefit of the bargain” to both parties notwithstanding any such aforesaid invalidity or unenforceability.

23. Negotiated Terms

The parties agree that the terms and conditions of this Agreement are the result of negotiations between the parties and that this Agreement shall not be construed in favor of or against any party by reason of the extent to which any party or its professional advisors participated in the preparation of this Agreement.

24. Counterparts and Electronic Signatures

This Agreement may be executed in counterparts, each of which shall be deemed an original, and all of which shall together constitute one and the same instrument binding all parties notwithstanding that all of the parties are not signatories to the same counterparts. For all purposes, duplicate unexecuted and unacknowledged pages of the counterparts may be discarded and the remaining pages assembled as one document. The parties agree that this Agreement and any subsequent writings, including amendments, may be executed and delivered by exchange of executed copies via E-mail or other acceptable electronic means, and in electronic formats such as Adobe PDF or other formats mutually agreeable the parties which preserve the final terms of this Agreement or such writing. A party’s signature transmitted by E-mail or other acceptable electronic means shall be considered an “original” signature which is binding and effective for all purposes of this Agreement.

[Signature Page Follows]

IN WITNESS WHEREOF, each party has caused this Agreement to be executed on its behalf by a duly authorized representative, all as of the Effective Date.

HAWAIIAN ELECTRIC COMPANY, INC.

By: _____
Print Name: _____
Its: _____

MAUI ELECTRIC COMPANY, LIMITED

By: _____
Print Name: _____
Its: _____

HAWAII ELECTRIC LIGHT COMPANY, INC,

By: _____
Print Name: _____
Its: _____

“Companies”

[Insert Name of IPP]

By: _____
Print Name: _____
Its: _____

“IPP”

DRAFT

REQUEST FOR PROPOSALS

FOR

COMMUNITY-BASED RENEWABLE ENERGY PROJECTS

FOR

LOW- AND MODERATE-INCOME SUBSCRIBERS

ISLAND OF MAUI

JULY 9, 2020

Docket No. 2015-0389

Appendix F – Description of Available Sites



**Maui
Electric**

**MAUI ELECTRIC
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://mauielectric.com/landrfi>.

This information is being provided for proposers’ consideration only. Project proposals submitted in response to this RFP are not required to be sited at a location identified through the Land RFI. Maui Electric also makes no representations as to the suitability of the listed sites for renewable energy production with regard to resource quality, interconnection constraints, zoning and permitting issues, community support, or other issues. Proposers should perform their own evaluation of these factors in determining whether a site is suitable for renewable energy project development. After further evaluation, proposers that are interested in any of the identified sites are invited to engage in further discussions directly with landowners to negotiate any required rights to use the property.

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.

DRAFT

REQUEST FOR PROPOSALS

FOR

COMMUNITY-BASED RENEWABLE ENERGY PROJECTS

FOR

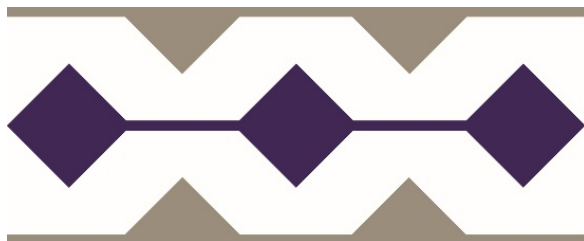
LOW- AND MODERATE-INCOME SUBSCRIBERS

ISLAND OF MAUI

JULY 9, 2020

Docket No. 2015-0389

Appendix G – (Reserved)



**Maui
Electric**

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REQUEST FOR PROPOSALS

FOR

COMMUNITY-BASED RENEWABLE ENERGY

FOR

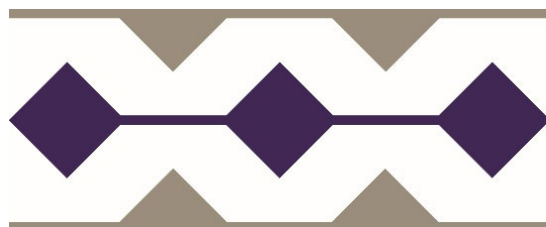
LOW- AND MODERATE-INCOME SUBSCRIBERS

ISLAND OF MAUI

JULY 9, 2020

Docket No. 2015-0389

*Appendix H – Interconnection Facilities and
Cost Information*



**Maui
Electric**

Maui Electric Company
APPENDIX H - INTERCONNECTION FACILITIES AND COST INFORMATION

Tariff Rule No. 19, approved by the PUC, establishes provisions for Interconnection and Transmission Upgrades (see [Appendix I](#)). 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. Bidders will comply with the terms and conditions as specified therein.

To assist Bidders in assessing the impacts of location on potential projects, the per unit cost figures provided in the tables below are to be used to provide an approximate estimated cost for interconnecting, including substation, communications, security, and transmission or distribution line cost to the existing Maui Electric System. 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 Bidder 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 Bidder’s project requirements are different than what is assumed in the notes, the Bidder should identify each difference and provide an estimated additional cost or savings resulting from those different requirements.

2.1 Transmission & Distribution Line Interconnection Costs

Component	Description	Cost per Mile
1	New 12kV Overhead line (accessible 250' spans)	\$680,000
2	New 12kV Underground line	\$3,000,000
3	12 kV underbuild on existing line (accessible spans, for station service)	\$(To be updated prior to issuance of final RFP)
4	12 kV underbuild on existing line (inaccessible spans, for station service)	\$(To be updated prior to issuance of final RFP)
5	Padmount service 500 kVA transformer (for station service)	\$(To be updated prior to issuance of final RFP)

Maui Electric Company
 APPENDIX H - INTERCONNECTION FACILITIES AND COST INFORMATION

6	PME9 and PME3 switches for 1-ph and 3-ph transformers	\$[To be updated prior to issuance of final RFP]
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Notes:

1. Please refer to Attachment 1 (for Projects greater 250 kW and less than 1 MW) or Attachment 2 (for Projects 1 MW or greater) of this Appendix H for a single line diagram depicting the required interconnection to the Company's system. Conceptual Design is not intended to cover all interconnection requirements. Final interconnection design will be subject to the results of a technical review.
2. New 12kV Overhead line (accessible) consists of 45' height wood poles (39' above / 6' below grade).
3. Component 2 - based on 1000 KCM AL 15kV (600A) cable includes duct bank and MH installation.
4. Note: Exclusions to these rough costs are as follows but not limited to:
 - a. Development of the PUC application/proceedings timeline
 - b. State or County right-of-way permitting and SMA
 - c. Environmental studies cost
 - d. Survey proposed line extension route
 - e. Easement/Land Issues if discovered in the course of final design
 - f. Archaeological survey and monitoring cost/duration (if needed)
 - g. Clearing/grading along power line corridor and access road
 - h. Final design adjustments required to negotiate terrain, physical landmarks, existing utilities and access
 - i. Construction of permanent roadways/truck access
 - j. Helicopter services
 - k. Traffic Control
 - l. Removals (MECO & HTCOCOM as applicable)
 - m. Salvage and depreciation credits
 - n. Street lights
 - o. Delays due to weather and material acquisitions
5. All estimates are provided in 2020 dollars.

Maui Electric Company
 APPENDIX H - INTERCONNECTION FACILITIES AND COST INFORMATION

2.2 Typical CBRE SLD Interconnection Costs (Projects > 250 kW and less than 1 MW)

Please refer to Attachment 1 of this Appendix H (for Projects greater 250 kW and less than 1 MW). Conceptual Design is not intended to cover all interconnection requirements. Final interconnection design will be subject to the results of the Detailed Evaluation, Technical Review, or an IRS.

Component	Description	Cost
1	All other components in Attachment 1 except for the line extension from the project to the utility distribution circuit (See 2.1)	[\$To be updated prior to issuance of final RFP]

Notes:

1. Costs includes components on the Company side of the demarcation shown in Attachment 1.
2. Costs for line extension from the project to tap the distribution circuit should be estimated using 2.1, above.
3. Company shall own a high-speed power quality device (i.e., Tesla Model No. 4000) near the point of interconnection, which shall be in continuous service and on a rolling window basis monitoring sub-cycle voltages, currents and harmonics, as well as disturbance events and capable of remote interrogation following an event. Company requires 24-hour access to this equipment. Customer to provide the following hard-wired inputs to Company's power quality device:
 - a. Status of Customer's main AC breaker CB-A (MECO# XXXX);
 - b. Line amps (3 phase); and
 - c. Line-to-line voltage (3 phase)
4. Secure and reliable communication is required for the following:
 - a. SCADA to/from Customer's facility;
 - b. Revenue metering for power export and consumption readings;
 - c. Power quality and fault recording and retrieval; and
 - d. Phone circuits as required.
5. Customer to design revenue metering facilities in accordance with the requirements in Chapter 4 of the HECO Electric Service Installation Manual.
6. PTs and CTs for high speed digital fault recorder should be the same quality as the PTs and CTs for the protective relaying.

Maui Electric Company
APPENDIX H - INTERCONNECTION FACILITIES AND COST INFORMATION

2.3 Typical CBRE SLD Interconnection Costs (Projects 1 MW or greater)

Please refer to Attachment 2 of this Appendix H (for Projects 1 MW or greater). Conceptual Design is not intended to cover all interconnection requirements. Final interconnection design will be subject to the results of the Detailed Evaluation, Technical Review, or an IRS.

Component	Description	Cost
1	All other components in Attachment 2 except for the line extension from the project to the utility distribution circuit (See 2.1)	\${To be updated prior to issuance of final RFP]

Notes:

1. Costs includes components on the Company side of the demarcation shown in Attachment 2.
2. Costs for line extension from the project to tap the distribution circuit should be estimated using 2.1, above.
3. Company shall own a high-speed power quality device (i.e., Tesla Model No. 4000) near the point of interconnection, which shall be in continuous service and on a rolling window basis monitoring sub-cycle voltages, currents and harmonics, as well as disturbance events and capable of remote interrogation following an event. Company requires 24-hour access to this equipment. Customer to provide the following hard-wired inputs to Company’s power quality device:
 - a. Status of Customer’s main AC breaker CB-A (MECO# XXXX);
 - b. Line amps (3 phase); and
 - c. line-to-line voltage (3 phase)
4. Secure and reliable communication is required for the following:
 - a. SCADA to/ from Customer’s facility;
 - b. Revenue metering for power export and consumption readings;
 - c. Power quality and fault recording and retrieval; and
 - d. Phone circuits as required.
5. Customer to provide a reliable DC Source for 12-hour backup period; specific voltage to be determined by Company at a later date.
6. Upon receipt of direct transfer trip signal from (MECO substation name) Substation opening of breaker (MECO breaker number), trip and block close Customer’s 12 kV breaker CB-A (MECO# XXXX) via Company-owned SCADA resettable lockout relay.
7. Upon DTT communication channel failure longer than 6 seconds:
 - a. Company to provide signal to Customer to initiate Customer performed ramp down and tripping of Customer’s 12 kV breaker CB-A (MECO# XXXX).

Maui Electric Company
APPENDIX H - INTERCONNECTION FACILITIES AND COST INFORMATION

- b. Company to initiate trip and block close of Customer's 12 kV breaker CB-A (MECO# XXXX) via Company-owned SCADA resettable lockout relay after (Project size MW/2 MW per minute ramp down) minutes.
 8. Customer to design revenue metering facilities in accordance with the requirements in Chapter 4 of the HECO Electric Service Installation Manual.
- PTs and CTs for high speed digital fault recorder should be the same quality as the PTs and CTs for the protective relaying.

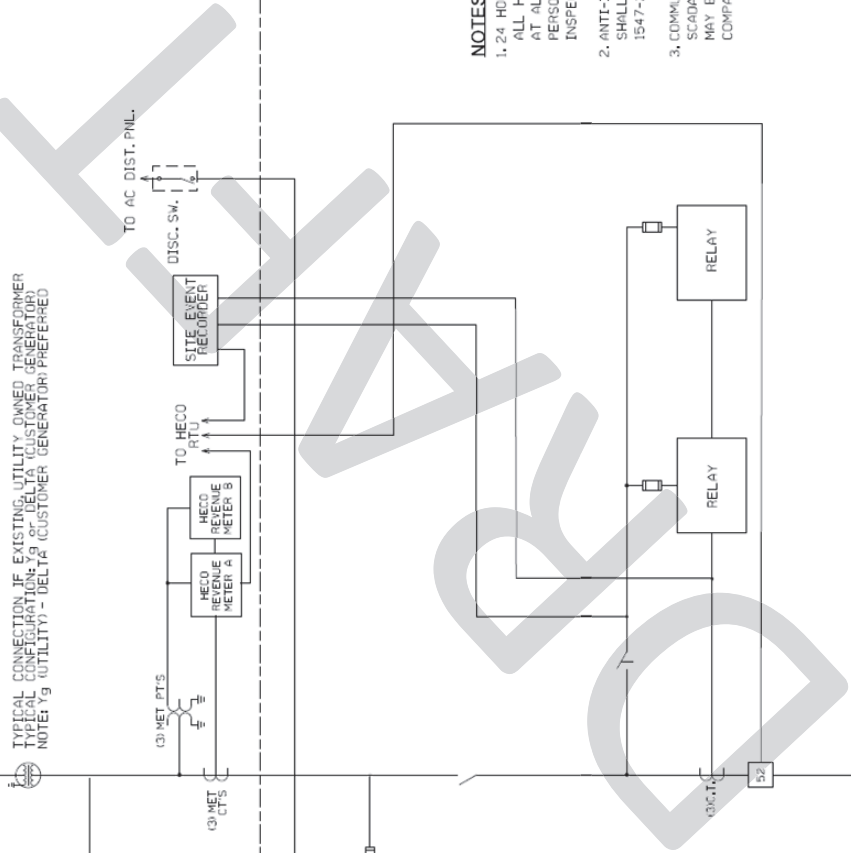
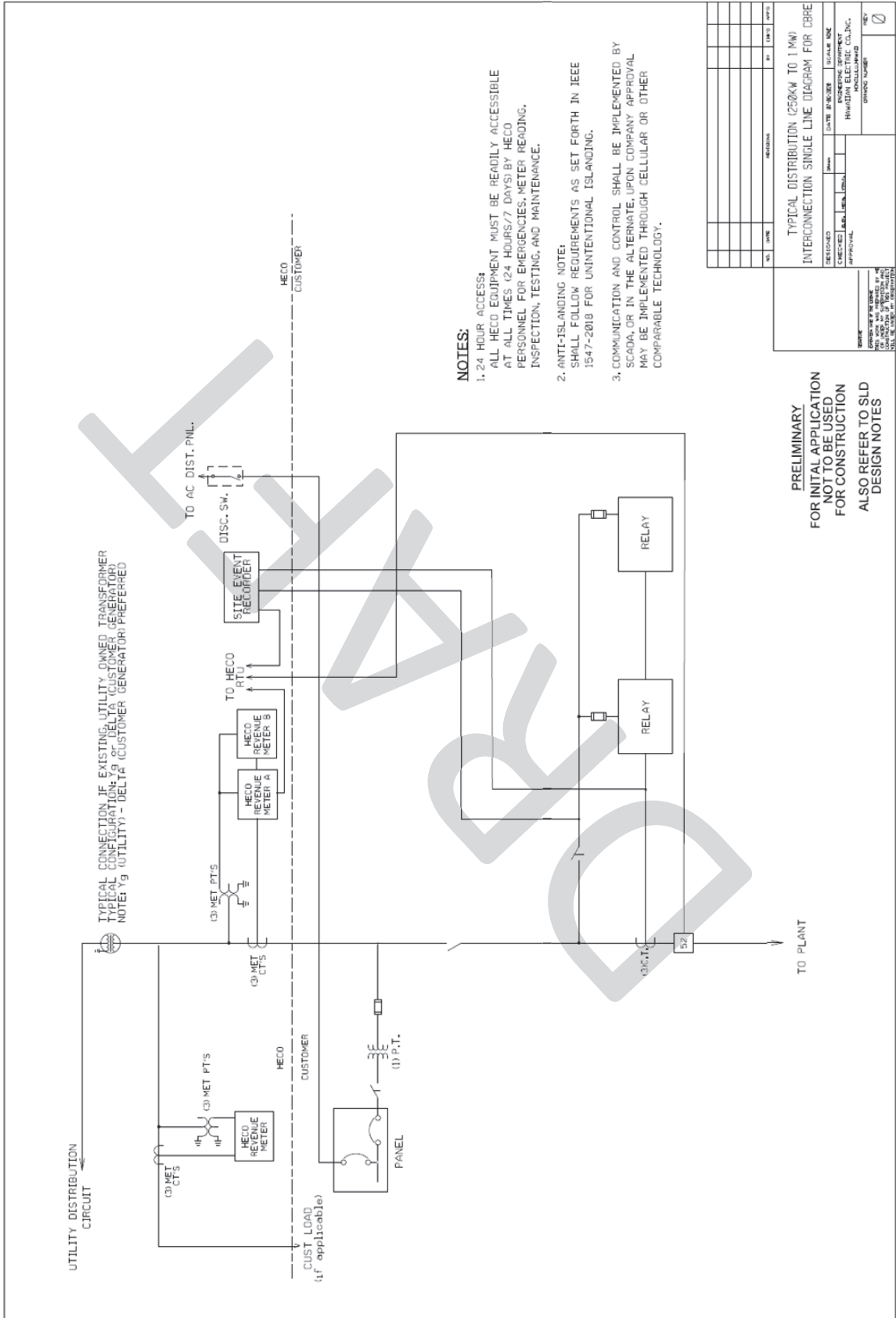
2.4 Telecommunications

1. Point-to-point microwave: \$1,095,000 with the following assumptions:
 - a. There is line-of-sight between the communications endpoints.
 - b. FCC licensed Microwave Frequencies are available.
 - c. There are existing structures/buildings and available space on either end to house the radio equipment.
 - d. Telecommunications grounding standards are up-to-date at both sites.
 - e. 48V DC power with 12-hour battery backup is available.
 - f. This estimate does not include any special site-specific permit/approval that may be required.
 - g. Space is available to locate antenna towers/structures at both ends. Meets category 5 hurricane wind loading.
 - h. Interconnection to Maui Electric's existing communications is not included.
2. Fiber with overbuild and new construction: \$254,000 per mile with the following assumptions:
 - a. The poles are in good condition and do not need replacing.
 - b. The poles are not overloaded.
 - c. The poles and the attachments are in accordance with NESC 2002 and no work is required to upgrade the poles to current standards.

2.5 Security System Interconnection Costs

[NOTE: Specific security requirements for the Maui System are under review and will be included in the final RFP.]

Appendix H Attachment 1



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

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

TYPICAL DISTRIBUTION (250kW TO 1 MW)
INTERCONNECTION SINGLE LINE DIAGRAM FOR DBFE

DESIGNED	DATE: 8/16/2018	SCALE: 100%
CHECKED	DATE: 8/16/2018	SCALE: 100%
APPROVAL	DATE: 8/16/2018	SCALE: 100%
COMPANY: HAWAIIAN ELECTRIC CO., INC. PROJECT: HAWAIIAN ELECTRIC CO., INC. DRAWING NUMBER: 101		

DRAFT

REQUEST FOR PROPOSALS

FOR

COMMUNITY-BASED RENEWABLE ENERGY PROJECTS

FOR

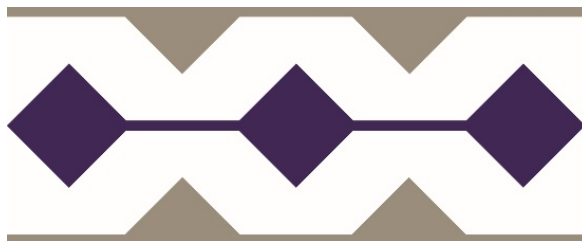
LOW- AND MODERATE-INCOME SUBSCRIBERS

ISLAND OF MAUI

JULY 9, 2020

Docket No. 2015-0389

Appendix I – Rule 19 Tariff



**Maui
Electric**

RULE NO. 19

Interconnection and Transmission Upgrades

A. GENERAL

1. Definitions

- a. "Betterment" means and includes any upgrading to a facility made solely for the benefit of and at the election of the Company, not attributable to the interconnection requirements. The Betterment includes any provisions for future expansion which cannot be charged to replacement. It also includes any related system work beyond that required for interconnection. If an existing facility is replaced with one of greater functional capacity or capability, the difference between the upgraded facility and a replacement facility of equivalent functional capacity is considered Betterment. It does not mean the substitution of a replacement facility for an existing facility, that is, an underground facility for an overhead facility, unless otherwise provided for in the RFP.

Example 1: A substation with a three breaker scheme is required to connect the Generating Facility to the grid. If the Company installs a substation with a six breaker ring bus scheme, the difference between installing a substation with a three breaker scheme and one with a six breaker scheme would be the Betterment.

Example 2: A transmission line needs to be upgraded to accommodate a new Generating Facility. The existing line is designed to withstand a 56 mph wind speed. The project includes upgrading the facilities to withstand a 100 mph wind speed. The increase in the design to the 100 mph wind speed criteria would be the Betterment.

Example 3: A transmission line needs to be upgraded to accommodate a new Generating Facility. In response to the Company's application to upgrade the line, the Commission orders that the line be placed underground. The cost difference between the overhead upgrade and the installation of the underground facilities would not be considered Betterment.

- b. "Company's Dispatch" means the Company's sole and absolute right to control, from moment to moment, through Supervisory Control, or otherwise, and in accordance with good engineering and operating practices in the electric utility industry, the rate of delivery of energy offered by the bidder to the Company.
- c. "Company's System" means the electric system owned and operated by the 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.

MAUI ELECTRIC COMPANY, LIMITED

RULE NO. 19 - Continued

Interconnection and Transmission Upgrades

- d. "Distribution System" means all electrical wires, equipment, and other facilities at the distribution voltage levels (such as 25kV, 12kV, or 4kV) owned or provided by the Company, through which the Company provides electrical service to its customers.
- e. "Framework" means the Framework for Competitive Bidding dated December 8, 2006, adopted by the Commission in Docket No. 03-0372, Decision and Order No. 23121, which provides the mechanism for acquiring a future energy generation resource or a block of generation resources by the Company.
- f. "Generating Facility" means a bidder or utility-owned electrical energy generation resource that is interconnected to the Company electrical grid.
- g. "Grid Connection Point" means the point at which Interconnection Facilities connect to the Company's System, normally the Company's transmission grid. Facilities from the Generating Facility to the Grid Connection Point shall be considered Interconnection Facilities (see examples given in Attachment A). The Grid Connection Point will be identified in the IRS.
- h. "Interconnection Agreement" means a contract with the bidder that specifies the terms and conditions under which Interconnection Facilities (and, in some cases, certain System Upgrades) will be designed, installed, paid for, owned, operated and/or maintained. In some instances, such terms and conditions may be included in the PPA with a bidder, instead of in a separate Interconnection Agreement.
- i. "Interconnection Facilities" means the equipment and devices 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, the Company's System (in accordance with applicable provisions of the Commission's General Order No. 7, Company tariffs, operational practices and planning criteria), such as, but not limited to, transmission and distribution lines, transformers, switches, and circuit breakers.

Example 1: A wind farm facility constructed on a neighbor island (e.g. Molokai) that exports to the Company the energy it produces would be required to install undersea transmission lines to interconnect the Generating Facility to the Company's System. The undersea transmission lines and related facilities would be considered Interconnection Facilities.

MAUI ELECTRIC COMPANY, LIMITED

RULE NO. 19 - Continued

Interconnection and Transmission Upgrades

Example 2: A proposed Generating Facility is remotely located in a region of the island where there are no existing Transmission System facilities. In this case, if the size of the Generating Facility requires that it be tied to the existing Transmission System, the new Transmission System facilities (i.e. all electrical wires, equipment, and other facilities at the transmission voltage level) constructed from the Generating Facility to the Company's existing Transmission System facilities would be considered Interconnection Facilities.

- j. "Interconnection Requirements Study (IRS)" means a study, performed in accordance with the terms of the IRS Letter Agreement and with the applicable terms of the RFP and any resulting PPA, to identify the Interconnection Facilities, System Upgrades and other system requirements and all associated costs to integrate the proposed Generating Facility with the Company's System, and includes a detailed steady-state and a dynamic analysis. The IRS is conducted by the Company or its consultant and the bidder is responsible for the cost of conducting the IRS.
- k. "Interconnection Requirements Study Letter Agreement (IRS Letter Agreement)" means the letter agreement and any written, signed amendments thereto, between the Company and the bidder that describes the scope, schedule, and payment arrangements for the IRS.
- l. "IRP" means an electric utility's Integrated Resource Plan that has been submitted to the Commission for review and approval in the utility's IRP proceeding, in accordance with the Commission's IRP Framework.
- m. "IRP Framework" means the Commission's Framework for Integrated Resource Planning, dated May 22, 1992, as amended by In re Public Util. Comm'n, Docket No. 05-0075, Decision and Order No. 22490, filed on May 26, 2006.
- n. "Point of Interconnection" means the point of delivery of Energy and/or Capacity supplied by the bidder to the Company, where the facilities owned by the bidder interconnect with the facilities owned or to be owned by the Company. The bidder shall own and maintain the facilities from the Generating Facility to the Point of Interconnection. The Company shall own and maintain the facilities from the Point of Interconnection to the Company's System (see examples given in Attachment A). The Point of Interconnection will be identified in the IRS.
- o. "PPA" means a power purchase agreement or contract by the Company to purchase firm capacity, energy, or both.

MAUI ELECTRIC COMPANY, LIMITED

RULE NO. 19 - Continued

Interconnection and Transmission Upgrades

- p. "Renewable Energy Facility" means a Generating Facility that generates electricity using renewable energy as the source.
- q. "RFP" means a written request for proposal issued by the Company to solicit bids from interested third-parties, and where applicable from the Company or its affiliate, to supply a future generation resource or a block of generation resources to the Company pursuant to a competitive bidding process.
- r. "Subtransmission System" means all electrical wires, equipment, and other facilities at the subtransmission voltage levels (such as 46kV, 35kV, or 23kV) owned or provided by the Company, through which the utility provides electrical service to its customers.
- s. "Supervisory Control" means remote monitoring and/or control of a Generating Facility's power output and interrupting device status by means of a communication channel that is acceptable to the Company. For Generating Facilities intending to export power with an aggregate export capacity greater than 250kW, computerized supervisory control may be required to ensure the safety of working personnel and prompt response to system abnormalities in case of islanding of the Generating Facility. The Company shall determine the need for supervisory control based upon the results of the initial technical screening and/or IRS. Supervisory control shall include at a minimum monitoring of: (a) gross generation by the Generating Facility; (b) feedback of Watts, Vars, WattHours, current and voltage; (c) Vars furnished by the utility; and (d) status of the interrupting device. In addition, the supervisory control will allow the Company to trip the interrupting device during emergency conditions. Monitoring will be performed by system dispatchers or operators at the Company's control center.
- t. "System Benefit" means a material increase in power flow capability or in the reliability of the Company's electrical system from a system-wide perspective.
- u. "System Upgrades" means improvements made to the Company's System, other than the Interconnection Facilities, required to provide reliable and safe operation of, and power quality on, the Company's System (in accordance with applicable provisions of the Commission's General Order No. 7, Company tariffs, operational practices and planning criteria) when the Generation Facility is interconnected with the Company's System (see Attachment A). Such improvements may include, but are not limited to, new transmission or distribution lines, reconstruction or reconductoring of existing lines, circuit breakers, switches, transformers, buses, protective devices, communications, and substation equipment and facilities.

MAUI ELECTRIC COMPANY, LIMITED

RULE NO. 19 - Continued

Interconnection and Transmission Upgrades

v. "Transmission System" means all electrical wires, equipment, and other facilities at the transmission voltage levels (such as 138kV or 69kV) owned or provided by the utility, through which the utility provides electrical service to its customers.

2. Application of Tariff

This Tariff shall apply to an RFP issued pursuant to the Framework and Interconnection Requirement Studies arising from the RFP process. In the event that there is a conflict between any provision of this Tariff and that of an RFP issued pursuant to the Framework and reviewed by the Commission in accordance with Sections III.B.2 and IV.B.6.e. of the Framework, the provisions of the RFP shall prevail. The terms and conditions established in a PPA arising from the RFP and approved by the Commission shall ultimately control over the requirements and terms of both this Tariff and the RFP.

3. Independent Observer

As established in the Framework, the duties and responsibilities of an Independent Observer (IO) include, among other duties and responsibilities, reviewing and monitoring the Company's communications, methods, and implementation of this Tariff, the RFP and related IRS processes.

B. INTERCONNECTION STUDY PROCESS FOR COMPETITIVE BIDDING

1. RFP Package Data -- available to all prospective bidders.

RFP packages issued by the Company shall contain general and regional system information to provide prospective bidders with high level guidance relating to the Company's existing transmission infrastructure. For example, RFP packages may include information in the form of an island map with areas of the Transmission System identified that are at or near their loading limits to provide high level guidance to bidders on areas of the island with transmission constraints. These constraints may include "load pockets", which are load-driven transmission constraints as well as areas of generation-driven transmission constraints. Because transmission impacts are to a large extent specific to the characteristics of supply-side proposals, definitive transmission information cannot be provided in these maps. Detailed geographic maps of the transmission system may not be part of this information due to security concerns. Rather, a map of the island with areas of the map shaded to identify areas (rather than circuits) of transmission constraints, may be provided.

MAUI ELECTRIC COMPANY, LIMITED

RULE NO. 19 - Continued

Interconnection and Transmission Upgrades

In addition, the RFP shall include applicable transmission planning criteria that will be used in the determination of interconnection requirements and potential Transmission System impacts. The information in the bid package will provide bidders with information (a) that should help in the selection of the proposed project's characteristics, including project site, project size, and project mode of operation, and (b) to estimate the interconnection requirements associated with their Generating Facilities and the opportunity to reflect the costs of the interconnection requirements in their bids.

2. Information Requests During Bidding Process - available to all prospective bidders.

During the bidding process, if a prospective bidder requires clarification or additional technical or operational information pertaining to the Company's System, a written request with specific questions may be submitted to the Company in accordance with the requirements set forth in the RFP. The written request, specific questions, and written Company response will be provided to all bidders.

3. RFP Requirements and Threshold Criteria Screening - evaluation performed on all bids received

Each bid received will be reviewed to ensure that it satisfies all of the RFP and threshold criteria requirements. The Company will determine whether each bid conforms to the specified RFP requirements and meets the minimum threshold criteria. Applicable performance standards may be part of the threshold criteria. These performance standards may vary depending upon factors such as the size of the generating resource(s) being acquired in the RFP, the Company's ability to dispatch the Generating Facility, the operational status (e.g., as-available vs. firm) of the Generating Facility, and the fuel type of the Generating Facility (e.g., run-of-the-river hydro may have different performance standards from wind power).

4. High Level Evaluation -- performed on all bids that pass threshold screening in RFP process
 - a. All bids which pass the threshold screening in the RFP process will undergo a high level evaluation consistent with the requirements identified in the RFP, which will focus primarily on basic steady-state analyses (e.g., identifying thermal line impacts, voltage impacts, and any obvious "fatal flaws").

MAUI ELECTRIC COMPANY, LIMITED

RULE NO. 19 - Continued

Interconnection and Transmission Upgrades

- b. For each bid, a high level estimate of the costs of Interconnection Facilities and required System Upgrades will be developed based solely on the high level evaluation identified in Section B.4.a. of this Tariff and on unitized cost estimates (e.g., \$/mile for 138kV line, \$/transformer).
 - c. Results of the high level evaluation and high level estimate of the costs of Interconnection Facilities and required System Upgrades will be factored into the determination of which bids make the short list based on the requirements specified in the RFP.
 - d. Basic curtailment analysis of the proposed Generating Facility and related impacts to operations of existing Generating Facilities may also be factored into the determination of which bids make the short list based on the requirements specified in the RFP.
5. Full Interconnection Requirements Study - performed only on short list bids.
- a. An IRS shall be performed only for bid(s) that have met the RFP requirements, passed the threshold criteria, and made the short list, or as otherwise specified in the RFP.
 - b. An IRS would be performed either serially starting with the bid evaluated as the most competitive at the point of the evaluation process, then proceeding to the next most competitive bid on the short list or in parallel on all or some of the short list bidders simultaneously. The determination of whether or not IRS work is to be performed serially, in parallel, or a combination of the two will be based upon factors such as resource availability, number of short list bids, RFP schedule, and relative competitiveness of one bid to others, and the availability of all information and data from bidders necessary to perform the IRS work
 - c. The Company may if practicable "bundle" IRS work for multiple short list bids into a single IRS if the bids are, among other factors, technically, operationally and geographically (e.g., size, location, technology, timing, operating characteristics, etc.) identical or sufficiently similar to each other.
 - d. The results of the IRS, including identified Interconnection Facilities, System Upgrades, Point of Interconnection, and Grid Connection Point, will be provided to the bidder.
 - e. Bidders shall be responsible for incorporating the costs of their Interconnection Facilities into their bids. The RFP may provide bidders with an opportunity to revise their pricing proposals under certain circumstances. Any pricing change, if permitted under the terms of the RFP, will prompt a re-evaluation of short list bidders in the selection of the winning bid as provided for in the RFP.

MAUI ELECTRIC COMPANY, LIMITED

RULE NO. 19 - Continued

Interconnection and Transmission Upgrades

- f. The Company may perform the analyses included in the IRS, or the IRS or parts of the IRS may be contracted to an outside consultant specializing in such analyses for complex situations or in situations where the Company does not have available resources to conduct the analyses in a time frame agreeable to the Company.
 - g. The scope and cost of the IRS will depend on the complexity of the Company's System and Generating Facility that must be modeled, and the degree to which the Generating Facility will affect the Company's System.
 - h. The bidder will be responsible for the cost of the IRS (or such lesser amount as the Company may specify to facilitate the processing of interconnection requests for similarly situated facilities) to be performed in order to evaluate the impacts of the Generating Facility's interconnection to the Company's System.
- C. INTERCONNECTION COST AND SYSTEM UPGRADE COST ALLOCATION FOR COMPETITIVE BIDDING
1. The bidder shall be responsible for the cost of Interconnection Facilities and shall be responsible for the installation and maintenance of Interconnection Facilities from the Generating Facility to the Point of Interconnection, unless otherwise specified in the RFP.
 2. Interconnection Facilities from the Generating Facility to the Point of Interconnection shall be built by the bidder, unless the Company agrees otherwise.
 3. Interconnection Facilities from the Point of Interconnection to the Grid Connection Point shall be built by the Company and paid for by the bidder, unless the Company agrees or determines otherwise. The Company may elect to include Betterments to Interconnection Facilities from the Point of Interconnection to the Grid Connection Point, and such Betterments shall be paid for by the Company. The cost of Betterments to such Interconnection Facilities will not be considered in the bid evaluations. The bidder shall acquire the necessary land and easements for Interconnection Facilities from the Point of Interconnection to the Grid Connection Point, unless the Company agrees otherwise. Interconnection Facilities from the Point of Interconnection to the Grid Connection Point, if built by the bidder, shall be transferred to the Company upon completion, along with the necessary land rights and easements.

MAUI ELECTRIC COMPANY, LIMITED

RULE NO. 19 - Continued

Interconnection and Transmission Upgrades

4. The Company shall install and maintain the identified System Upgrades arising from the interconnection of the Generating Facility and shall be responsible for the cost of such System Upgrades.
 - a. The Company's cost for System Upgrades will be considered as a factor in the bid evaluations.
 - b. The degree to which the System Upgrades provide System Benefits and/or Betterments will be considered in the bid evaluations.
5. Standards and Interconnection Agreements
 - a. Interconnection Facilities and System Upgrades owned or to be owned by the Company shall be constructed in accordance with the Company's applicable standards and in accordance with the PPA or the Interconnection Agreement, if there is a separate Interconnection Agreement.
 - b. Generating Facilities and Interconnection Facilities owned by the bidder shall be constructed in accordance with applicable State and County code requirements and in accordance with the PPA or the Interconnection Agreement, if there is a separate Interconnection Agreement.
 - c. The bidder's Generating Facility may be interconnected and operated in parallel with the Company's System in accordance with the terms and conditions of the PPA between the Company and the bidder, and/or the terms and conditions of an Interconnection Agreement between the Company and the bidder, if there is a separate Interconnection Agreement.
 - d. The bidder will be required to furnish, install, operate, and maintain suitable and sufficient equipment, to maintain adequate records, and to follow such operating procedures, as may be specified by the Company to protect the Company's System from damage resulting from the parallel operation of the Seller's Facility, including the equipment, records and operating procedures more fully described in the PPA and/or Interconnection Agreement, if there is a separate Interconnection Agreement.
 - e. Interconnection Facilities shall be designed, installed operated and maintained in accordance with good interconnection practice. The objectives of good interconnection practice include, but are not limited to,
 1. Safety - To protect the safety of utility personnel, utility customers, and the public.

MAUI ELECTRIC COMPANY, LIMITED

RULE NO. 19 - Continued

Interconnection and Transmission Upgrades

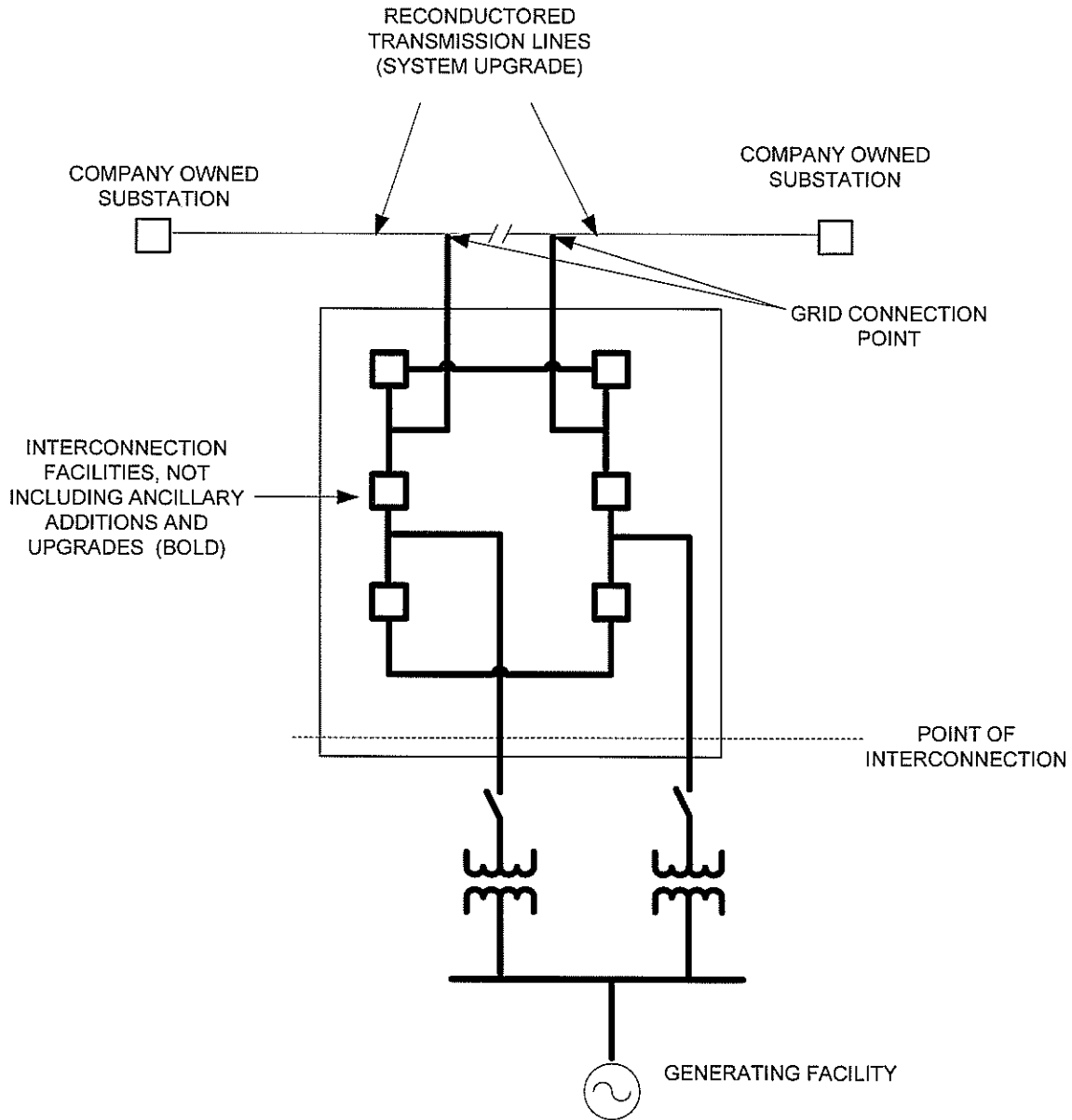
2. Reliability - To maintain the reliability of the utility system for all utility customers.
 3. Power Quality - To provide for acceptable power quality and voltage regulation on the utility system and for all utility customers.
 4. Restoration - To facilitate restoration of power on the utility system.
 5. Protect Utility and Customer Equipment - To protect utility and customer equipment during steady state and faulted system operating conditions.
 6. Protect Generating Facilities - To protect generating facilities from operation of utility protective and voltage regulation equipment.
 7. Utility System Overcurrent Devices - To maintain proper operation of the utility system's overcurrent protection equipment.
 8. Utility System Operating Efficiency - To ensure operation at appropriate power factors and minimize system losses.
- f. The bidder shall obtain, at its expense, any and all authorizations, approvals, permits, and licenses required for the construction and operation of its Generating Facility and the interconnection of its Generating Facility with the Company's System, including but not limited to environmental permits, building permits, rights of way, or easements.
 - g. Where any Company-owned Interconnection Facilities are to be located on the site of the bidder's Generating Facility, the bidder shall provide, at no expense to the Company, a location and access acceptable to the Company for all such facilities.
6. Renewable Energy Facilities
- a. In its IRP process, the Company may propose System Upgrades, to be paid for, owned and maintained by the utility, to encourage the development of Renewable Energy Facilities.
 - b. In its IRP process, the Company may propose to pay for Interconnection Facilities between the Point of Interconnection and the Grid Connection Point, in order to encourage the development of Renewable Energy Facilities.

MAUI ELECTRIC COMPANY, LIMITED

RULE NO. 19 - Continued

Interconnection and Transmission Upgrades

Attachment A



MAUI ELECTRIC COMPANY, LIMITED

DRAFT

REQUEST FOR PROPOSALS

FOR

COMMUNITY-BASED RENEWABLE ENERGY PROJECTS

FOR

LOW- AND MODERATE-INCOME SUBSCRIBERS

ISLAND OF MAUI

JULY 9, 2020

Docket No. 2015-0389

Appendix J – Rule 29 Tariff

[NOTE: Please refer to Exhibit 2 of the July 9, 2020 filing for the proposed Rule 29 Tariff.]



**Maui
Electric**

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REQUEST FOR PROPOSALS

FOR

COMMUNITY-BASED RENEWABLE ENERGY PROJECTS

FOR

LOW- AND MODERATE-INCOME SUBSCRIBERS

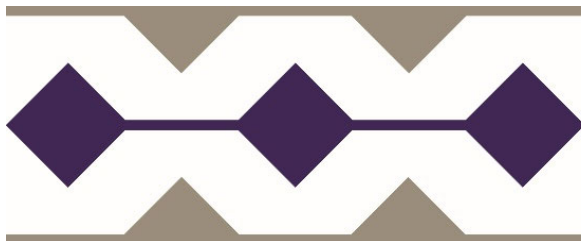
ISLAND OF MAUI

JULY 9, 2020

Docket No. 2015-0389

Appendix K – Model PV Large RDG PPA

**[NOTE: Please refer to Exhibit 10 of the July 9, 2020 filing for the proposed
Model Large RDG PPA (PV + Storage).]**



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REQUEST FOR PROPOSALS

FOR

COMMUNITY-BASED RENEWABLE ENERGY PROJECTS

FOR

LOW- AND MODERATE-INCOME SUBSCRIBERS

ISLAND OF MAUI

JULY 9, 2020

Docket No. 2015-0389

*Appendix L – Model PV Mid-Tier RDG PPA
(250kW to 2.5 MW)*

[NOTE: Please refer to Exhibit 11 of the July 9, 2020 filing for the proposed Model Mid-Tier RDG PPA (PV + Storage).]



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REQUEST FOR PROPOSALS

FOR

COMMUNITY-BASED RENEWABLE ENERGY PROJECTS

FOR

LOW- AND MODERATE-INCOME SUBSCRIBERS

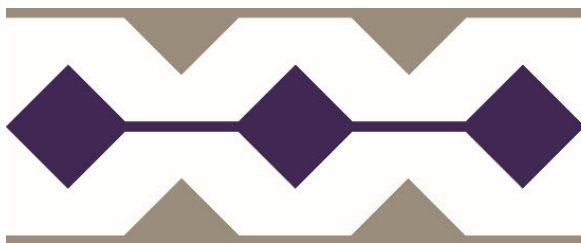
ISLAND OF MAUI

JULY 9, 2020

Docket No. 2015-0389

Appendix M – Model Wind Large RDG PPA

[NOTE: Appendix M will be provided in advance of the July 29, 2020 Status Conference.]



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REQUEST FOR PROPOSALS

FOR

COMMUNITY-BASED RENEWABLE ENERGY PROJECTS

FOR

LOW- AND MODERATE-INCOME SUBSCRIBERS

ISLAND OF MAUI

JULY 9, 2020

Docket No. 2015-0389

*Appendix N – Model Wind Mid-Tier RDG PPA
(250kW to 2.5 MW)*

[NOTE: Appendix N will be provided in advance of the July 29, 2020 Status Conference.]



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REQUEST FOR PROPOSALS

FOR

COMMUNITY-BASED RENEWABLE ENERGY PROJECTS

FOR

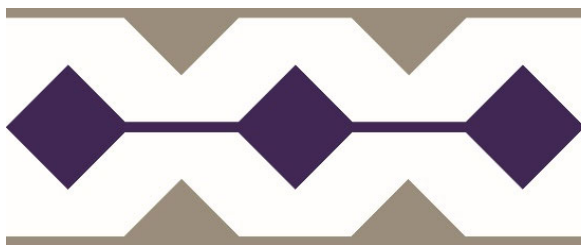
LOW- AND MODERATE-INCOME SUBSCRIBERS

ISLAND OF MAUI

JULY 9, 2020

Docket No. 2015-0389

Appendix O – Grid Needs Assessment



**Maui
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This Appendix provides the definitions for the grid services considered in the CBRE RFPs and placeholder charts for the grid needs and their relative values. The grid services were defined as part of the Integrated Grid Planning (“IGP”) Solution Evaluation & Optimization Working Group (“SEOWG”) activities. Bidders can use the information provided in this appendix to understand what the grid needs are and structure their proposals to provide the most value to the Companies.

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 Grid Service Definitions

Grid Service	Definition
Energy	A continuous, controllable, and predictable supply of megawatt-hours to serve system load needs in response to Company Dispatch. ¹
Energy Reserve Margin	A guideline to minimize risk of insufficient generation capability from a diverse mix of generating resources available to the system in long-range generation expansion studies. Resources needed to meet the energy reserve margin must be capable of providing capacity and energy in response to Company Dispatch.
Regulating Reserves	A reserve capacity provided by generating and load resources to allow continuous energy balance over the next 1 minute and 20 to 30-minute time interval due to the variability in renewable resources and load that can be called upon in response to Company Dispatch
Fast Frequency Response (FFR1)	An autonomous and predictable capacity to limit the frequency drop resulting from a frequency disturbance
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

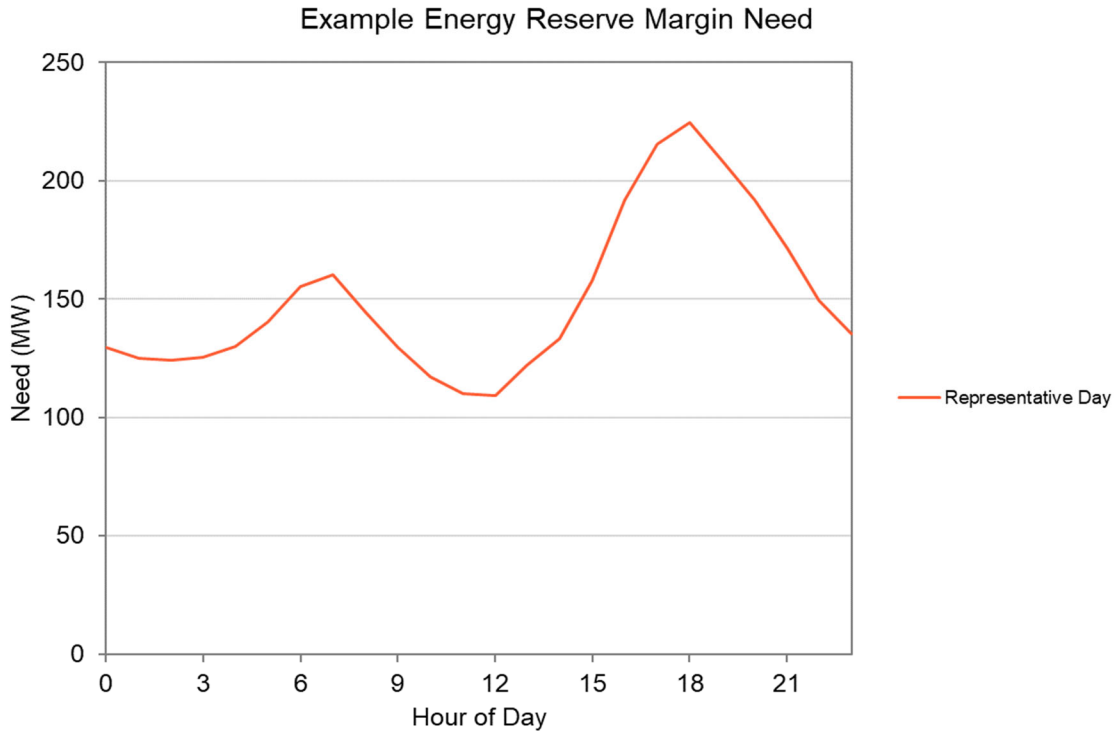
¹ “Company Dispatch” as defined in the PPA and SFC means Company's right, through supervisory equipment or otherwise, to direct or control both the capacity and the energy output of the Facility from its minimum output rating to its maximum output rating consistent with this Agreement (including, without limitation, Good Engineering and Operating Practices and the requirements set forth in Section 3 (Performance Standards) of Attachment B (Facility Owned by Subscriber Organization to this Agreement), which dispatch shall include real power, reactive power, voltage, frequency, the determination to cycle a unit off-line or to restart a unit, the droop control setting, the ramp rate setting, and other characteristics of such electric energy output whose parameters are normally controlled or accounted for in a utility dispatching system.

Distribution Reliability

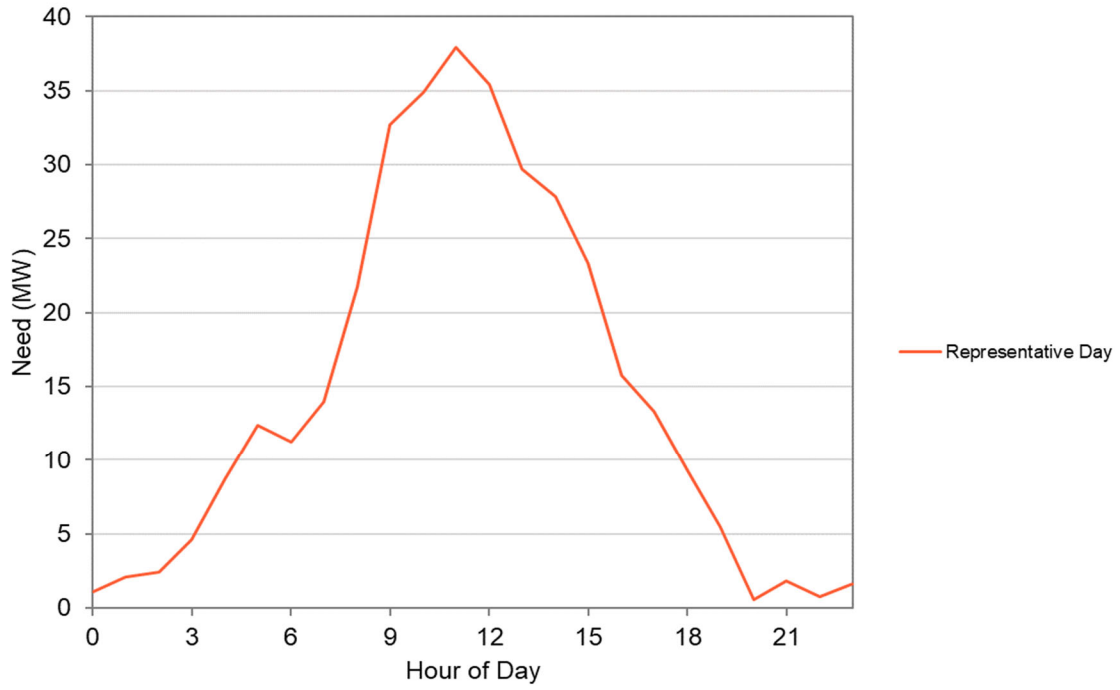
A load modifying or supply service capable of improving local distribution reliability under abnormal conditions in response to Company Dispatch

Grid Needs

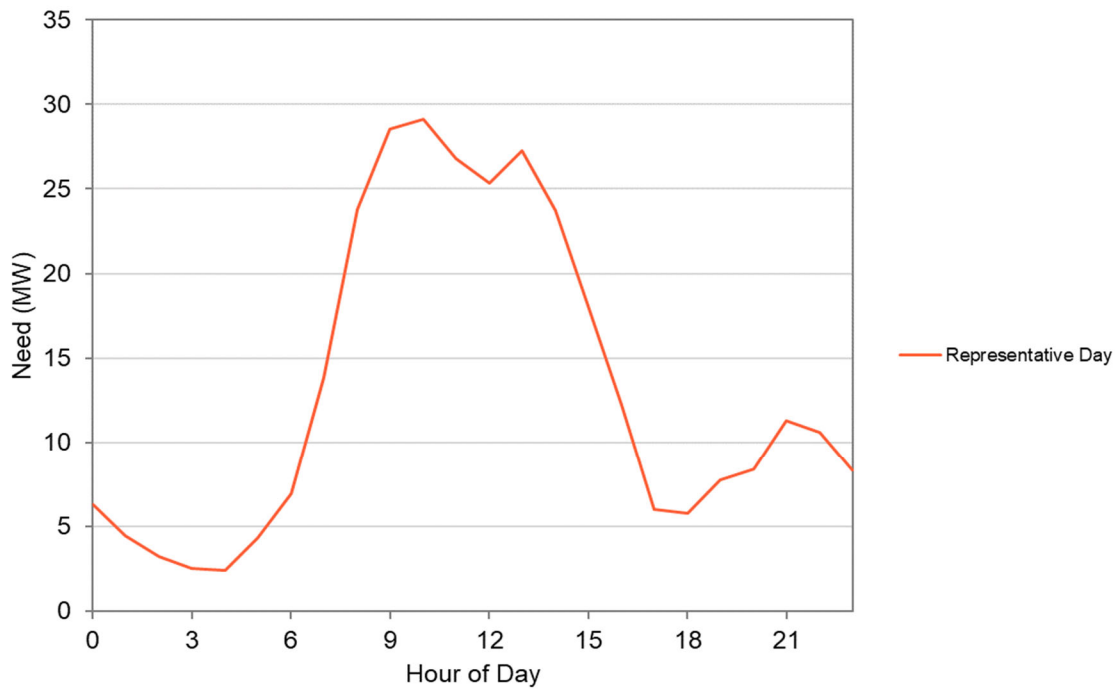
The charts below are examples of the hourly need for the services described in Table 1. The grid needs can be provided for the representative days modeled in RESOLVE.

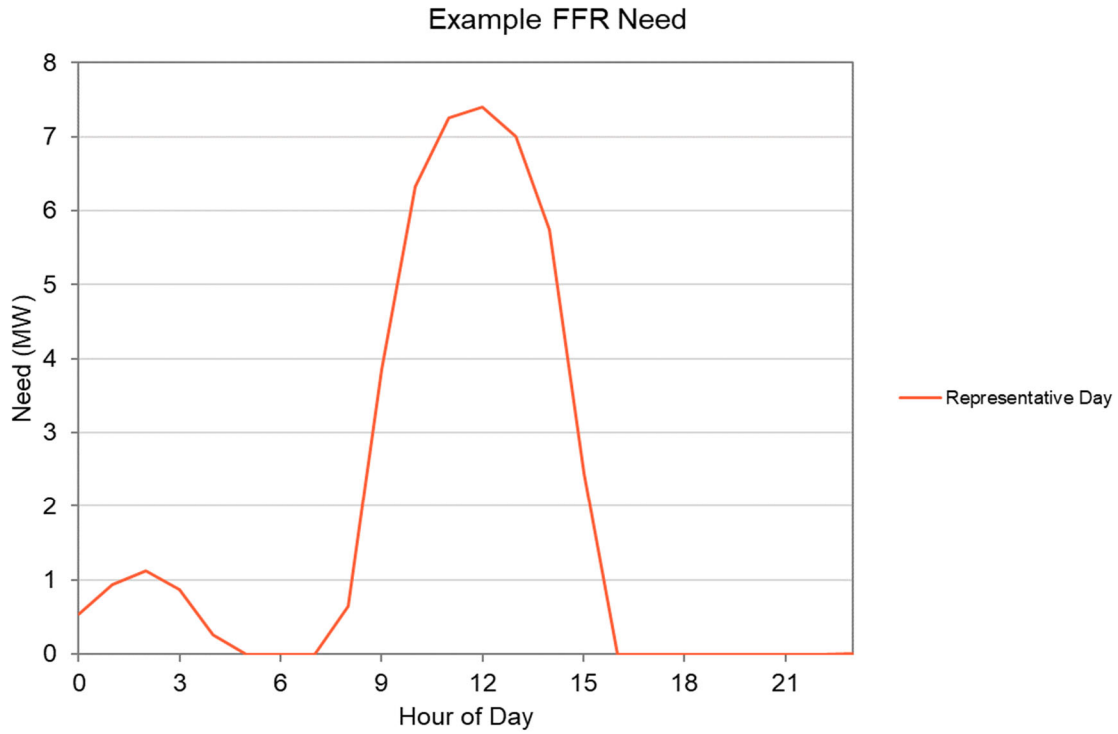


Example Upward Regulating Reserve Need



Example Downward Regulating Reserve Need

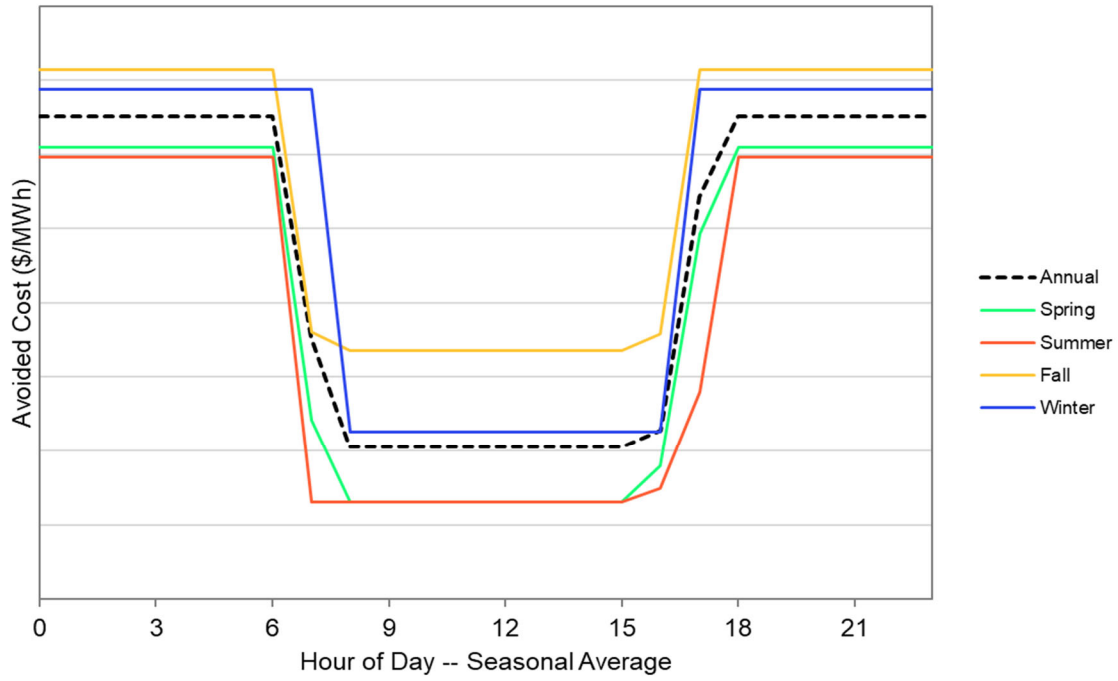




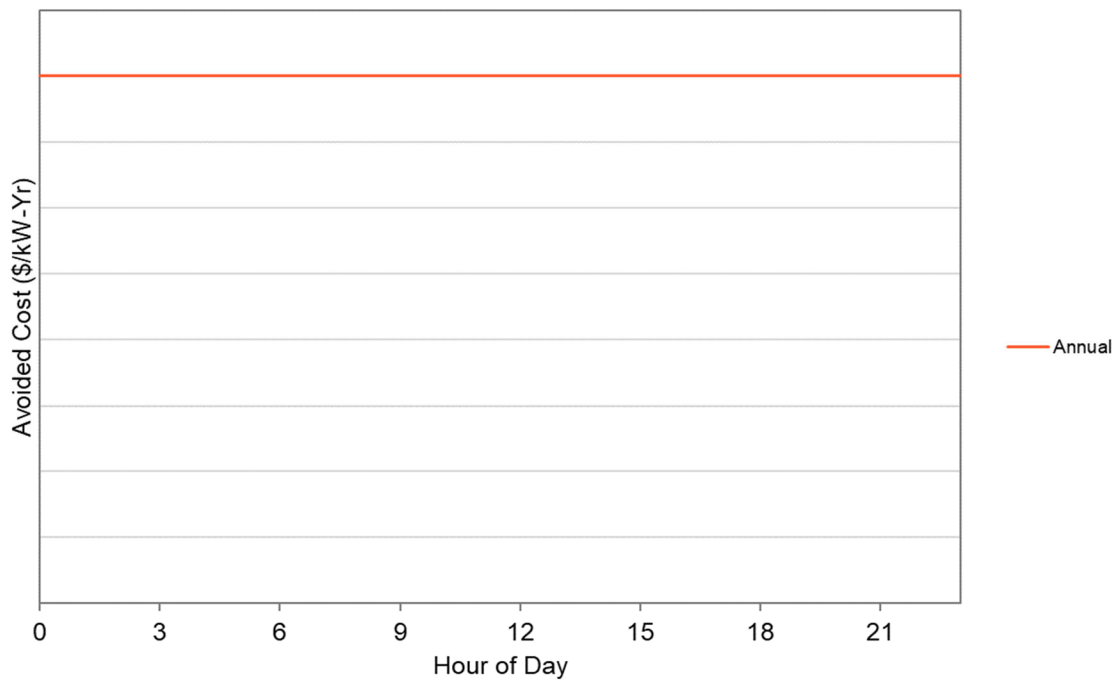
Grid Service Values

The Companies intend to provide relative marginal avoided costs for the grid services provided in Table 1. The charts below are examples of the kinds of data that can be provided from the RESOLVE model to inform the relative values of each service.

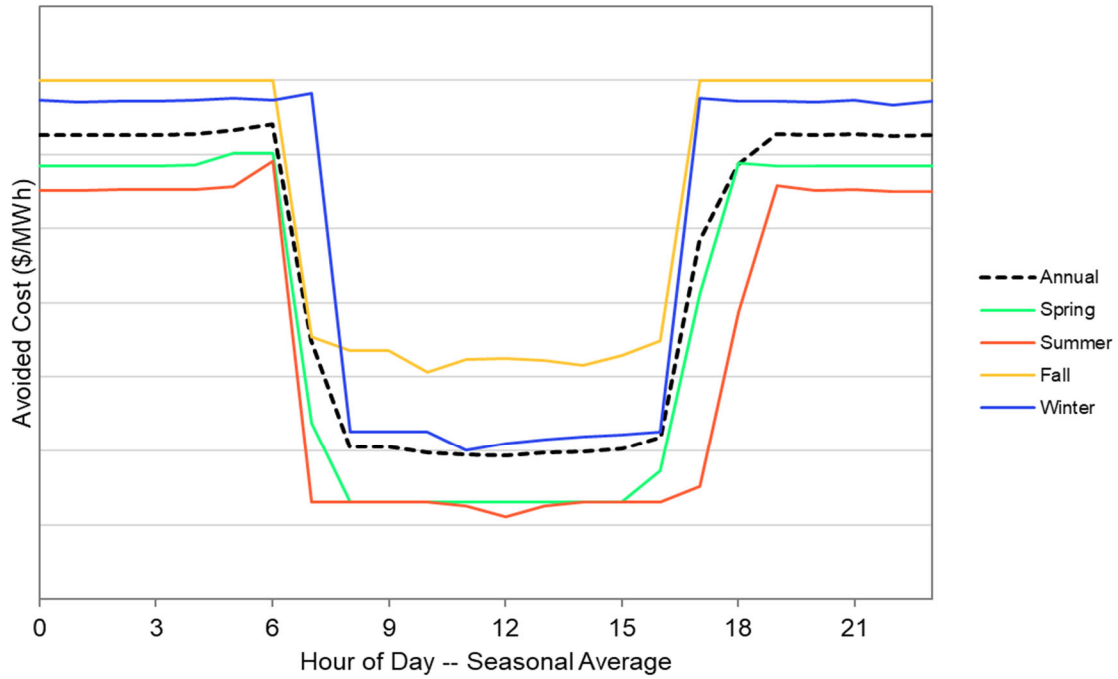
Example Energy Avoided Cost



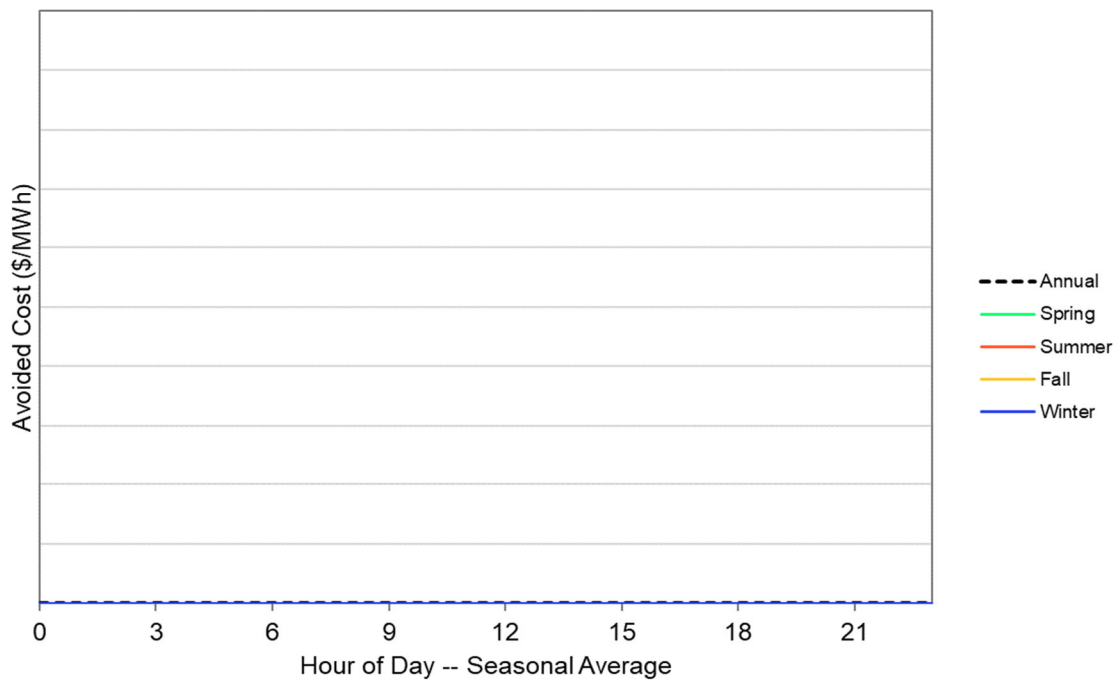
Example Energy Reserve Margin Avoided Cost



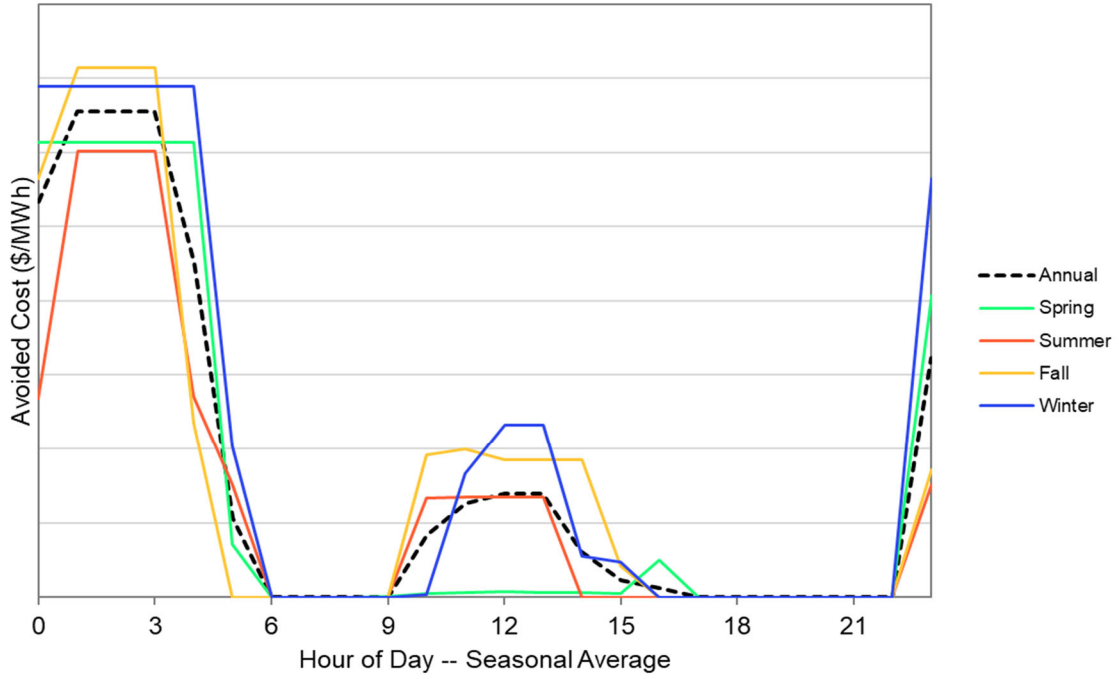
Example Upward Regulating Reserve Avoided Cost



Example Downward Regulating Reserve Avoided Cost



Example FFR Avoided Cost



For NWA needs, the distribution avoided cost will be based on the deferral value of the capital project to be deferred for projects offering to meet that service by siting a project on a circuit with an distribution grid needs with a certainty rating of 1. 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.² A certainty rating of “0” means all other situations where a need may be identified.

Need or Distribution Service	Year of Need	Location	MW Need	Time of Day	Certainty Rating
Distribution Capacity or Distribution Reliability (back-tie)	202X	Circuits	Size of overload (or load increase that caused voltage issue)	Daytime or evening	1 or 0

[NOTE: Specific NWA opportunities to be filled in prior to Final submittal]

² 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

Example Distribution Capacity / Distribution Reliability Avoided Cost

