

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

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

DOCKET NO. 2015-0389

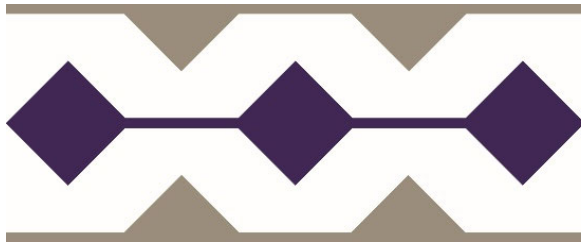
**THE HAWAIIAN ELECTRIC COMPANIES’
SUBMISSION OF CBRE PHASE 2 FINAL DRAFT RFPS AND
SUPPORTING DOCUMENTS FOR MOLOKAI AND LANAI**

Book 4 of 5

Filed November 4, 2021

EXHIBIT 6

Redlines of Changed Sections of the CBRE RFP for
Molokai from August 31, 2021 version



**Maui
Electric**

DRAFT

REQUEST FOR PROPOSALS

FOR

COMMUNITY-BASED RENEWABLE ENERGY PROJECTS

ISLAND OF MOLOKA‘I

~~AUGUST 31~~NOVEMBER 4, 2021

Docket No. 2015-0389

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

Table of Contents

Chapter 1: Introduction and General Information	1
1.1 — Authority and Purpose of the Request for Proposals	2
1.2 — Scope of the RFP	2
1.3 — Competitive Bidding Framework	4
1.4 — Role of the Independent Observer	5
1.5 — Communications Between the Company and Proposers — Code of Conduct Procedures Manual.....	5
1.6 — Company Contact for Proposals	6
1.7 — Proposal Submission Requirements.....	6
1.8 — Proposal Fee.....	7
1.9 — Procedures for the Self Build or Affiliate Proposals	8
1.10 — Dispute Resolution Process.....	10
1.11 — No Protest or Appeal.....	11
1.12 — Modification or Cancellation of the Solicitation Process	12
Chapter 2: Resource Needs and Requirements	12
2.1 — Performance Standards	12
2.2 — Distribution Level System Information.....	13
2.3 — Interconnection to the Company System	13
Chapter 3: Instructions to Proposers	14
3.1 — Schedule for the Proposal Process	15
3.2 — Company RFP Website/Electronic Procurement Platform.....	15
3.3 — Information Exchange.....	16
3.4 — Preparation of Proposals	16
3.5 — Organization of the Proposal	17
3.6 — Proposal Limitations	17
3.7 — Proposal Compliance and Bases for Disqualification.....	18
3.8 — Power Purchase Agreement.....	18
3.9 — Pricing Requirements.....	19
3.10 — Project Description.....	20
3.11 — Sites Identified by the Company.....	21
3.12 — Confidentiality	22

3.13— Credit Requirements	23
Chapter 4: Evaluation Process and Evaluation Criteria	23
4.1— Proposal Evaluation and Selection Process	23
4.2— Eligibility Requirements Assessment	26
4.3— Threshold Requirement Assessment	27
4.4— Initial Evaluation— Price and Non-Price Analysis	30
4.5— Selection of a Priority List	37
4.6— Best and Final Offer (BAFO)	37
4.7— Detailed Evaluation	38
4.8— Selection of the Final Award Group	39
Chapter 5: Post Evaluation Process	40
5.1— Project Interconnection Process	40
5.2— Contract Execution Process	42
5.3— Community Outreach and Engagement	43
5.4— RESERVED	44
5.5— PUC Approval	44
5.6— Facility In Service	44
Chapter 1: Introduction and General Information	1
1.1 Authority and Purpose of the Request for Proposals	2
1.2 Scope of the RFP	2
1.3 Competitive Bidding Framework	4
1.4 Role of the Independent Observer	5
1.5 Communications Between the Company and Proposers – Code of Conduct Procedures Manual.....	5
1.6 Company Contact for Proposals	6
1.7 Proposal Submission Requirements.....	6
1.8 Proposal Fee.....	7
1.9 Procedures for Affiliate Proposals	8
1.10 Dispute Resolution Process.....	9
1.11 No Protest or Appeal.....	11
1.12 Modification or Cancellation of the Solicitation Process	12
Chapter 2: Resource Needs and Requirements	12
2.1 Performance Standards	12

2.2	Distribution-Level System Information	13
2.3	Interconnection to the Company System	13
<u>Chapter 3: Instructions to Proposers</u>		<u>14</u>
3.1	Schedule for the Proposal Process	15
3.2	Company RFP Website/Electronic Procurement Platform.....	15
3.3	Information Exchange.....	16
3.4	Preparation of Proposals	16
3.5	Organization of the Proposal	17
3.6	Proposal Limitations	17
3.7	Proposal Compliance and Bases for Disqualification.....	18
3.8	Power Purchase Agreement	18
3.9	Pricing Requirements.....	19
3.10	Project Description.....	20
3.11	Sites Identified by the Company.....	21
3.12	Confidentiality	22
3.13	Credit Requirements	23
<u>Chapter 4: Evaluation Process and Evaluation Criteria</u>		<u>23</u>
4.1	Proposal Evaluation and Selection Process	23
4.2	Eligibility Requirements Assessment	26
4.3	Threshold Requirement Assessment.....	27
4.4	Initial Evaluation – Price and Non-Price Analysis	30
4.5	Selection of a Priority List	37
4.6	Best and Final Offer (BAFO)	37
4.7	Detailed Evaluation.....	38
4.8	Selection of the Final Award Group.....	39
<u>Chapter 5: Post Evaluation Process</u>		<u>40</u>
5.1	Project Interconnection Process	40
5.2	Contract Execution Process	42
5.3	Community Outreach and Engagement.....	43
5.4	RESERVED.....	44
5.5	PUC Approval.....	44
5.6	Facility In-Service.....	44

List of Appendices

Appendix A	Definitions
Appendix B	Proposer's Response Package / Project Interconnection Data Request
Appendix C	Code of Conduct Procedures Manual
Appendix D	PowerAdvocate User Information
Appendix E	Mutual Confidentiality and Non-Disclosure Agreement
Appendix F	Description of Available Sites
Appendix G	Self-Build Option and Self-Build Option Team Certification Form <u>RESERVED</u>
Appendix H	Interconnection Facilities and Cost Information
Appendix I	RESERVED
Appendix J	Rule 29 Tariff
Appendix K	Model PV Mid-Tier Standard Form Contract for Renewable Dispatchable Generation (Mid-Tier SFC)
Appendix K-1	RESERVED
Appendix K-2	RESERVED
Appendix K-3	Project Specific Addendum (PSA) for Mid-Tier SFC, Projects Located on Moloka'i

- Appendix K-4 Attachment COS to the Project Specific Addendum for Mid-Tier SFC:
Company-Owned Site (for Moloka‘i only)
- Appendix K-5 Attachment DCC to the Project Specific Addendum for Mid-Tier SFC: DC
Coupled Storage

Chapter 1: Introduction and General Information

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

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

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

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

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

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

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

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

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

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

1.1 Authority and Purpose of the Request for Proposals

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

1.2 Scope of the RFP

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

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

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

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

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

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

1.3 Competitive Bidding Framework

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

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

1.4 Role of the Independent Observer

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

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

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

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

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

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

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

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

1.6 Company Contact for Proposals

The primary contact for this RFP is:

~~Kyle Bliedley~~

~~Joseph Streeter~~

Energy Contract Manager

Hawaiian Electric Company, Inc.

RFP Email Address: cbrerfp@hawaiianelectric.com

1.7 Proposal Submission Requirements

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

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

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

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

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

1.8 Proposal Fee

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

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

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

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

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

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

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

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

1.9 Procedures for ~~the Self-Build or~~ Affiliate Proposals

- 1.9.1 ~~Order No. 37070 states that the CBRE RFPs will be open to all bidders, including the Company.~~ The Competitive Bidding Framework allows the Company the option and its

~~Affiliates the opportunity to submit Proposals⁴ to offer a Proposal(s) RFPs issued by the Company. The Company will NOT be providing a Self-Build Option in response to this RFP but reserves the right to do so in future solicitations. Requirements for Company Self-Build (“Self-Build Option” or “SBO”). Accordingly, the Company must follow certain requirements and procedures designed to safeguard against”) and address concerns associated with: (1) preferential treatment of the SBO or members, agents, or consultants of the Company formulating the SBO (the “Self-Build Team”); and (2) preferential access to proprietary information by the Self-Build Team. These requirements 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 ~~October~~ July 9, 2020. The CBRE Code of Conduct will apply to all CBRE Phase 2 RFPs; regardless of whether the Company submits ~~an~~ SBO-Proposal. A copy of the Procedures Manual is attached as Appendix- C.~~

~~The Competitive Bidding Framework also allows Affiliates of the Company to submit Proposals⁵ to RFPs issued by the Company. All Self-Build and Affiliate Proposals are subject to the Company’s Code of Conduct and the Procedures Manual. Affiliate Proposals are also subject to any applicable Affiliate Transaction Requirements issued by the PUC in Decision and Order No. 35962 on December 19, 2018, and subsequently modified by Order No. 36112, issued on January 24, 2019, in Docket No. 2018-0065. However, for Affiliate Proposals for Mid-Tier Projects, the PUC will not require an additional review pursuant to the Affiliate Transaction Requirements, but will hold Affiliate Proposals to the terms of their Proposals Proposal. Affiliate Proposals will be treated identically to IPP Proposals and must be submitted electronically through the Electronic Procurement Platform by the IPP and Affiliate Proposal Due Date in RFP Section 3.1, Table 12.~~

~~1.9.2—The Company will require that the Proposal for the SBO(s) and Affiliate Proposals be submitted electronically through the Electronic Procurement Platform. The Self-Build Team may submit up to two (2) variations of their Proposal, one of which is the base variation of the Proposal as described in Section 1.8.3. SBO Proposals will be due a minimum of one (1) Day before other Proposals are due. A Proposal for the SBO will be uploaded into the Electronic Procurement Platform in the same manner Proposals from other Proposers are uploaded. The Energy Contract Manager, in consultation with the Independent Observer, will confirm that the Self-Build Proposals are timestamped by the Self-Build Proposal Due Date found in RFP Section 3.1, Table 1.~~

~~1.9.3—Detailed requirements for an SBO Proposal can be found in Appendix G. These requirements are intended to provide a level playing field between SBO Proposals and third-party Proposals. Except where specifically noted, an SBO Proposal must adhere to the same price and non-price Proposal requirements as required of all Proposers, as well as certain Mid-Tier SFC requirements, such as milestones and liquidated damages, as~~

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

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

~~described in Appendix G. The non-negotiability of the Performance Standards shall apply to any SBO to the same extent it would for any other Proposal. In addition to its Proposal, the Self-Build Team will be required to submit Appendix G Attachment 1, Self-Build Option Team Certification Form, acknowledging it has followed the rules and requirements of the RFP to the best of its ability and has not engaged in any collusive actions or received any preferential treatment or information providing an impermissible competitive advantage to the Self-Build Team over other Proposers responding to this RFP, as well as adherence to Mid-Tier SFC terms and milestones required of all Proposers and the SBO's proposed cost protection measures.~~

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

~~At the core of an SBO Proposal are its total project capital cost and any associated annual operations and maintenance ("O&M") costs. During the RFP's initial pricing evaluation step, these capital costs⁶ and O&M costs will be used in a revenue requirement calculation to determine the estimated revenues needed from customers which would allow the Company to recover the total cost of the project. The SBO revenue requirements are then used to calculate a Levelized Program Capacity Price (\$/MW) for comparison to IPP and any Affiliate Proposals.~~

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

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

1.10 Dispute Resolution Process

- 1.10.1 If disputes arise under the RFP, the provisions of Section 1.10 and the dispute resolution process established in the Framework will control (see Part V of the Framework).
- 1.10.2 Proposers who challenge or contest any aspect of the RFP process must first attempt to resolve their concerns with the Company and the Independent Observer ("Initial Meeting"). The Independent Observer will seek to work cooperatively with the parties to

⁶SBO Proposals will be required to provide a table identifying project costs by year. These capital costs should be all inclusive, including but not limited to costs associated with equipment, Engineering, Procurement, and Construction ("EPC"), interconnection, overhead, and Allowance for Funds Used During Construction ("AFUDC").

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 of this RFP (e.g., a court proceeding), then such Proposer shall be responsible for any and all attorneys’ fees and costs that may be incurred by the Company or the PUC in order to resolve such claim.

1.11 No Protest or Appeal

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

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

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.

1.12 Modification or Cancellation of the Solicitation Process

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

Chapter 2: Resource Needs and Requirements

2.1 Performance Standards

Proposals must meet the attributes set forth in this RFP, the technical requirements identified in Appendix I of Rule 14H, and the requirements of the Mid-Tier SFC. This RFP, Rule 14H, and the Mid-Tier SFC set forth the minimum requirements that all Proposals must satisfy to be eligible for consideration in this RFP. If there is a conflict between the Performance Standards in Rule 14H and the Mid-Tier SFC, the contract terms will control. Additional Performance Standards may be required based on the results of the IRS.

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

Black start capability⁸ is required for Paired Projects that are 1 MW or larger. For these facilities, the ability to startup without requiring energy from the grid (Black start capability) is also required including energization of the interconnection transformers. The company may use the facility to assist in system restoration, based upon energy availability and BESS state of charge.

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

⁸ The ability to start itself and provide power to the Company's grid without relying on any services or energy from the Company's grid in order to assist the grid in recovering from a total or partial shutdown. During such a total or partial shutdown of the grid, the Project may experience step changes in load and other transient and dynamic conditions as it picks up load without support from other resources on the system during start-up (if the Project remains connected) or while connecting to the loads the Project is picking up (not the start-up and connecting of the Facility itself).

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

2.2 Distribution-Level System Information

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

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

2.3 Interconnection to the Company System

The Proposer must provide information pertaining to the design, development, and construction of the Interconnection Facilities. Interconnection Facilities includes both: (1) Seller-Owned Interconnection Facilities; and (2) Company-Owned Interconnection Facilities.

- 2.3.1 All Proposals must include a description and conceptual or schematic diagrams of the Proposer’s plan to transmit power from the Facility to the Company System. The proposed Interconnection Facilities must be compatible with the Company System. In the design, Projects must adequately consider Company requirements to address impacts on the performance and reliability of the Company System.

For Projects that are exactly 250 kW, Project single line diagram(s) must be submitted with the Proposal submission. For Projects that are greater than 250 kW, a completed Project Interconnection Data Request worksheet (see Appendix B, Attachment 2) and a single line diagram must be submitted with the Proposal submission. Additional information is required to be submitted for all Project sizes within 30 days of selection to the Final Award Group as described in Section 5.1.

- 2.3.1.1 In addition to the Performance Standards and findings of the IRS, the design of the Interconnection Facilities, including power rating, Point(s) of Interconnection with the

Company System, and scheme of interconnection, must meet Company standards. The Company will provide its construction standards and procedures to the Proposer (Engineer, Procure, Construct Specifications for Hawaiian Electric Power Lines and Substations) if requested via the communication methods identified in Section 1.5 and upon the execution of a CBRE NDA as specified in Section 3.12.1. These specifications are intended to illustrate the scope of work typically required to administer and perform the design and construction of a Maui Electric substation and power line.

- 2.3.1.2 Interconnection Facilities must be designed such that it meets or exceeds the applicable single line diagram in Appendix H.
- 2.3.2 Tariff Rule No. 19 establishes provisions for Interconnection and Transmission Upgrades and can be found at <https://www.hawaiianelectric.com/billing-and-payment/rates-and-regulations/>. While the Moloka'i System does not have a traditional Transmission System, the tariff provisions are intended to simplify the rules regarding who pays for, installs, owns, and operates interconnection facilities in the context of competitive bidding. The Company will be responsible for building all Company-Owned Interconnection Facilities for a selected Project.
- 2.3.3 The Proposer shall be responsible for all costs required to interconnect a Project to the Company System, including all Seller-Owned Interconnection Facilities and Company-Owned Interconnection Facilities, regardless of who is responsible for building such facilities.
- 2.3.4 Proposers are required to include in their pricing proposal all costs for interconnection and equipment expected to be required to interconnect their Facility to the grid. Appendix H includes information related to Company-Owned Interconnection Facilities and costs that may be helpful to Proposers. Selected Proposers shall be responsible for the actual final costs of all Seller-Owned Interconnection Facilities and Company-Owned Interconnection Facilities, including certain interconnection costs associated with system upgrades (see Appendix H), whether or not such costs exceed the costs set forth in a Proposer's Proposal. No adjustments will be allowed to the proposed price in a Proposal if actual costs for Interconnection Facilities exceed the amounts proposed.
- 2.3.5 Proposers are required to account for all costs for distribution-level service interconnection for station power in their pricing proposal.
- 2.3.6 All Projects will be screened for general readiness to comply with the requirements for interconnection. Proposals selected to the Final Award Group will be subject to Section 5.1.1. Proposals selected to the Final Award Group may be subject to further study in the form of an IRS. The IRS process is further described in Section 5.1. The results of the completed IRS or as identified through the Detailed Evaluation process, as well as any mitigation measures identified, will be incorporated into the terms and conditions of a final executed Mid-Tier SFC.

Chapter 3: Instructions to Proposers

3.1 Schedule for the Proposal Process

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

**Table 1
Proposed RFP Schedule**

Milestone	Schedule Dates
(1) Draft RFP filed	July 9, 2020
(2) Technical Status Conference	July 29, 2020
(3) Parties and Participants file Comments by	August 12, 2020
(4) Proposed Final RFP filed	September 8, 2020
(5) Updated RFP Draft filed Per Order 37592	March 30, 2021
(6) Parties and Participants file Comments by	April 14, 2021
(7) Proposed Updated RFP filed per Order 37879	August 31, 2021 ⁹
(8) Proposed Final RFP is Issued <u>filed per Order 38038</u>	September 22 <u>November 4</u> , 2021 ¹⁰
(9) Self-Build Proposal Due Date Final RFP is Issued	November 22, 2021 at 2:00 pm HST ¹¹
(10) IPP and Affiliate Proposal Due Date	November 23, 2021 <u>February 15, 2022</u> at 2:00 pm HST
(11) Selection of Priority List	February 1 <u>April 20</u> , 2022
(12) BAFOs Due	February 8 <u>April 27</u> , 2022
(13) Selection of Final Award Group	May 24 <u>August 10</u> , 2022
(14) Contract Execution Start	May 31 <u>August 17</u> , 2022

3.2 Company RFP Website/Electronic Procurement Platform

3.2.1 The Company has established a website for general information to share with potential Proposers. The RFP website is located at the following link:

<http://www.hawaiianelectric.com/competitivebidding>

⁹ All subsequent dates in the proposed schedule may be modified based on further guidance provided by the PUC.

¹⁰ Per Order 37879, page 69, “RFPs shall be approved automatically 15 days after their filing, unless the Commission orders otherwise.” The schedule reflects the RFP being issued one week after its anticipated approval date. All subsequent dates in the proposed schedule may be modified based on further guidance provided by the PUC.

¹¹ Per Order 38038, page 6, “These final RFPs and supporting documents for Molokai and Lanai will be approved automatically 10 days after they are filed, unless the Commission orders otherwise..” The schedule reflects the RFP being issued one week after its anticipated approval date.

The Company will provide general notices, updates, schedules and other information on the RFP website throughout the process. Proposers should check the website frequently to stay abreast of any new developments. This website will also contain the link to the Electronic Procurement Platform employed by the Company for the receipt of Proposals.

“Sourcing Intelligence” developed by Power Advocate is the Electronic Procurement Platform that the Company has licensed and will utilize for the receipt of Proposals in this RFP. Proposers who do not already have an existing account with PowerAdvocate and who intend to submit a Proposal for this RFP will need to register as a “Supplier” with PowerAdvocate.

- 3.2.2 There are no license fees, costs, or usage fees to Proposers for the use of the Electronic Procurement Platform.

See [Appendix D](#) for user information on and screenshots of PowerAdvocate’s Sourcing Intelligence procurement platform.

3.3 Information Exchange

The PUC conducted a Technical Status Conference on July 29, 2020 to discuss the draft RFP. Parties and Participants had the opportunity to submit comments on the draft RFP. The Company then revised the RFP after considering the comments received and filed a final RFP for PUC review and approval. Subsequently, the PUC issued Order No. 37592 which among other things, directed the Companies to further collaborate with the Parties and Participants. As a result, the Company held several meetings with the Parties and Participants, which helped inform further updates to the RFP that were reflected in the Company’s submittal of an updated RFP to the PUC.

Additionally, the Company will hold a prerecorded webinar for CBRE in accordance with the Competitive Bidding Framework for prospective Proposers to learn about the provisions and requirements of this RFP. This prerecorded webinar will be posted to the Company’s website within one week of the issuance of the final RFP.

Prospective Proposers may also submit written questions regarding the RFP to the RFP Email Address set forth in [Section 1.6](#). The Company will endeavor to address all questions that will be helpful to prospective Proposers via a Q&A section on the RFP website.

Prospective Proposers should review the RFP Website’s Q&A section prior to submission of their Proposal. Duplicate questions will not be answered.

3.4 Preparation of Proposals

- 3.4.1 Each Proposer shall be solely responsible for reviewing the RFP (including all attachments and links) and for thoroughly investigating and informing itself with respect to all matters pertinent to this RFP, the Proposer’s Proposal, and the Proposer’s anticipated performance under the Mid-Tier SFC. It is the Proposer’s responsibility to

ensure it understands all requirements of the RFP, to seek clarification if the RFP's requirements or Company's request is not clear, and to ask for any confirmation of receipt of submission of information. Under Section 1.7.5, the Proposer is solely responsible for all errors in its Proposal(s). The Company will not accept any explanation by a Proposer that it was incumbent on the Company to catch any error.

- 3.4.2 Proposers shall rely only on official information provided by the Company in this RFP when preparing their Proposal. The Company will rely only on the information included in the Proposals, and additional information solicited by the Company to Proposers in the format requested, to evaluate the Proposals received. Evaluation will be based on the stated information in this RFP and on information submitted by Proposers in response to this RFP. Proposals must clearly state all capabilities, functionality and characteristics of the Project; must clearly detail plans to be performed; must explain applicability of information; and must provide all referenced material if it is to be considered during the Proposal evaluation. Referencing previous RFP submissions or projects for support will not be considered. Proposers should not assume that any previous RFP decisions or preferences will also apply to this RFP.
- 3.4.3 Each Proposer shall be solely responsible for, and shall bear all of its costs incurred in the preparation of its Proposal and/or its participation in this RFP, including, but not limited to, all costs incurred with respect to the following: (1) review of the RFP documents; (2) status conference participation; (3) site visits; (4) third-party consultant consultation; and (5) investigation and research relating to its Proposal and this RFP. The Company will not reimburse any Proposer for any such costs, including the selected Proposer(s).
- 3.4.4 Each Proposal must contain the full name and business address of the Proposer and must be signed by an authorized officer or agent¹² 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

¹² Proposer's officer or agent must be authorized to sign the Proposal. Such authorization must be in writing and may be granted via Proposer's organizational documents (i.e., Articles of Incorporation, Articles of Organization, By-laws, etc.), resolution, or similar documentation.

or all Proposals submitted in response to this RFP, to negotiate with any or all Proposers eligible to be selected for award, or to withdraw or modify this RFP in whole or in part at any time.

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

3.7 Proposal Compliance and Bases for Disqualification

Proposers may be deemed non-responsive and/or Proposals may not be considered for reasons including, but not limited to, the following:

- Any unsolicited contact by a Proposer or prospective Proposer with personnel of the Company pertaining to this RFP as described in Section 1.5.5.
- Any illegal or undue attempts by or on behalf of the Proposer or others to influence the Proposal Review process.
- The Proposal does not meet one or more of the Eligibility Requirements specified in Section 4.2.
- The Proposal does not meet one or more of the Threshold Requirements specified in Section 4.3.
- The Proposal is deemed to be unacceptable through a fatal flaws analysis as described in Section 4.4.2.
- The Proposer does not respond to a Company request for additional information to clarify the contents of its Proposal within the timelines specified by the Company.
- The Proposal contains misrepresentations or errors.

3.8 Power Purchase Agreement

- 3.8.1 The Power Purchase Agreement for proposals selected under this RFP for Mid-Tier Projects will be in the form of a pre-approved Mid-Tier SFC, attached as Appendix K.

The Mid-Tier SFC will be reviewed and pre-approved by the PUC and as a result, will not be negotiable. Appendix K-3 is a Project Specific Addendum for Mid-Tier Projects located on Moloka'i. In addition, Appendix K-4 is provided for use if the Project is on a Company-owned Site and Appendix K-5 is provided for use if the Project is designed with a single inverter system such that the PV System and BESS are "DC Coupled."

3.8.2 If selected, any Affiliate Proposers will be required to enter into the Mid-Tier SFC with the Company.

~~3.8.3 If selected, a Self-Build Proposer will not be required to enter into a Mid-Tier SFC with the Company. However, the SBO will be held to the same performance metrics and milestones set forth in the Mid-Tier SFC to the same extent as all Proposers, as attested to in the SBO's Appendix G Attachment 1, Self-Build Option Certification submittal. If liquidated damages are assessed, they will be paid from shareholder funds and returned to customers through the Purchased Power Adjustment Clause ("PPAC") or other appropriate rate adjustment mechanisms.~~

~~3.8.43.8.3~~ In general, under the Mid-Tier SFC, payment to the Seller consists of a Lump Sum Payment component to cover the costs of the Project. In return for the Lump Sum Payment component, the Seller shall guarantee minimum performance and availability metrics to ensure that the Facility is maintained and available for energy storage and dispatch, as well as provide an indication of the available energy in near real-time for the Company's dispatch. Company shall not be obligated to accept, nor shall it be required to pay for, test energy generated by the Facility during acceptance testing or other test conditions.

~~3.8.53.8.4~~ The Performance Standards identified in Section 2.1 establish the minimum requirements a Proposal must satisfy to be eligible for consideration in this RFP. A proposed Facility's ability to meet these Performance Standards is both a Threshold Requirement and a Non-Price Related Criteria under Sections 4.3 and 4.4.2, respectively. As such, these Performance Standards are non-negotiable ~~by a Self-Build Proposer or any other Proposer.~~

3.9 Pricing Requirements

3.9.1 Proposers must submit pricing for each of their variations associated with each Proposal (if variations as described in Section 1.8.2 and 1.8.3 are submitted). Proposers are responsible for understanding the terms of the Mid-Tier SFC. Pricing cannot be specified as contingent upon other factors (e.g., changes to federal tax policy or receiving all Investment Tax Credits assumed).

3.9.2 Escalation in pricing over the term of the Mid-Tier SFC is prohibited.

3.9.3 Pricing information must only be identified within specified sections of the Proposal as instructed by this RFP's Appendix B Proposer's Response Package (i.e., Proposal pricing information must be contained within defined Proposal sections of the Proposal submission). Pricing information contained anywhere else in a Proposal will not be considered during the evaluation process.

3.9.4 The Proposer's Response Package must include the following for each Proposal (and variation):

~~For IPP or Affiliate proposals:~~

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

~~For Self-Build Proposals:~~

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

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

3.9.5 As identified in the Schedule of Defined Terms in the Mid-Tier SFC under "BESS Allocated Portion of the Lump Sum Payment", the allocated portion of the Lump Sum Payment specified for energy storage for the Facility for determining liquidated damages is 50% and shall be a non-negotiable percentage in the Mid-Tier SFC.

3.10 Project Description

3.10.1 Proposals are required to provide a Net Energy Potential ("NEP") RFP Projection for the Project. The NEP RFP Projection associated with the proposed Project represents the estimated annual net energy (in MWh) that could be produced by the Facility and delivered to the Point of Interconnection over a ten-year period with a probability of exceedance of 95%. For Paired Projects, the energy generated by the Facility in excess of Company dispatch but below the Facility's Allowed Capacity that is stored in the Facility's BESS component and can later be discharged to the POI considering the BESS Contract Capacity and Maximum Rated Output should be included in the NEP RFP Projection. Any energy in excess of what is allowed to be delivered to the POI and would exceed the BESS Contract Capacity shall be excluded from the Net Energy Potential. To achieve this objective, the BESS Contract Capacity (MWh) must be at least four times the MW Capacity of the installed PV Capacity. Any energy generated outside of the proposed Facility that is used to charge the BESS component should not be factored into the NEP RFP Projection. Any losses that may be incurred from energy being stored and then discharged from the BESS (round trip efficiency losses) should be excluded from the NEP RFP Projection, but the NEP should consider auxiliary loads in developing the

value relative to the POI. The NEP RFP Projection will be used in the RFP evaluation process and therefore Proposers will be held to their provided value.¹³

- 3.10.2 Paired Project Proposals are required to provide a single value Round Trip Efficiency (“RTE”), measured at the Point of Interconnection, that the Facility’s BESS component is required to maintain throughout the term of the Mid-Tier SFC. This RTE value will be used in the RFP evaluation process and therefore Proposers will be held to this provided value as it will become the RTE Performance Metric in Section 2.10 of the Mid-Tier SFC. Please review the Mid-Tier SFC for potential liquidated damages assessed against Seller if the BESS does not maintain the required RTE. The RTE is further specified in Appendix B Section 2.
- 3.10.3 Each Proposer must also agree to provide Project financial information, including proposed Project finance structure information specified in Appendix B. Such information will be used to evaluate Threshold Requirements and non-price criteria (e.g., Financial Viability of Proposer, Financial Strength and Financing Plan, State of Project Development and Schedule) set forth in Sections 4.3 and 4.4.2.
- 3.10.4 The Proposer agrees that no material changes or additions to the Facility from what is submitted in its Proposal will be made without the Proposer first having obtained prior written consent from the Company. Evaluation of all Proposals in this RFP is based on the information submitted in each Proposal at the Proposal Due Date. If any Proposer requests any Proposal information to be changed after that date, the Company, in consultation with the Independent Observer, and in consideration of whether the evaluation is affected, will determine whether the change is permitted.

3.11 Sites Identified by the Company

- 3.11.1 As an alternative to a Site identified by the Proposer, the Company has identified potential Sites where landowners have expressed a willingness to negotiate a lease or purchase of the land to support a renewable energy project. These Sites were identified through a Land RFI. Proposers will be responsible for working directly with the landowner and must secure Site Control with such landowner prior to submitting a 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.

¹³ If a Proposal is selected to the Final Award Group and a Mid-Tier SFC is executed between the Company and the Proposer, the NEP RFP Projection will be further evaluated at several steps throughout the process as set forth in the Mid-Tier SFC, and adjustments to the Lump Sum Payment will be made accordingly. Additionally, because the Company will rely on an accurate representation of the NEP RFP Projection in the RFP evaluation, a one-time liquidated damage as described in the Mid-Tier SFC will be assessed if the First NEP benchmark is less than the Proposer’s NEP RFP Projection. After the Facility has achieved commercial operations, the performance of the Facility will be assessed on a continuing basis against key metrics identified in the Mid-Tier SFC. See Article 2 and Attachment U of the Mid-Tier SFC.

3.11.2 Additionally, a Company-owned Site is being offered to Proposers for their consideration. The available area is approximately 7.2 acres and comprised of 3 unique areas of approximately 5.7, 1.0, and 0.5 acres, each. The Company-owned site is within the Pala‘au Generating Station property west of Kaunakakai town, referred to as the Pala‘au Site, is further described in Appendix F. This is a different and unique site at the Pala‘au Generating Station property from what was offered in the Moloka‘i Variable Renewable Dispatchable Generation Paired with Energy Storage, issued on November 27, 2019.

Proposers proposing to use the Pala‘au Site shall be required to agree to specific terms and conditions for such use as provided for in Attachment COS of the Mid-Tier SFC. Provisions providing for access to the site during construction and thereafter, during commercial operations, will be subject to current Company security policies and procedures, including any additional restrictions due to COVID-19. Physical, communication, and internet security will be required consistent with Company policy. Additional measures may be required to limit or eliminate interference between Seller and Company facilities and infrastructure. Such policies, procedures, and requirements may change as necessary during the term of the Mid-Tier SFC to reflect changes in Company policies or to remain in compliance with current applicable laws, rules, or regulations. Limited sections of Attachment COS (Company-Owned Sites) (Section 4 Subscriber Organization's Investigations of the Company-Owned Site, Section 5 Construction, Maintenance and Interference, Section 7 Hazardous Substances, and Section 8 Archeological and Historical Items) shall be negotiable.

Due to the Company’s COVID-19 travel restrictions, a site visit will not be available at this time. The Company will endeavor to provide as much information as possible to interested potential Proposers, and if conditions related to the ongoing pandemic do not allow for an in-person visit early in the bid submittal period, the Company will provide additional information, which may include photographs and/or video. Information on a potential in-person site visit, or additional information that will be provided, will be posted on the Company’s website.

3.12 Confidentiality

3.12.1 Each prospective Proposer must submit an executed CBRE NDA in the form attached as Appendix E by the Proposal Due Date specified in the RFP Schedule in Section 3.1, Table 1. The form of the CBRE NDA is not negotiable and must be applicable to the Company whose System the Proposal is intended to connect to. Information designated as confidential by the Company will be provided on a limited basis, and only those prospective Proposers who have submitted an executed CBRE NDA will be considered. NDAs that were fully executed for prior non-CBRE RFPs will not be accepted. Proposers must clearly identify all confidential information in their Proposals. However, Proposers should designate as confidential only those portions of their Proposals that genuinely warrant confidential treatment. The Company discourages the practice of marking every page of a Proposal as confidential. The Company will make reasonable efforts to protect any such information that is clearly marked as confidential. Consistent with the terms of the CBRE NDA, the Company reserves the right to share any information, even if

marked confidential, to its agents, contractors, or the Independent Observer for the purpose of evaluating the Proposal.

- 3.12.2 Proposers, in submitting any Proposal(s) to Company in response to this RFP, certify that such Proposer has not shared its Proposal(s), or any part thereof, with any other Proposer of a Proposal(s) responsive to this RFP.
- 3.12.3 The Company will request that the PUC issue a Protective Order to protect confidential information provided by Proposers to the Company and to be filed in a proceeding before the PUC. A copy of the Protective Order, once issued by the PUC, will be provided to Proposers. Proposers should be aware that the Company may be required to share certain confidential information contained in Proposals with the PUC, the State of Hawai'i Department of Commerce and Consumer Affairs, Division of Consumer Advocacy, and the parties to any docket instituted by the PUC, provided that recipients of confidential information have first agreed in writing to abide by the terms of the Protective Order. Notwithstanding the foregoing, no Proposer will be provided with Proposals from any other Proposer, nor will Proposers be provided with any other information contained in such Proposals or provided by or with respect to any other Proposer.

3.13 Credit Requirements

- 3.13.1 Proposers with whom the Company enters into a Mid-Tier SFC must post Development Period Security and Operating Period Security in the form of an irrevocable standby letter of credit from a bank chartered in the United States as required and set forth in Article 14 of the Mid-Tier SFC. Cash, a parent guaranty, or other forms of security will not be accepted in lieu of the irrevocable standby letter of credit.
- 3.13.2 The Development Period Security and Operating Period Security identified in the Mid-Tier SFC are minimum requirements. Proposers shall not propose an amount lower than that set forth in the Mid-Tier SFC.
- 3.13.3 Proposers may be required to provide an irrevocable standby letter of credit in favor of the Company from a bank chartered in the United States in lieu of the required Source Code Escrow in an amount and as required and set forth in Attachment B to the Mid-Tier SFC.

Chapter 4: Evaluation Process and Evaluation Criteria

4.1 Proposal Evaluation and Selection Process

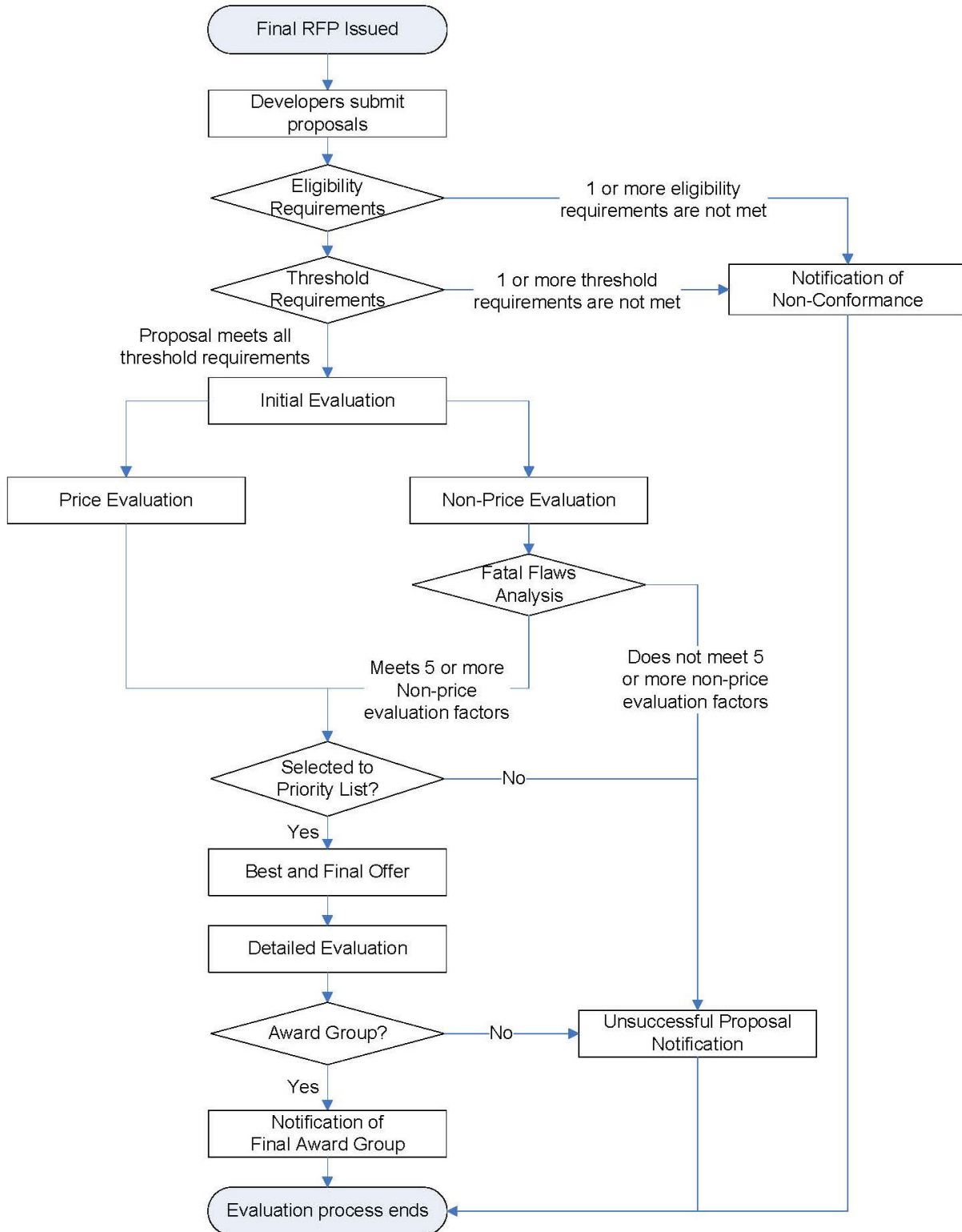
The Company will employ a multi-step evaluation process. Once the Proposals are received, the Proposals will be subject to a consistent and defined review, evaluation, and selection process. This Chapter provides a description of each step of the process, along with the requirements of Proposers at each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

Upon receipt of the Proposals, the Company will review each Proposal submission to determine if it meets the Eligibility Requirements and the Threshold Requirements. The Company, in coordination with the Independent Observer will determine if a Proposer is allowed to cure any aspect of its Proposal or whether the Proposal would be eliminated based on failure to meet either Eligibility or Threshold Requirements.¹⁴ 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.¹⁵ 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.

¹⁴ 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.

¹⁵ The initial request will be offered three (3) business days to cure. Succeeding inquiries on the deficiencies will be offered cure periods deemed sufficient by the Company and Independent Observer.

Figure 1 – Evaluation Workflow



4.2 Eligibility Requirements Assessment

Upon receipt of the Proposals, each Proposal will be reviewed to ensure that it meets the following Eligibility Requirements.

- The Proposer is not eligible to participate in this RFP if the Proposer, its parent company, or an affiliate of the Proposer has:
 - defaulted on a current contract with the Company, or
 - had a contract terminated by the Company, or
 - any pending litigation in which the Proposer has made claims against the Company.
- The Proposal, including required uploaded files, must be received on time via the Electronic Procurement Platform.
- The Proposal Fee must be received on or before the Proposal Due Date.¹⁶
- The Proposal must not contain material omissions.
- The Proposal must be signed and certified by an officer or other authorized person of the Proposer.
- The Proposer must fully execute the CBRE NDA and any other document required pursuant to this RFP.
- The Proposer must provide a Certificate of Vendor Compliance from the Hawai'i Compliance Express dated and issued within 60 days of the date of Proposal submission (a certificate of good standing from the State of Hawai'i Department of Commerce and Consumer Affairs and also federal and Hawai'i state tax clearance certificates for the Proposer may be substituted for the Certificate of Vendor Compliance).
- The Proposal must not be contingent upon changes to existing county, state, or federal laws or regulations.
- The proposed Project must be located on the island of Moloka'i.
- The Proposal must be for a PV project paired with a BESS.
- The proposed project must be 250 kW or larger.
- Projects interconnecting to a distribution circuit (12 kV or lower) must be equal to 250 kW. Projects interconnecting at the Pala'au Generating Station must be 250 kW or larger, up to and including 2.5 MW.
- Projects sited at the Pala'au Generating Station must be 1 MW or larger, up to and including 2.5 MW.
- A minimum of 40% of the Subscriber portion of the Project must be dedicated to residential Subscribers as described in Section 1.2.3.
- No single point of failure from the Facility shall result in a decrease in net electrical output greater than 2.2 MW.
- Project infrastructure and point of interconnection must be located outside the 3.2 feet sea level rise exposure area (SLR-XA) as described in the Hawai'i Sea Level

¹⁶~~Proposal Fees will not be required for SBO Proposals.~~

Rise Vulnerability and Adaptation Report (2017), and not located within a Tsunami Evacuation Zone.

- The Proposal must meet the grid-charging requirements of Section 1.2.13.
- The Proposal must specify a GCOD no later than August 31, 2026.
- Proposals for projects that are 1 MW or greater must provide grid-forming and black start capabilities.
- The Proposer shall agree to post Development Period Security and Operating Period Security as described in Section 3.13.

4.3 Threshold Requirement Assessment

Proposals that meet all the Eligibility Requirements will then be evaluated to determine compliance with the Threshold Requirements, which have been designed to screen out Proposals that are insufficiently developed, lack demonstrated technology, or will impose unacceptable execution risk for the Company.

Proposals must provide explanations and contain supporting information demonstrating how and why the Project proposed meets each of the Threshold Requirements. Proposals that fail to provide this information or meet a Threshold Requirement will be eliminated from further consideration upon concurrence with the Independent Observer.

The Threshold Requirements for this RFP are the following:

1. **Site Control:** The Proposal must demonstrate that the Proposer has Site Control for all real property required for the successful implementation of a specific Proposal at a Site not controlled by the Company, including any Interconnection Facilities, with the exception of rights-of-way or easements for the interconnection route, for which the Proposer is responsible. The need for a firm commitment is necessary to ensure that Proposals are indeed realistic and can be relied upon as the Company moves through the remainder of the RFP process. As noted in Appendix B, Section 2.5.4, while land rights are not required with the Proposal for the interconnection route, the Proposal should thoroughly describe the interconnection route and as set forth in Appendix B, Section 2.5.5, the Proposal should identify any rights-of-way or easements that are required for access to the Site or for the interconnection route and describe the plan for obtaining such rights-of-way or easement, including the proposed timeline. In addition, developmental requirements and restrictions such as zoning of the Site and the status of easements must be identified and will be considered in determining whether the Proposal meets the Site Control threshold.

To meet this Site Control requirement, Proposers must do one of the following:

- Provide documentation confirming (1) that the Proposer has an existing legally enforceable right to use and control the Site, either in fee simple or under leasehold for a term at least equal to the term of the Mid-Tier SFC (“Site Control”) as specified in the Proposer’s Proposal (taking into account the timelines set forth in this RFP for selection and execution of a Mid-Tier SFC and PUC approval as applicable), and (2) the applicable zoning for the

Site and that such zoning does not prohibit the development of the Site consistent with the Proposal; or

- Provide documentation confirming, at a minimum, (1) that the Proposer has an executed binding letter of intent, memorandum of understanding, option agreement, or similar document with the land owner (a “binding commitment”) which sets forth the general terms of a transaction that would grant the Proposer the required Site Control, and (2) the applicable zoning for the Site and that such zoning does not prohibit the development of the Site consistent with the Proposal. The binding commitment does not need to be exclusive to the Proposer at the time the Proposal is submitted and may be contingent upon selection of the Proposal to the Final Award Group. If multiple Projects are provided a binding commitment for the same Site, the documents granting the binding commitments must not prevent the Company from choosing the Proposal that otherwise would have been selected.
 - **Government/Public Lands Only:** The above two bullet points may not be feasible where government or publicly-owned lands are part of the Site or are required for the successful implementation of the Proposal. In such a case, at a minimum the Proposer must provide a credible and viable plan, including evidence of any steps taken to date, to secure all necessary Site Control for the Proposal, including but not limited to evidence of sufficient progress toward approval by the government agency or other body vested with the authority to grant such approval (as demonstrated by records of the agency). The Proposer will still be required, however, to demonstrate Site Control as required in the Mid-Tier SFC should the Proposal be selected to the Final Award Group.
2. **Performance Standards:** The proposed Facility must be able to meet the performance attributes identified in this RFP and the Performance Standards identified in Section 2.1 of this RFP. Proposals should include sufficient documentation to support the stated claim that the Facility will be able to meet the Performance Standards. The Proposal should include information required to make such a determination in an organized manner to ensure this evaluation can be completed within the evaluation review period.
 3. **Proven Technology:** This criterion is intended as a check to ensure that the technology proposed is viable and can reasonably be relied upon to meet the objectives of this RFP. The Company will only consider Proposals utilizing technologies that have successfully reached commercial operations in commercial applications (i.e., a PPA) at the scale being proposed. Proposals should include any supporting information for the Company to assess the commercial and financial maturity of the technology being proposed as noted in Attachment B, Section 2.12.
 4. **Experience of the Proposer:** The Proposer, its affiliated companies, partners, and/or contractors and consultants on the Proposer’s Project team must have experience in financing, designing, constructing, interconnecting, owning, operating, and maintaining at least one (1) electricity generation project, including all components of the project (i.e., BESS or other attributes), similar in size, scope,

technology, and structure to the Project being proposed by Proposer. The Company will consider a Proposer to have reasonably met this Threshold Requirement if the Proposer can provide sufficient information in its Proposal's RFP Appendix B Section 2.13 tables demonstrating that at least one member of the Proposer's team (identified in the Proposal) has specific experience in each of the following categories: financing, designing, constructing, interconnecting, owning, operating, and maintaining projects similar to the Project being proposed.

5. **Financial Compliance:** The proposed Project must not cause the Company to be subject to consolidation, as set forth in Financial Accounting Standards Board ("FASB") Accounting Standards Codification Topic 810, Consolidation ("ASC 810"), as issued and amended from time to time by FASB. Proposers are required to state to the best of their knowledge, with supporting information to allow the Company to verify such conclusion, that the Proposal will not result in the Seller under the PPA being a Variable Interest Entity ("VIE") and result in the Company being the primary beneficiary of the Seller that would trigger consolidation of the Seller's finances on to the Company's financial statements under FASB ASC 810. The Company will perform a preliminary consolidation assessment based on the Proposals received. The Company reserves the right to allow a Proposal to proceed through the evaluation process through selection of the Priority List and work with the Proposer on this issue prior to or during contract execution. The Company has determined that for purposes of FASB ASC 842, a generation plus BESS facility will be treated as two separate measurements of account. For accounting purposes, the BESS portion (if applicable) will be treated as a lease, while the generation facility will not. As a result, no lease evaluation will be completed as part of the Proposal evaluation.
6. **Community Outreach:** Gaining community support is an important part of a Project's viability and success. A comprehensive community outreach and communications plan ("Community Outreach Plan") is an essential roadmap that guides a developer as they work with various communities and stakeholders to gain their support for a Project. Proposers must include a Community Outreach Plan that describes the Proposer's commitment to work with the neighboring community and stakeholders and to provide them timely Project information during all phases of the Project. The Community Outreach Plan shall include, but not be limited to, the following information: Project description, community scoping (including stakeholders and community concerns), Project benefits, government approvals, development process (including Project schedule), a comprehensive communications plan, and outreach experience.
7. **Cultural Resource Impacts:** Proposers need to be mindful of the Project's potential impacts to historical and cultural resources. Proposers must identify: (1) valued cultural, historical, or natural resources in the area in question, including the extent to which traditional and customary native Hawaiian rights are exercised in the area; (2) the extent to which those resources – including traditional and customary native Hawaiian rights – will be affected or impaired by the proposed

action; and (3) the feasible action, if any, to be taken to reasonably protect any identified cultural, historical, or natural resources in the area in question, and the reasonable protection of traditional and customary native Hawaiian rights in the affected area. Also, Proposers must have already contracted with a consultant with expertise in this field to begin a cultural impact plan for the Project.

4.4 Initial Evaluation – Price and Non-Price Analysis

Proposals that meet both the Eligibility and Threshold Requirements are Eligible Proposals which will then be subject to a price and non-price assessment. Two teams have been established to undertake the Proposal evaluation process: a Price Evaluation Team and Non-Price Evaluation Team. The results of the price and non-price analysis will be a relative ranking and scoring of all Eligible Proposals. Price-related criteria will account for sixty percent (60%) of the total score and non-price-related criteria will account for forty percent (40%) of the total score. The non-price criteria and methodology for applying the criteria are explained in Section 4.4.2.

The Company will employ a closed-bidding process for this solicitation in accordance with Part IV.H.3 of the Framework where the price and non-price evaluation models to be used will not be provided to Proposers. However, the Company will provide the Independent Observer with all necessary information to allow the Independent Observer to understand the evaluation models and to enable the Independent Observer to observe the entire analysis to ensure a fair process.

4.4.1 Initial Evaluation of the Price Related Criteria

For the initial price analysis, a total of 600 points will be awarded. Price related criteria will be based on the GCOD and an equivalent levelized program capacity. An equivalent Levelized Program Capacity Price (\$/MW) will be calculated for each Proposal based on information provided in the Proposal including the Lump Sum Payment (\$/year) and the net nameplate capacity of the Facility (MW) information defined in Section 3.9 of this RFP, and Section 2.0 of Appendix B of this RFP, respectively.

The eligible Proposal with the earliest GCOD will receive 50 points. All other eligible Proposals in that evaluation category will receive points of a proportionate reduction based on the difference between the earliest GCOD and latest acceptable GCOD (August 31, 2026) rounded by months. For example, if the earliest GCOD is March 1, 2024, that Proposal will receive 50 points. The total months between the earliest GCOD and latest acceptable GCOD then becomes 30 months. If another Proposal has a GCOD date of November 1, 2024, it is 9 months later than the earliest GCOD and will then receive $50 \times (1 - (9/30)) = 35$ points.

The eligible Proposal with the lowest Levelized Program Capacity Price category will receive 550 points. All other eligible Proposals in that evaluation category will receive points based on a proportionate reduction using the percentage by which the Eligible Proposal's Levelized Program Capacity Price exceeds the lowest Levelized Program

Capacity Price. For example, if a Proposal's Levelized Program Capacity Price is ten percent (10%) higher than the lowest Levelized Program Capacity Price, the Proposal will be awarded 495 points (that is, 550 points less 10%). The result of this assessment will be a ranking and scoring of each Proposal (including variations).

4.4.2 Initial Evaluation of the Non-Price Related Criteria

For the non-price analysis, each Proposal will be evaluated on each of the non-price criteria categories set forth below:

1. Community Outreach
2. State of Project Development and Schedule
3. Performance Standards
4. Locational Value for Community Resilience
5. Commitment to Residential Subscriber Participation
6. CBRE Program
7. Environmental Compliance and Permitting Plan
8. Experience and Qualifications
9. Financial Strength and Financing Plan
10. RESERVED
11. Guaranteed Commercial Operations Date
12. Cultural Resource Impacts

Each of the first six criteria – Community Outreach, State of Project Development and Schedule, Performance Standards, Locational Value for Community Resilience, Commitment to Residential Subscriber Participation, and CBRE Program – will be weighted twice as heavily as the others to reflect the impact these categories have to achieve a successful and timely procurement. The non-price criteria are generally scored on a scale of 1 (poor) to 5 (highly preferable). A score of 3 means that a Proposal meets the minimum standard for that criteria.

The total non-price score will be the sum of the scores for each of the individual non-price criteria. The Company will then award non-price evaluation points in accordance with the relative ranking of scores. The Proposal with the highest total non-price score will receive 400 points, and all other Proposals will receive points equal to the Proposal's score divided by the top score, multiplied by 400.

During the non-price criteria evaluation, a fatal flaws analysis will also be conducted such that any Proposal that does not meet the minimum standards level of at least five (5) non-price criteria will be disqualified given that the Proposal has failed to meet the required number of non-price factors that are indicative as to the general feasibility and operational viability of a proposed Project. Non-price criteria numbers 4, 5 and 11 above will be excluded from the fatal flaws analysis.

The Company's evaluation of the non-price criteria will be based on the materials provided by a Proposer in its Proposal. Acceptance of any Proposal into the Final Award Group shall not be assumed or construed to be an endorsement or approval that the materials provided by Proposer are complete, accurate or in compliance with applicable

law. The Company assumes no obligation to correct, confirm, or further research any of the materials submitted by Proposers. Proposers retain sole responsibility to ensure their Proposals are accurate and in compliance with all laws.

The non-price criteria are:

1. **Community Outreach** – Gaining community support is an important part of a Project’s viability and success. An effective Community Outreach Plan will call for early meaningful communications with stakeholders and will reflect a deep understanding and respect for the community’s desire for information to enable them to make informed decisions about future projects in their communities. Therefore, Proposals will be evaluated on the quality of the Community Outreach Plan to inform the Project’s impacted communities.

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

- 1) Project description. A thorough description including a map of the location of the Project. This information will help the community understand the impact that the Project may have on the community.
- 2) Community scoping. Identify stakeholders (individuals, community leaders, organizations), community issues and concerns, and community sentiment.
- 3) Project benefits. An explanation of the need for the Project, and, if available, a description of any community benefits outside the provision of renewable energy, such as a plan to support local economic development through local workforce development and ownership strategies. This will help the community to understand how the Project might benefit their community.
- 4) Government approvals. Required government permits and approvals, public hearings and other opportunities for public comment. This information will help the community to understand the level of public scrutiny and participation that might occur for the Project and the opportunities to provide public comments.
- 5) Development process. A Project schedule that identifies key milestones will facilitate the community’s understanding of the development process.
- 6) Communications Plan. A communications plan including a detailed community outreach schedule that will keep the affected communities and stakeholders informed about the Project’s outreach efforts during early Project development period through construction and operations.
- 7) Outreach experience. If available, the Proposer should include past community engagement, support, and outreach of the proposed Project or other similar renewable energy projects, which could be demonstrated through letters of community support, number of interactive community meetings and number of participatory hours from community members.

Preference will be given to Proposers who have already identified established contacts to work with the local community, have used community input to incorporate changes to the final design of the Project and mitigate community concerns, have proposed a community benefits package (including details of the community recipients and benefits package), or have community consultants as part of the Project team doing business in Hawai'i that have successfully worked with communities in Hawai'i on the development of two or more energy projects or projects with similar community issues. These criteria are aligned with the Company's community engagement expectation whereby all developers will be required to engage in community outreach prior to signing a PPA with the Company. This process is also outlined in RFP Section 5.3. Further information and instructions regarding expectations for the Community Outreach Plan are included as Attachment 4 and 5 to Appendix B.

2. **State of Project Development and Schedule** – Projects that are further along in development generally have lower project execution risk and a greater probability of being able to be successfully placed into service prior to the GCOD (specifically identified in each Proposal). At a minimum, Projects should demonstrate how they plan to capture any ITC safe harbor and reach their GCOD specified, including identification of risks and schedule assumptions. (Schedules must identify the IRS completion date and PUC approval dates assumed.) Proposals should also demonstrate, via a detailed critical path schedule, that there is a high likelihood that the Project will be able to reach commercial operations as specified. Proposals shall include a Gantt chart that clearly illustrates the overall schedule and demonstrates achievement of any ITC safe harbor, if applicable, and commercial operations by their specified GCOD. The Gantt chart shall include task durations and dependencies, identify tasks that will be fast tracked, and identifies slack time and contingencies. This criterion will also look at the high-level Project costs set forth in the Proposal including: costs for equipment, construction, engineering, Seller-Owned Interconnection Facilities, Company-Owned Interconnection Facilities, land, annual O&M, the reasonableness of such costs and the assumptions used for such costs. Project costs that do not appear reasonable for a project of the size proposed may result in a lower ranking for this criterion if the Company reasonably determines that the cost information is unrealistic based on prior experience in the market which may result in a risk that the Project can be built on time and for the price proposed by the Proposer. The Company reserves the right to discuss any cost and financial information with a Proposer to ensure the information provided is accurate and correct.
3. **Performance Standards** – The proposed Facility must be able to meet the performance attributes identified in this RFP and the Performance Standards identified in the Mid-Tier SFC. The Company will review the Proposal information received, including design documents and operating procedures materials provided in the Proposal, and evaluate whether the Project as designed is able to meet the Performance Standards identified in the Mid-Tier SFC and in

this RFP. At a minimum, in addition to meeting the Performance Standards, the Proposal should include sufficient documentation, provided in an organized manner, to support the stated claim that the Facility will be able to meet the Performance Standards. The Proposal should include information required to make such a determination in an organized manner to ensure this evaluation can be completed on a timely basis. Preference will be given to Proposals that provide detailed technical and design information showing how each standard can be met by the proposed Facility. Preference will also be provided on facilities that offer additional capabilities (e.g., black-start, grid-forming).

4. **Locational Value for Community Resilience** – The Company has identified that CBRE projects have the potential to support community resilience. For Projects to support community resilience, a BESS with grid-forming and black start capability is needed. Proposals should provide a description of the critical infrastructure or community resilience hubs in proximate location to the proposed Project site that could benefit from the islanding capabilities of the proposed Project.
5. **Commitment to Residential Subscriber Participation** – Proposals will be evaluated on the stated commitments of the Project’s Subscriber Organization to residential Subscribers. At a minimum, Subscriber Organizations will be required to set aside 40% of the Project’s capacity for residential Subscribers. Proposers that commit to reserving a portion larger than 40% of their Project capacity for residential Subscribers will be given more favorable scoring. In addition, Proposals will also be evaluated on the stated commitments of the Project’s Subscriber Organization to LMI Customers. Proposers that commit to reserving a portion of the Project’s capacity for LMI Customers will be given more favorable scoring.
6. **CBRE Program** – Proposals will be evaluated on several facets of the CBRE program being proposed.
 - 1) **Program Offering:** Proposals will be evaluated to give preference to program offerings that provide the most benefits to residential and LMI Customers, as applicable. Financing options, upfront fees, payment over time, public funding options, and other creative approaches will be preferred along with programs that offer higher expected customer level savings, favorable payback periods and mechanisms, and other customer benefits. In addition, Proposals shall describe the extent to which residential Subscribers will be financially responsible for the Facility’s underperformance.
 - 2) **Marketing and Outreach Plans:** Proposals will be evaluated on the proposed strategies and methods to educate, inform, and stimulate the market in order to achieve their target levels of participation.

- 3) **Program Experience:** Proposals will also be evaluated on Proposers documented success in reaching and retaining participation of residential and LMI Customers, as applicable, in other community-based renewable energy programs.
7. **Environmental Compliance and Permitting Plan** – This criterion relates to the potential (short- and long-term) environmental impacts associated with each project, the quality of the plan offered by the Proposer to mitigate and manage any environmental impacts (including any pre-existing environmental conditions), and the plan of Proposers to remain in environmental compliance over the term of the contract. These impacts are reflected on a technology-specific basis. Completing any necessary environmental review and obtaining the required permitting in a timely manner is also important and Proposals will be evaluated on their plan to identify, apply for, and secure the required permits for the Project, any permitting activity that has been completed to date, including having initial discussions with the applicable regulating agencies such as U.S. Fish and Wildlife and the State of Hawai‘i Department of Land and Natural Resources’ Division of Forestry and Wildlife, prior to submitting a Proposal, and the degree of certainty offered by the Proposer in securing the necessary permits.

At a minimum, proposed Projects should be expected to have minimal environmental impact for most areas and Proposals should provide a comprehensive plan to mitigate the identified potential or actual significant environmental impacts to remain in environmental compliance. The proposed mitigation plans should be included in the Project timeline. Preference will be given to Proposals that provide a more detailed plan as well as those that have proactively taken steps to mitigate potential environmental impacts.

Also, this criterion requires that, at a minimum, Proposers should have identified, and disclosed in their Proposal(s) all major permits, approvals, appurtenances and entitlements (including applicable access, rights of way and/or easements) (collectively, the “permits”) required and have a preliminary plan for securing such permits. Preference will be given to Proposals that are able to provide a greater degree of certainty that its plan to secure the required permits is realistic and achievable, or have already received all or a majority of the required permits. The Proposer should disclose all identified (a) discretionary permits required, i.e., those requiring public or contested case hearings and/or review and discretionary approval by an appropriate government agency and (b) ministerial conditions without discretionary approval conditions. In all cases, the Proposer must provide a credible and viable plan to secure all necessary and appropriate permits necessary for the project. For example, if the project is located within an agricultural district, the Proposer shall provide evidence of Proposer’s verification with the appropriate government agency that the project complies with HRS Section 205-2 and Section 205-4.5, relating to solar energy facilities placed on agricultural land, provided, however that where a special use permit (under Section 205-6), exemption (under Section 205-6), or amendment to land use district boundary lines (under Section 205-4) is required to secure such compliance, Proposer shall identify the need for such permit, exemption or

amendment and provide a list of required prerequisites and/or conditions and a realistic timeline necessary to obtain such permit, exemption or amendment satisfactory for Proposer to still meet its designated Guaranteed Commercial Operations Date.

8. **Experience and Qualifications** – Proposals will be evaluated based on the experience of the Proposer in financing, designing, constructing, interconnecting, owning, operating, and maintaining projects (including all components of the project) of similar size, scope and technology. At a minimum, Proposals must show via the table format specified in RFP Appendix B Section 2.13 that at least one (1) member must have specific experience in each of the following categories: financing, designing, constructing, interconnecting, owning, operating, and maintaining at least one electricity generation project including all components of the project similar to the Project being proposed. Preference will be given to Proposers with experience in successfully developing multiple projects that are similar to the one being proposed and/or that have prior experience successfully developing and interconnecting a utility scale project to the Company's System.
9. **Financial Strength and Financing Plan** – This criterion addresses the comprehensiveness and reasonableness of the financial plan for the Project as well as assesses the financial strength and capability of the Proposer to develop the Project. A complete financial plan addresses the following issues: Project ownership, capital cost and capital structure, sources of debt and equity, and evidence that credit-worthy entities are interested in financing the Project. The financial strength of Proposers or their credit support providers will be considered, including their credit ratings. The financing participants are expected to be reasonably strong financially. Developers and their sources of capital that have investment grade credit ratings from a reputable credit rating agency (S&P, Moody's, Fitch) will also be given preference, with those that have higher credit ratings ranked higher.
10. RESERVED
11. **Guaranteed Commercial Operations Date** – Proposers that are able to design for and commit to an earlier GCOD will be given more favorable scoring. Proposers will be held to the GCOD identified in their Proposal. The GCOD will be a Guaranteed Milestone and will be inserted without amendment into the Mid-Tier SFC, as applicable.
12. **Cultural Resource Impacts** – Proposers need to be mindful of the Project's potential impacts to historical and cultural resources. Proposers should have identified (1) valued cultural, historical, or natural resources in the area in question, including the extent to which traditional and customary native Hawaiian rights are exercised in the area; (2) the extent to which those resources – including traditional and customary native Hawaiian rights – will be affected or impaired by

the proposed action; and (3) the feasible action, if any, to be taken to reasonably protect any identified cultural, historical, or natural resources in the area in question, and the reasonable protection of traditional and customary native Hawaiian rights in the affected area.

Also, Proposers should have already contracted with a consultant with expertise in this field to begin a cultural impact plan for the Project. Proposals will be evaluated on the commitment to addressing cultural resource impacts on their Project, if any. Therefore, in order to be evaluated for this criterion, Proposers should, at least, provide the following documentation, as applicable: (1) Proposer's or its consultant's experience with cultural resource impacts on past projects; (2) the status of their cultural impact plan. Proposals will be evaluated on the extent to which their cultural impact plan has been developed, and preference will be given to Proposals that are further along in the process, including but not limited to, whether a mitigation/action plan has been provided that addresses any identified cultural resource issues, or a date for when such a plan will be available has been identified, or any portions of such plan have been completed.

4.5 Selection of a Priority List

At the conclusion of both the price and non-price analysis, a total score will be calculated for each Proposal using the 60% price-related criteria / 40% non-price-related criteria weighting outlined above. The price and non-price analysis, and the summation of both price and non-price scores described above, will result in a ranking of Proposals.

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

4.6 Best and Final Offer (BAFO)

- 4.6.1 The Company will solicit a Best and Final Offer from Proposers selected to the Priority List. ~~If the SBO is selected to the Priority List, the SBO will not be eligible to provide a Best and Final Offer and the original pricing submitted in its Self-Build Proposal will be used in the Detailed Evaluation. All other~~ Proposers selected to the Priority List will have the opportunity to update (downward only)¹⁷ the pricing elements in their Proposal in order to improve the competitiveness of their Proposal prior to being further assessed in the Detailed Evaluation phase. At this point in the process, updates may only be made to the following pricing element:

¹⁷ 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.)

- Lump Sum Payment (\$/year) amount

Proposers will not be allowed to increase their price¹⁸ 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.¹⁹

4.7 Detailed Evaluation

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

The detailed evaluation process will consist of assessment of combinations of Proposals from the Priority List. Using the forecast and planning assumptions developed for the Company's Integrated Grid Planning process in Docket No. 2019-0165 submitted on August 3, 2021, a capacity expansion model will be used to determine a simplified proxy of benefits and value of proposals of the CBRE portfolio based on the process utilized in the DER docket, (Docket No. 2019-0323) (i.e., a resource plan with and without the CBRE portfolio). Proposals will be compared to this proxy value to determine if the proposed projects will provide cost effective value to customers.

Due to computational limitations, all Proposals from a Priority List may not be evaluated simultaneously. The ranking developed in the Initial Evaluation can be used to screen the Proposals in the Detailed Evaluation to those that provide the highest potential benefit to the system.

The proxy evaluation will evaluate the benefits and costs of integrating the CBRE portfolio onto the Company's System which includes:

1. The cost to dispatch the CBRE RFP portfolio and the energy under the Mid-Tier SFC;
2. The fuel cost savings (benefits) and any other direct savings (Subscriber Organization savings from dispatchable fossil fuel savings, where applicable) resulting from the displacement of generation, including consideration of round-trip efficiencies for facilities with a BESS; and
3. The estimated increase (or decrease) in operating cost, if any, incurred by the Company to maintain system reliability; and

¹⁸ 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.

¹⁹ 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.

4. The cost of imputed debt, if applicable.

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

During the Detailed Evaluation and before the Proposals advance to the Final Award Group, the Company will perform load flow analyses to determine if certain Projects or combinations of Projects introduce circuit constraints that will factor into the selection process. This is to address the possibility that even though sufficient line capacity was identified for an individual Project, Projects that are in close proximity with each other could introduce additional circuit constraints. The Projects selected must not have any additional constraints imposed based on the Load Flow Analysis to advance to the Final Award Group. However, the Company reserves the right, in consultation with the Independent Observer, to allow minor modifications (i.e., downsize project) to a Proposal to avoid such additional constraints. If such modification resulted in a reduced size of the Facility, the pricing proposed would also need to be revised. Under no circumstances would a Proposer be allowed to increase their price as a result of such minor modification.

Also, in the Detailed Evaluation, other factors will be validated to ensure that the final combination of Projects provides the contemplated benefits that the Company seeks. The Company will consider the implementation of a combination of Projects, including consideration of the geographic diversity, program implementation, resource diversity, interconnection complexity, and flexibility and latitude of operation control of the Projects.

The Company may complete additional analyses of Projects, in consultation with the Independent Observer, if the time and capability exist to perform such analyses.

Projects interconnecting to distribution circuits may be subject to the Technical Review process of Rule 14H. The Company may consider a Project's performance through this process in the Detailed Evaluation.

4.8 Selection of the Final Award Group

Based on the results of the Detailed Evaluation and review of the results with the Independent Observer, the Company will select a Final Award Group. Mid-Tier Projects selected to the Final Award Group will execute a Mid-Tier SFC with the Company in the

form of Appendix K. All Proposers will be notified at this stage of the evaluation process whether their Proposal is included in the Final Award Group.

Selection to the Final Award Group does not guarantee execution of a Mid-Tier SFC.

Further, if at any time during the evaluation process it is discovered that a Proposer's Proposal contains incorrect or misrepresented information that has a material effect on any of the evaluation processes, including selection of the Priority List or the Final Award Group, the Company reserves the right, in consultation with the Independent Observer, to disqualify the Proposer from the RFP.

Following any removal of a proposal from the Final Award Group, either by disqualification noted immediately above, or via any other removal or withdrawal of a proposal, including failure to reach agreement to the Mid-Tier SFC, the Company, taking into consideration the timing of such removal and the current status of the Company's needs under the RFP, in consultation with and concurrence from the Independent Observer, will review the Priority List to determine (1) if another proposal should be added to the Final Award Group; or (2) if the remaining proposals in the Final Award Group should remain unchanged.

Chapter 5: Post Evaluation Process

5.1 Project Interconnection Process

5.1.1 Interconnection Modeling Process

A summary of the model requirements and impact study scope can be found in Appendix B, Attachment 6.

~~For all projects starting from~~Projects that are exactly 250 kW and less than 1 MW in size, Project single line and three line diagrams and an equipment list shall be submitted for each Proposal. For all projects greater than or equal to 1 MW in size (regardless of whether an IRS is required), a complete package of Project Interconnection Data Request worksheets, Project ~~single line and three line diagram~~three line diagram(s), and an equipment list must be provided within 30 days after selection to the Final Award Group. If requested by the Company, models for equipment and controls, (see Appendix B, Attachments 3 and 6), list(s) to clearly identify the components and respective files (for inverters and power plant controller), and complete documentation with instructions shall~~also be submitted for each Proposal. The submittal shall be done~~within 30 days after selection to the Final Award Group (see Section 2.11 of Appendix B). In addition, updated single line diagram(s) shall be submitted within 30 days after selection to the Final Award Group.

For all Projects greater than 250 kW in size (regardless of whether an IRS is required), Project three line diagram(s), models for equipment and controls (see Appendix B, Attachments 3 and 6), list(s) to clearly identify the components and respective files (for inverters and power plant controller), and complete documentation with instructions shall be submitted for each Proposal within 30 days after selection to the Final Award Group

(see Section 2.11 of Appendix B). In addition, updated Project Interconnection Data Request worksheets and single line diagram(s) shall be submitted within 30 days after selection to the Final Award Group.

Preparation of the models, documentation, and related information, and may take longer than 30 days, and Proposers shall allow adequate time for this submittal requirement.

If required for the project (see Appendix B, Attachment 6), PSSE Generic models, PSSE User models, and ASPEN models shall be configured to represent all of the functional equipment with settings in place to comply with the Company's performance requirements. These must be checked for functionality by the Proposer or its vendors and consultants prior to submission to the Company. Similarly, fully accurate PSCAD models shall be submitted in a condition that complies with the PSCAD modeling guidelines provided by the Company. Overlaid validation plots of PSSE Generic models, PSSE User models, and PSCAD models shall be submitted as described in the Project Interconnection Data Request worksheets to ensure compatible responses from each model.

If the Company determines that an IRS is not required, the Company will provide an Interconnection Modeling Letter Agreement for each selected Project, with a statement of required deposit for individual work for: (a) a technical model checkout for each project, and (b) any considerations that are specific to a particular project and location. After proposals and models are submitted, the Company will inspect the data packages for general completeness. For any incomplete submissions, a list of missing or non-functional items will be provided. Proposers will be given 15 Days to resolve data and modeling deficiencies. The Company, in consultation with the Independent Observer, may remove Proposals if their submission requirements are deemed incomplete for the lack of requested models and validation plots.

The technical model checkouts will be conducted first. Upon identification of any functional problems or deficiencies, corrective action shall be taken immediately and on an interactive basis so that the problems or deficiencies can be resolved within 15 Days, including re-submission of data and updated models, or the Project shall be deemed withdrawn. At the discretion of the Company and provided that there is a demonstration of good faith action to minimize delay that would affect the schedule, a second round of model checkout and problem solving may proceed. Thereafter, any notice that a Project is deemed withdrawn for lack of completeness shall be final. Subject to consultation with the Independent Observer, failure to provide all requested material within the time(s) specified, or changes to the data provided after the due date(s), shall result in elimination from consideration.

5.1.2 Interconnection Requirements Study Process

The Detailed Evaluation process or Appendix III of Rule 14H shall determine the need for an IRS. Upon notification of selection to the Final Award Group, and subject to Rule 14H, the Company will provide an IRS Letter Agreement (in lieu of an Interconnection Modeling Letter Agreement) for each selected project, with a statement of required

deposit for individual and prorated work as part of an IRS Scope for: (1) a System Impact Study that will involve (a) technical model checkout for each project, (b) any considerations that are specific to a particular project and location, and (c) system impact analyses of the projects as a group; and (2) a Facility Study that includes the Interconnection cost and schedule, including cost of any required system upgrades. After proposals and models are submitted, the Company will inspect the data packages for general completeness. For any incomplete submissions, a list of missing or non-functional items will be provided. Proposers will be given 15 Days to resolve data and modeling deficiencies. The Company, in consultation with the Independent Observer, may remove Proposals if their submission requirements are deemed incomplete for the lack of requested models and validation plots.

The technical model checkouts will be conducted first. Upon identification of any functional problems or deficiencies, corrective action shall be taken immediately and on an interactive basis so that the problems or deficiencies can be resolved within 15 Days, including re-submission of data and updated models, or the Project shall be deemed withdrawn. At the discretion of the Company and provided that there is a demonstration of good faith action to minimize delay that would affect the schedule, a second round of model checkout and problem solving may proceed. Thereafter, any notice that a Project is deemed withdrawn for lack of completeness shall be final. Subject to consultation with the Independent Observer, failure to provide all requested material within the time(s) specified, or changes to the data provided after the due date(s), shall result in elimination from consideration.

Proposers shall be responsible for the cost of the IRS, under separate agreements for the System Impact Study and the Facility Study. The overall IRS will provide information including, but not limited to, an estimated cost and schedule for the required Interconnection Facilities for a particular Project and any required mitigation measures. Proposers will be responsible for the actual final costs of all Seller-Owned Interconnection Facilities and Company-Owned Interconnection Facilities. Upon reviewing the results of the IRS, Detailed Evaluation or Technical Review process, if required, pursuant to Rule 14H, Appendix III, Proposers will have the opportunity to declare the Mid-Tier SFC null and void in the event that the estimated interconnection costs and schedule for the Project are higher than what was estimated in the Project Proposal.

5.2 Contract Execution Process

Within five (5) business days of being notified by the Company of its intent to execute a Mid-Tier SFC, Proposers selected for the Final Award Group will be required to indicate, in writing to the Company's primary contact for this RFP, whether they intend to proceed with their Proposals. Proposers who elect to remain in the Final Award Group will be required to keep their Proposal valid through the award period.

The Company intends to execute the Mid-Tier SFC and later amend the Mid-Tier SFC to include the results of the IRS.

5.3 Community Outreach and Engagement

The public meeting and comment solicitation process described in this section and Section 28 of the Mid-Tier SFC (Community Outreach) do not represent the only community outreach and engagement activities that can or should be performed by a Proposer.

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

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

Within five (5) business days of notification of selection to the Final Award Group, Proposers must provide the Company with an updated comprehensive Community Outreach Plan to work with and inform neighboring communities and stakeholders and to provide them timely information during all phases of the Project. The Community Outreach Plan shall include but not be limited to the following information: Project description, Project stakeholders, community concerns and Proposer's efforts to address such concerns, Project benefits, government approvals, Project schedule, and a comprehensive communications plan. The Proposer's Community Outreach Plan shall be a public document identified on the Proposer's Project website for the term of the Mid-Tier SFC and made available to the public upon request. As an option, Proposers may provide their updated Community Outreach Plan and website information to the Company for review and feedback. If provided at least 30 days prior to the dates required, the Company will endeavor to review such information and provide feedback on the information before it is made available to the public. Details on the Community Outreach Plan can be found in Appendix B, Attachments 4 and 5.

Prior to the execution date of the Mid-Tier SFC, Proposers shall also host a public meeting in the community where the proposed Project is to be located for community and neighborhood groups in and around the vicinity of the Project Site that provided the neighboring community, stakeholders and the general public with: (i) a reasonable opportunity to learn about the proposed Project, and (ii) an opportunity to engage in a dialogue about concerns, mitigation measures, and potential community benefits of the proposed Project. The Proposer shall collect all public comments, and then provide the Company copies of all comments received in their original, unedited form. Proposers shall notify the public at least three weeks in advance of the meeting. The Company shall be informed of the meeting. The Company has provided Proposers with detailed instructions regarding the community meeting requirement after the selection of the Final Award Group (Attachment 4 to Appendix B). (For example, notice will be published in

county and regional newspapers/media, as well as media with statewide distribution. The Proposer will be directed to notify certain individuals and organizations. The Proposer will be provided templates to use for the public meeting notices, agenda, and presentation.) Proposers must also comply with any other requirement set forth in the Mid-Tier SFC relating to Community Outreach.

The Proposer shall be responsible for community outreach and engagement for the Project, and that the public meeting and comment solicitation process described in this section do not represent the only community outreach and engagement activities that can or should be performed.

5.4 RESERVED

5.5 PUC Approval

Selected Mid-Tier Projects will execute a Mid-Tier SFC with the Company which will not be subject to further regulatory review and approval. ~~SBO proposals that are 250 kW or greater, up to and including 2.5 MW will also not be required to submit an additional application pursuant to General Order No. 7, but the Commission will hold the bidding utility to the terms of its bid, similar to an independent power producer.~~

5.6 Facility In-Service

In order to facilitate the timely commissioning of the projects selected through this RFP, the Company requires the following be included with the 60% design drawings: relay settings and protection coordination study, including fuse selection and ac/dc schematic trip scheme.

For the Company to test the Facility, coordination between the Company and Project is required. Drawings must be approved by the Company prior to testing. The entire Facility must be ready for testing to commence. Piecemeal testing will not be allowed. Communication infrastructure and equipment must be tested by the IPP and ready for operation prior to Company testing.

If approved drawings are not available, or if the Facility is otherwise not test ready as scheduled, the Project may lose its place in the queue, with the Company retaining the flexibility to adjust scheduling as it sees fit. If tests are not completed within the allotted scheduled testing time, the Project will be moved to the end of the Company's testing queue. The IPP will be allowed to cure if successful testing is completed within the allotted scheduled time. No adjustments will be made to the Mid-Tier SFC milestones if tests are not completed within the original allotted time. Liquidated damages for missed milestones will be assessed pursuant to the Mid-Tier SFC.

DRAFT
REQUEST FOR PROPOSALS
FOR
COMMUNITY-BASED RENEWABLE ENERGY PROJECTS

ISLAND OF MOLOKA‘I

~~AUGUST 31~~NOVEMBER 4, 2021

Docket No. 2015-0389

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



**Maui
Electric**

1.0 GENERAL INSTRUCTIONS TO PROPOSERS

Sourcing Intelligence®, developed by PowerAdvocate®, is the Electronic Procurement Platform that the Company has licensed and will utilize for the RFP process. All Proposals and all relevant information must be submitted via the Electronic Procurement Platform, in the manner described in this RFP.

Proposers must adhere to the response structure and file naming conventions identified in this Appendix for the Proposer's response package. Information submitted in the wrong location/section or submitted through communication means not specifically identified by the Company will not be considered by the Company.

Proposers must provide a response for every item. If input/submission items in the RFP are not applicable to a specific Proposer or Proposal variation, Proposers must clearly mark such items as "N/A" (Not Applicable) and provide a brief explanation.

Proposers must clearly identify all confidential information in their Proposals, as described in more detail in Section 3.12 Confidentiality of the RFP.

All information (including attachments) must be provided in English. All financial information must be provided in U.S. Dollars and using U.S. credit ratings.

It is the Proposer's sole responsibility to notify the Company of any conflicting requirements, ambiguities, omission of information, or the need for clarification prior to submitting a Proposal.

The RFP will be conducted as a "Sealed Bid" event within Sourcing Intelligence, meaning the Company will not be able to see or access any of the Proposer's submitted information until after the event closes.

1.1 ELECTRONIC PROCUREMENT PLATFORM

To access the RFP event, the Proposer must register as a "Supplier"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. Two variations of a Proposal, one variation of which is the base variation of the Proposal, may be submitted together as a Proposal by following the instructions outlined in this Appendix (see Section 4 below). If the Proposer chooses to submit more than one Proposal, the Proposer must register as a new "Supplier" on Sourcing Intelligence for each additional Proposal.

Each registration will require a unique username, unique Email address, and unique Company name. Proposers that require multiple registrations to submit multiple Proposals should use the Company name field to represent the Company name and Proposal number (ex: CompanyNameP1). Proposers may use shorthand or clear

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).

abbreviations. The unique Email address used to create the PowerAdvocate account does not necessarily have to match the Email address specified in Section 2.2.1 below. For example, if the Proposer is submitting multiple Proposals, all of the Proposer's Proposals could specify the same primary point of contact Email address if that is what the Proposer requests contact through for all their proposals.

Proposers can register for an account on Sourcing Intelligence by clicking on the "Registration" button (located in the top right corner of the webpage) on the PowerAdvocate website at the following address:

www.poweradvocate.com

The Proposer's use of the Electronic Procurement Platform is governed by PowerAdvocate's Terms of Use. By registering as a "Supplier" on the Electronic Procurement Platform, the Proposer acknowledges that the Proposer has read these Terms of Use and accepts and agrees that, each time the Proposer uses the Electronic Procurement Platform, the Proposer will be bound by the Terms of Use then accessible through the link(s) on the PowerAdvocate login page.

Once a Proposer has successfully registered as a "Supplier" with PowerAdvocate, the Proposer shall request access to the subject RFP event from the Company Contact via Email through the RFP Email Address set forth in Section 1.6 of the RFP. The Email request must list the Company Name field and username under which the Proposer has registered with PowerAdvocate. If the Proposer plans to submit multiple Proposals and has registered multiple accounts in accordance with the instructions above, the Email request must contain the Company Name field and username for each account that will be used to submit the Proposals. After being added to the event, the Proposer will see the bid event on their dashboard upon logging into Sourcing Intelligence. Once the RFP event opens, the Proposer may begin submitting their Proposal(s).

After registering and prior to the opening of the RFP, Proposers are encouraged to familiarize themselves with the Electronic Procurement Platform, including tabs, the dashboard, PowerAdvocate Users Guide (RFP Appendix D), etc. Proposers should note that they will not be able to access any bid documents until the event officially opens.

Proposers may contact PowerAdvocate Support for help with registration or modification of registration if desired. Support is available from 8 AM to 8 PM Eastern Time (2 AM to 2 PM Hawai'i Standard Time when daylight savings is in effect) Monday to Friday, except for Holidays posted on the PowerAdvocate website, both by phone (857-453-5800) and by Email (support@poweradvocate.com).

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

Once the RFP event is opened, registered Proposers will have online access to general notices and RFP-related documents via the Electronic Procurement Platform. Proposers should also monitor the RFP Website throughout the RFP event.

1.2 PROPOSAL SUBMISSION PROCEDURES

An Email notification will be sent to all registered Proposers when the event has been opened to receive Proposals.

After logging onto the Electronic Procurement Platform, the RFP will be visible on the Proposer's dashboard with several tabs, including the following:

- “**1. Download Documents**” Documents stored under this tab are provided for the Proposer’s use and information. All documents can be downloaded and/or printed, as required.
- “**2. Upload Documents**” Proposal submission documents requested in Appendix B must be uploaded using this tab.
- Note that “3. Commercial Data”, “4. Technical Data”, and “5. Pricing Data” tabs are NOT USED for this event.

Step-by-step instructions for submitting a complete Proposal are provided below:

1. Proposers must upload their Proposal files, including all required forms and files, to submit a complete Proposal. All files must be uploaded before the respective Proposal Due Date (RFP Section 3.1 Table 1, Item 9 or Item 10).
2. Submit (upload) one consolidated PDF representing your Proposal via the “2. Upload Documents” tab. That Proposal PDF must abide by the format specified in this Appendix B. A MSWord.docx template that outlines the format of this document is available under the “1. Download Documents” tab for the Proposer’s use. **Response information must be provided in the order, format, and manner specified in this Appendix B and must clearly identify and reference the Appendix B section number that the information relates to.**
 - a. Proposers shall use a filename denoting: CompanyName_Proposal#.pdf.
(example: AceEnergy_P1.pdf)
3. Proposal information that cannot be easily consolidated into the PDF file described in Step 2 (such as large-scale drawing files) or files that must remain in native file format (such as computer models and spreadsheets) shall be **uploaded separately but must be referenced from within the main Proposal PDF file** (e.g., “See AceEnergyP1V2_2.5_SiteControlMap.kmz”). Such additional files must follow the naming convention below:
 - a. File names must include, in order, Company Name, Proposal number (if more than one Proposal being submitted per Proposer), Variation (if any variations are being submitted), Appendix B section number, and a file descriptor, as shown in the example file name below:
AceEnergyP1V2_2.5_SiteControlMap.kmz
Proposers may use abbreviations if they are clear and easy to follow.
4. Upload files using the “**2. Upload Documents**” tab on the Electronic Procurement Platform.
 - a. For all documents identify the “Document Type” as “Technical Information.” (Do not identify any documents as “Commercial and Administrative” or “Pricing.”)
 - b. “Reference ID” may be left blank.
 - c. Select “Choose File...” Navigate to and choose the corresponding file from your computer. Select “Open” and then “Submit Document.”

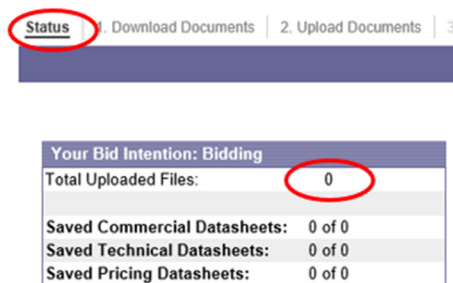
There is no limit to the number or size of files that can be uploaded. Multiple files may be grouped into a .zip archive for upload. (Any zipped files must still adhere to the naming directions in #3 above.) When successfully uploaded, documents will appear under the “Bid Submissions” section on the bottom of the tab’s page, organized within the “Technical Information” Document Type. Repeat steps a, b, and c, as required for each file upload.

If a file with the same name is uploaded twice, the Platform will automatically append a unique numerical extension to the Document Name. To delete a file that has been previously uploaded, click on the “X” button in the “Actions” column for the file to be deleted. Do not upload any files prior to the issuance of the Final RFP.

5. The Company will not be responsible for technical problems that interfere with the upload or download of Proposal information. Support is available to answer technical questions about PowerAdvocate’s Sourcing Intelligence from 8 AM to 8 PM Eastern Time (2 AM to 2 PM Hawai‘i Standard Time when daylight savings is in effect) Monday to Friday, except for Holidays posted on the PowerAdvocate website, both by phone (857-453-5800) and by Email (support@poweradvocate.com).
6. Proposers are strongly encouraged to start early and avoid waiting until the last minute to submit the required information. Proposers are allowed to add, modify, and/or delete documents that have been previously submitted any time prior to the event close deadline. For clarity, it is the Proposer’s responsibility to ensure a complete Proposal is uploaded into PowerAdvocate before the Proposal Due Date.
7. Any questions or concerns regarding the RFP, may be submitted to the Company Contact via the RFP Email address provided in Section 1.6 of the RFP. Per RFP Section 1.4.2, the Independent Observer will monitor messages within the bid event. Proposers are responsible for following instructions and uploading documents in their appropriate locations. Documents uploaded in the wrong tab will not be considered by the Company.

1.3 PROPOSAL COMPLETION AND CONFIRMATION PROCEDURES

To confirm the submission of all proposal files, in the “Status” tab on the Electronic Procurement Platform, confirm that the “Total Uploaded Files” is the number of expected files to be included in the submission by checking it against your list of submitted files. Example “Status” tab view:



As stated above in Section 1.2, nothing should be uploaded to the Commercial, Technical or Pricing Datasheet tabs. Documents uploaded there will not be included in your Proposal submission.

1.3.1 **Proposal Fee Delivery Information.** Provide the Proposal Fee submission information for this Proposal. Include:

- The Date the Proposal Fee was sent.
- The delivery service used and the tracking number for the parcel.

- The U.S.-chartered bank name that issued the cashier’s check and the check number.

2.0 PROPOSAL (BASE VARIATION) SUMMARY TABLE

Base variation Proposal Summary. If proposal variations are submitted, any changes to the summary information for such variations must be specifically identified in a similar table placed in Section 4.2 of this Appendix, as applicable.

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

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

² A Project’s net nameplate capacity is the net maximum instantaneous output (MWac) of the Facility at the point(s) of interconnection, whether that maximum is based on: nameplate power rating of energy generating equipment sizing; expected losses in delivery of power to the point(s) of interconnection; and/or any project control system involved in managing the delivery of power to the point(s) of interconnection. This value, subject to verification by the Company, will determine, how a project is evaluated relative to the terms and requirements of the RFP, including, but not limited to: classification as a Mid-Tier or Large Project, ability to interconnect to a distribution circuit, impact to circuit hosting capacity, and validation of the maximum output levels used to calculate the NEP RFP Projection. For the purposes of calculating the NEP RFP Projection, it should be assumed all energy is being delivered directly to the point(s) of interconnection from the renewable resource as it is generated and never in excess of the Project’s capacity, independent of the existence of any storage device. In the applicable PPA, this value will be the default Contract Capacity.

³ 9-digit Tax Map Key format: Island Number (1 digit); Zone Number (1 digit); Section Number (1 digit); Plat Number (3 digits, add leading zeros if less than 3 digits); Parcel Number (3 digits, add leading zeros if less than 3 digits).

⁴ Decimal degrees (YY.YYYYYY, -XXX.XXXXXX) latitude and longitude coordinates of the Point of Interconnection for the project. If there is more than one interconnection point, specify each.

11d	Is the Project capable of being 100% charged from the grid after the 5 year ITC recapture period? (Yes/No)	
11e	Is the Project grid-forming and black start capable? (Yes/No)	
12	Proposal Guaranteed Commercial Operations Date (MM/DD/YYYY)	
13	The Proposer hereby certifies that the Project meets all performance attributes identified in Section 2.1 of the RFP? (Yes/No)	
14	The Proposer hereby certifies that the Proposal (including its pricing elements) is not contingent upon changes to existing County, State or Federal laws or regulations. (Yes/No)	
15	The Proposer hereby agrees to provide Development Period Security and Operating Period Security as set forth in the Model Mid-Tier SFC. (Yes/No)	
16	The Proposer hereby certifies under penalties of perjury that this Proposal has been made in good faith and without collusion or fraud with any other person. As used in this certification, the word “person” shall mean any natural person, business partnership, corporation, union, committee, club, or organization, entity, or group of individuals. (Yes/No)	
17	The Proposer hereby certifies that the Proposer, its parent company, or any affiliate of the Proposer has not either defaulted on a current contract with the Company, had a contract terminated by the Company, or has any pending litigation in which the Proposer has made claims against the Company (Yes/No)	

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

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

⁵9-digit Tax Map Key format: Island Number (1 digit); Zone Number (1 digit); Section Number (1 digit); Plat Number (3 digits, add leading zeros if less than 3 digits); Parcel Number (3 digits, add leading zeros if less than 3 digits).

⁶Decimal degrees (YY.YYYYYYY, XXX.XXXXXXX) latitude and longitude coordinates of the Point of Interconnection for the project. If there is more than one interconnection point, specify each.

10b	AC or DC interconnected with the source energy resource		
10e	Energy Storage Capability for the Facility (MW and MWh)		
10d	Is the Project capable of being 100% charged from the grid after the 5 year ITC recapture period? (Yes/No)		
10e	Is the Project grid forming and black start capable? (Yes/No)		
11	Proposal Guaranteed Commercial Operations Date (MM/DD/YYYY)		
12	The Proposer hereby certifies that the Project meets all performance attributes identified in Section 2.1 of the RFP? (Yes/No)		
13	The Proposer hereby certifies that the Proposal (including its pricing elements) is not contingent upon changes to existing County, State or Federal laws or regulations. (Yes/No)		
14	The Proposer hereby agrees to provide Development Period Security and Operating Period Security as set forth in the Model Mid-Tier SFC. (Yes/No)		
15	The Proposer hereby certifies under penalties of perjury that this Proposal has been made in good faith and without collusion or fraud with any other person. As used in this certification, the word "person" shall mean any natural person, business partnership, corporation, union, committee, club, or organization, entity, or group of individuals. (Yes/No)		
16	Year (YYYY)	Project Capital Cost (\$)	Extend the table for questions 20, 21, and 22 for as many years as needed.
17	Year (YYYY)	O&M Cost (\$)	
18	Year (YYYY)	Annual Revenue Requirement (\$)	

2.1 REQUIRED FORMS ACCOMPANYING PROPOSAL PDF

The following forms must accompany each proposal, must be attached to the Proposal PDF, and uploaded via the "2. Upload Documents" tab:

- Document signed by an officer or other Proposer representative **authorizing the submission** of the Proposal
- Fully executed **CBRE Mutual Confidentiality and Non-Disclosure Agreement** (Appendix E to the RFP, may be downloaded from the "1. Download Documents" tab in the Electronic Procurement Platform)
- **Certificate of Vendor Compliance** for the Proposer

- **Certificate of Good Standing** for the Proposer and **Federal and State tax clearance certificates** for the Proposer may be provided in lieu of the Certificate of Vendor Compliance
- **Certification of Counsel for Proposer**, if applicable. (See Appendix B Attachment 1.)
- For Projects exactly 250 kW: **Project single line diagram(s)**. Note that a complete package of Project Interconnection Data Request worksheets, Project three line diagram(s) and an equipment list shall be submitted within 30 days after selection to the Final Award Group. Additionally, if requested by the Company, models for equipment and controls, list(s) to clearly identify the components and respective files (for inverters and power plant controller), and complete documentation with instructions must also be submitted within 30 days after selection to the Final Award Group as specified in Section 5.1 of the RFP.
- For Projects greater than 250 kW: Completed applicable **Project Interconnection Data Request worksheet** and **project single line diagram(s)**. ~~Models~~Note that three line diagram(s), models for equipment and controls, list(s) identifying components and respective files (for inverters and power plant controller), and complete documentation with instructions as specified in the Project Interconnection Data Request worksheet shall be submitted within 30 days after selection to the respective timeframesFinal Award Group as specified in Section 5.1 of the RFP.⁷ (See Section 2.11.4 below)
- ~~[For Self Build Only] **Self Build Option Team Certification Form**. See Appendix G Attachment 1.~~
- ~~[For Self Build Only] **Revenue Requirements Worksheets** that support the annual revenue requirements estimates shall be submitted. A starter revenue requirements template file can be requested by the Self Build Team via email to the RFP Email Address once the RFP event opens. The revenue requirements worksheets submitted will be modified to reflect the details of the Project's Proposal. All assumptions used will be reflected in an assumptions input tab.~~

2.2 PROPOSAL SUMMARY/CONTACT INFORMATION

2.2.1 Provide a **primary point of contact** for the Proposal being submitted:

- Name
- Title
- Mailing Address
- Phone Number
- Email Address – this will be the official communication address used during the RFP process

2.2.2 **Executive Summary of Proposal.** The executive summary must include an approach and description of the important elements of the Proposal, including a description if a minor variation to the base variation is being submitted. Refer to Section 1.8.2 and 1.8.3 of the RFP for an explanation of minor variations that are allowed. If a minor variation to the base variation is proposed, a **table summarizing the differences of the minor variation in Section 4 shall be included.**

2.2.3 **Pricing information.** Pricing information must be filled out in the Section 2.0 Proposal Summary Table above. If a minor variation to the base variation is proposed, the minor variation's pricing

⁷ 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.

summary must be identified in a similar pricing table in Sections 4.2.0 below. Proposers must provide pricing information only in those table sections – do not embed pricing information in any other portion of the Proposal PDF.

2.2.4 Provide a **high-level overview of the proposed Facility**, including at a minimum the following information:

- Installed nameplate capacity (MW_{AC} and MW_{DC}) (see Section 2.0 for definition)
- Net nameplate capacity of the Facility at the Point(s) of Interconnection (MW_{AC}) (see Section 2.0 for definition)
- Identified Available Circuit Capacity at the Point(s) of Interconnection (MW_{AC}). If a Circuit Capacity value is provided, please describe the source of the value (i.e. LVM, Company response to Proposer’s inquiry, etc.).
- Number of Generators (PV modules, BESS modules, and inverters)
- Rated Output and Type of each Generator (PV inverter, BESS inverter, Central inverter)
- Generator Facility Design Characteristics

Storage component:

- Technology Type (i.e. lithium ion battery)
- Interconnection type (AC or DC)
- Maximum Rated Output, as defined in the applicable contract (MW)
- Discharge Duration at Maximum Rated Output (hours)
- BESS energy capacity (MWh); minimum of 4 times the net nameplate capacity
- Storage Energy Capacity (MWh) available at the point of interconnection (i.e. BESS Contract Capacity as defined in the applicable contract)
- Operational Limitations, such as, but not limited to: grid charging limits (with respect to ITC), energy throughput limits (daily, monthly, annually), State of Charge restrictions (min/max SOC while at rest (not charging/discharging)), etc. Proposed Operational Limits cannot be in conflict with the energy discharge requirement in Sections 1.2.13 and 1.2.14 of the RFP. If such a conflict is identified, the Proposal may be disqualified.
- Round Trip Efficiency (“RTE”). Specify a single value (percentage) that the Facility is required to maintain throughout the term of the applicable contract. The RTE must consider and reflect:
 - the technical requirements of the Facility (as further set forth in the applicable contract);
 - that the measurement location of charging and discharged energy is at the point of interconnection;
 - electrical losses associated with the point of interconnection measurement location;
 - any auxiliary and station loads that need to be served by BESS energy during charge and discharge that may not be done at Maximum Rated Output or over a fixed duration; and
 - that the data used to validate the RTE will be captured during a full charge cycle (0%-100% SOC) directly followed by a full discharge cycle (100%-0% SOC).
- Describe any augmentation plans for the storage component to maintain the functionality and characteristics of the storage during the term of the applicable contract. Include any expected interval of augmentation (months/years).
- Estimated useful life of the storage component (including augmentation if used) (years).

2.3 FINANCIAL

Provide the following financial information identified below. As specified in the General Instructions in Section 1.0 above, all information (including attachments) must be provided in English, be provided in U.S. Dollars and use U. S. credit ratings.

2.3.1 Identification of Equity Participants

2.3.1.1 Who are the **equity participants** in the Project (or the equity partners' other partners)?

2.3.1.2 Provide an **organizational structure** for the Proposer including any general and limited partners and providers of capital that identifies:

- Associated responsibilities from a financial and legal perspective
- Percentage interest of each party

2.3.2 Project Financing

2.3.2.1 **How will the Project be financed** (including construction and term financing)? Address at a minimum:

- The Project's projected financial structure
- Expected source of debt and equity financing

2.3.2.2 [For IPP and Affiliate Proposals] Identify all **estimated development and capital costs** for, at a minimum:

- Equipment
 - Identify the manufacturer and model number for all major equipment
- Construction
- Engineering
- Seller-Owned Interconnection Facilities
- Company-Owned Interconnection Facilities
- Land
- Annual O&M
- (For Projects that include a storage component) Specify a percentage of the total project cost that is estimated to be attributed to the storage functionality of the Facility. As the storage functionality is treated as a lease, the Company will use the percentage for its preliminary calculation of the lease liability only. This percentage requested for the Company's accounting purposes does not affect nor alter the liquidated damage provisions of the Mid-Tier SFC, as those provisions reflect the benefit the Company seeks from the Project's storage functionality.

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

- ~~• Facility (including any generation and storage components)~~
- ~~• Outside Services~~
- ~~• Intereconnection~~
- ~~• Overhead Costs~~
- ~~• Allowance for Funds Used During Construction~~

- ~~• Annual O&M~~
- ~~• Specify the percentage of the total cost associated with the storage component of the Facility~~
- ~~• (For Projects that include a storage component) Specify a percentage of the total project cost that is estimated to be attributed to the storage functionality of the Facility. As the storage functionality is treated as a lease, the Company will use the percentage for its preliminary calculation of the lease liability only. This percentage requested for the Company's accounting purposes does not affect nor alter the liquidated damage provisions of the Mid-Tier SFC, as those provisions reflect the benefit the Company seeks from the Project's storage functionality.~~

2.3.2.3 Discuss and/or provide **supporting information on any project financing guarantees.**

2.3.2.4 Describe any **written commitments obtained from the equity participants.**

2.3.2.5 Describe any **conditions precedent to project financing**, and the Proposer's plan to address them, other than execution of the Power Purchase Agreement or any other applicable project agreements and State of Hawai'i Public Utilities Commission approval of the Power Purchase Agreement and other agreements.

2.3.2.6 Provide any **additional evidence to demonstrate that the Project is financeable.**

2.3.3 Project Financing Experience of the Proposer

Describe **the project financing experience of the Proposer** in securing financing for projects of a similar size (i.e., no less than two-thirds the size) and technology as the one being proposed including the following information for any referenced projects:

- Project Name
- Project Technology
- Project Size
- Location
- Date of Construction and Permanent Financing
- Commercial Operations Date
- Proposer's Role in Financing of the Project
- Off-taker
- Term of the Interconnection Agreement
- Financing Structure
- Major Pricing Terms
- Name(s) of Finance Team Member(s); Time (i.e., years, months) worked on the project and Role/Responsibilities

2.3.4 Evidence of the Proposer's Financial Strength

2.3.4.1 Provide **copies of the Proposer's audited financial statements** (balance sheet, income statement, and statement of cash flows):

- Legal Entity
 - Three (3) most recent fiscal years
 - Quarterly report for the most recent quarter ended
- Parent Company
 - Three (3) most recent fiscal years
 - Quarterly report for the most recent quarter ended

2.3.4.2 Provide the **current credit ratings** for the Proposer (or Parent Company, if not available for Proposer), affiliates, partners, and credit support provider:

- Standard & Poor's
- Moody's
- Fitch

2.3.4.3 Describe any **current credit issues** regarding the Proposer or affiliate entities raised by rating agencies, banks, or accounting firms.

2.3.4.4 Provide any **additional evidence that the Proposer has the financial resources and financial strength** to complete and operate the Project as proposed.

2.3.5 Provide **evidence** that the Proposer can provide **the required securities**.

2.3.5.1 Describe the Proposer's **ability (and/or the ability of its credit support provider) and proposed plans to provide the required securities** including:

- Irrevocable standby letter of credit
- Sources of security
- Description of its credit support provider

2.3.6 Disclosure of Litigation and Disputes

Disclose any **litigation, disputes, and the status of any lawsuits or dispute resolution** related to projects owned or managed by the Proposer or any of its affiliates

2.3.7 State to the best of the Proposer's knowledge: Will the Project result in consolidation of the Developer entity's finances onto the Company's financial statements under FASB 810. Provide supporting information to allow the Company to verify such conclusion.

2.4 CONTRACT EXCEPTIONS

2.4.1 The Mid-Tier SFC will be preapproved by the Commission and as a result, modifications may not be proposed to it.

2.5 SITE INFORMATION

2.5.1 The Proposal must demonstrate that the Proposer has Site Control for all real property required for the successful implementation of a specific Proposal at a Site not controlled by the Company, including any Interconnection Facilities for which the Proposer is responsible. In addition, developmental requirements

and restrictions such as zoning of the Site and the status of easements must be identified. **Proposers must provide documentation set forth in RFP Section 4.3 to prove Site Control.**

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

- Location of the parcel on which the site is located
- Tax map key number (9-digit format: Island Number (1 digit), Zone Number (1 digit), Section Number (1 digit), Plat Number (3 digits, add leading zeros if less than 3 digits), Parcel Number (3 digits, add leading zeros if less than 3 digits)
- Site boundaries (if the site does not cover the entire parcel)
- Total acreage of the site
- Point(s) of Interconnection
- Relationship of the site to other local infrastructure

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

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

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

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

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

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

2.5.6 Provide a **description of any critical infrastructure or community resilience hubs** in proximate location to the proposed Project site that could benefit from an islanding capability of the proposed Project and could enhance resilience in the community.

2.6 ENVIRONMENTAL COMPLIANCE AND PERMITTING PLAN

Scoring of proposals for the non-price evaluation criteria of this section will be based on the completeness and thoroughness of responses to each of the criteria listed below. The Company recommends that each Proposal incorporate the list below as an outline together with complete and thorough responses to each item in the list. Proposals that closely follow this recommendation will typically be awarded higher scores than proposals that do not.

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

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

2.6.2 Discuss the **city zoning and state land use classification**:

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

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

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

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

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

- Natural Environment
 - Air quality
 - Biology (Natural habitats and ecosystems, flora/fauna/vegetation, and animals, especially if threatened or endangered)
 - Climate
 - Soils
 - Topography and geology
- Land Regulation
 - Land Uses, including any land use restrictions and/or pre-existing environmental conditions/contamination

- Flood and tsunami hazards
- Noise
- Roadways and Traffic
- Utilities
- Socio-Economic Characteristics
- Aesthetic/Visual Resources
- Solid Waste
- Hazardous Materials
- Water Quality
- Public Safety Services (Police, Fire, Emergency Medical Services)
- Recreation
- Potential Cumulative and Secondary Impacts

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

- Developing and implementing program for recycling to the fullest extent possible, or otherwise properly disposing of installed infrastructure, if any, and
- Demonstrating how restoration of the Site to its original ecological condition is guaranteed in the event of default by the Proposer in the applicable Site Control documentation.

2.7 CULTURAL RESOURCE IMPACTS

2.7.1 Provide a **proposal to ensure cultural sites are identified and carefully protected** as part of a cultural impact plan as it pertains to the Project Site and interconnection route. This proposal must include at a minimum:

- An initial analysis that identifies:
 - 1) valued cultural, historical, or natural resources in the area in question, including the extent to which traditional and customary native Hawaiian rights are exercised in the area;
 - 2) the extent to which those resources – including traditional and customary native Hawaiian rights – will be affected or impaired by the proposed action; and
 - 3) the feasible action, if any, to be taken to reasonably protect any identified cultural, historical, or natural resources in the area in question, and the reasonable protection of traditional and customary native Hawaiian rights in the affected area.
- Proposer’s experience with cultural resource impacts on past projects
- Consultant’s experience with cultural resource impacts on past projects (name, firm, relevant experience)
- Status of the cultural impact plan (including, but not limited to: Cultural Impact Assessment, Cultural Landscape Study, Cultural Resource Management Plan, Ethnographic Survey, Consultation on Section 106 Process, and/or Traditional Cultural Property Studies)

2.8 COMMUNITY OUTREACH

Gaining community support is an important part of a Project’s viability and success. An effective Community Outreach Plan will call for early meaningful communications with stakeholders and will reflect a deep understanding and respect for the community’s desire for information. The public meeting and

comment solicitation process described in Section 5.3 of the RFP is intended to support that premise and the Commission's desire to increase bid transparency within the RFP process. When developers neglect to demonstrate transparency and a willingness to engage in early and frequent communication with Hawaii's communities, costly and timely challenges to their projects have resulted. In some instances, projects have failed. Incorporating transparency during the competitive bidding phase may seem unconventional, but it has become an essential community expectation. Developers must share information and work with communities to address concerns through careful listening, thoughtful responsiveness, and a commitment to respect the environmental and cultural values of Hawai'i.

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

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

Proposers are reminded of RFP Section 3.4.2 including the provision that Proposals must provide all referenced material if it is to be considered during the Proposal evaluation.

2.8.2 Provide any **documentation of local community support or opposition** including any letters from local organizations, newspaper articles, or communications from local officials.

2.8.3 Provide a **description of community outreach efforts** already taken or currently underway, including the names of organizations and stakeholders contacted about the proposed Project.

2.8.4 Describe any anticipated or negotiated investment in the community and other **community benefits** that the Proposer proposes to provide in connection with the Project, along with an estimated value of the community benefits in dollars (including the cost to Proposers providing the benefits and supporting details on how those costs and benefits were derived).

2.8.5 All Proposers selected to the Final Award Group must display the below table of information on their website as described in Section 5.3 of the RFP to provide communities Project information that is of

interest to them in a standard format. All information in this table must be included in all community presentations in addition to the Proposer's project website.

PROJECT SUMMARY AND COMMUNITY OUTREACH PLAN

*	Proposer Name (Company name)	
*	Parent Company/Owner/Sponsor/Business Affiliation/etc.	
*	Project Name	
*	Net nameplate capacity (MW) (must match Proposal information)	
*	Proposed Facility Location, Street Address if available, or what City/Area on the island it is near	
*	TMK(s) of Facility Location (must match Proposal information)	
*	Point of Interconnection's Circuit or Substation Name (must match Proposal information)	
*	Project Description (in 200 words or less)	<i>(A description that includes information about the project that will enable the community to understand the impact that the Project might have on the community.)</i>
*	Project site map	<i>(provide a map similar to what was provided in Section 2.5.2)</i>
*	Site layout plan	<i>(provide a layout similar to what was provided in Section 2.5.3)</i>
*	Interconnection route	<i>(provide a map of the route similar to what was provided in Section 2.5.4)</i>
Environmental Compliance and Permitting Plan		
*	Overall land use and environmental permits and approvals strategy	<i>(provide information in level of detail as provided in Section 2.6.1)</i>
*	Gantt format schedule which identifies the sequencing of permit applications and approval activities and critical path. Schedule must be in MM/DD/YY format)	<i>(provide information in level of detail as provided in Section 2.6.1)</i>
*	City Zoning and Land Use Classification	<i>(provide information in level of detail as provided in Section 2.6.2)</i>
*	Discretionary and non-discretionary Land use, environmental and construction permits and approvals	<i>(provide information in level of detail as provided in Section 2.6.3)</i>
*	Listing of Permits and approvals	<i>(provide information in level of detail as provided in Section 2.6.3)</i>

*	Preliminary environmental assessment of the Site (including any pre-existing environmental conditions)	<i>(provide information in level of detail as provided in Section 2.6.4)</i>
Cultural Resource Impacts		
*	Proposer’s updated Community Outreach Plan must include a plan that (1) identifies any cultural, historic or natural resources that will be impacted by the Project (2) describes the potential impacts on these resources and (3) identifies measures to mitigate such impacts.	<i>(provide information in level of detail as provided in Section 2.7)</i>
Community Outreach		
*	Detailed Community Outreach Plan	<i>(provide key information from Community Outreach Plan as specified in Section 2.8.1 or provide a link to updated comprehensive Community Outreach Plan)</i>
*	Local community support or opposition	<i>(provide latest comprehensive information)</i>
*	Community outreach efforts	<i>(provide latest comprehensive information)</i>
*	Community benefits	<i>(provide latest comprehensive information)</i>

2.9 OPERATIONS AND MAINTENANCE (O&M)

2.9.1 To demonstrate the long-term operational viability of the proposed Project, describe the **planned operations and maintenance**, including:

- Operations and maintenance funding levels, annually, throughout the term of the contract.
- Description of the operational requirements by frequency (daily, weekly, monthly, yearly, as-necessary, run hour interval) and maintenance requirements by frequency (daily, weekly, monthly, yearly, as-necessary, run hour interval).
- A discussion of the staffing levels proposed for the Project and location of such staff. If such staff is offsite, describe response time and ability to control the Project remotely.
- Technology specific maintenance experience records.
- Identification of any O&M providers.
- The expected role of the Proposer (Owner) or outside contractor.
- Scheduling of major maintenance activity.
- Plan for testing equipment.
- Estimated life of Generation and/or Storage Facilities and associated Interconnection Facilities.
- Safety plan, including historical safety records with environmental history records, violations, and compliance plans.
- Security plan.
- Site maintenance plan.
- Substation equipment maintenance plan.

- 2.9.2 State whether the Proposer would **consider 24-hour staffing**. Explain how this would be done.
- 2.9.3 Describe the **Proposer's contingency plan**, including the Proposer's mitigation plans to address failures. Such information should be described in the Proposal to demonstrate the Project's reliability with regard to potential operational issues.
- 2.9.4 Describe if the Proposer will **coordinate their maintenance schedule** for the Project with the Company's annual planned generation maintenance.
- 2.9.5 Describe the **status of any O&M agreements or contracts** that the Proposer is required to secure. Include a discussion of the Proposer's plan for securing a long-term O&M contract.
- 2.9.6 Provide **examples of the Proposer's experience with O&M services** for other similar projects.

2.10 PERFORMANCE STANDARDS

- 2.10.1 Design and operating information. Provide a **description of the project design**. Description shall include:
- Configuration description, including conceptual or schematic diagrams.
 - Overview of the Facility Control Systems – central control and inverter- or resource-level control.
 - Diagrams approved by a Professional Electrical Engineer registered in the State of Hawai'i, indicated by the presence of the Engineer's Professional seal on all drawings and documents.
Including but not limited to:
 - A single-line diagram, relay list, trip scheme and settings of the generating facility, which identifies the Point of Interconnection, circuit breakers, relays, switches, synchronizing equipment, monitoring equipment, and control and protective devices and schemes.
- 2.10.1.1 Provide the projected **hourly annual energy potential production profile of the Facility⁸ (24 hours x 365 days, 8760 generation profile)** for the provided NEP RFP Projection.
- 2.10.1.2 Provide the **sample rate of critical telemetry** (i.e. frequency and voltage) based on inputs to the facility control systems.
- 2.10.1.3 Provide a description of the Facility's **capability to be grid-forming and have black start capability**.
- 2.10.1.4 Provide the explanation of the methodology and underlying **information used to derive the Project's NEP RFP Projection**, including the preliminary design of the Facility and the typical meteorological year file used to estimate the Renewable Resource Baseline, as required in Article 6.6 of the Mid-Tier SFC. The explanation of the methodology should include, but not be limited to, the long-term resource data used, the gross and net generation MWh, and assumptions (loss factors, uncertainty values, any grid or project constraints).

⁸ The projected hourly annual energy production profile is the projected output from the generating facility without curtailment and before any energy is directed to an energy storage component, if one will be provided.

2.10.2 **Capability of Meeting Performance Standards.** The proposed Facility must meet the performance attributes identified in Section 2.1 of the RFP. Provide **confirmation that the proposed Facility will meet the requirements identified** or provide clarification or comments about the Facility's ability to meet the performance standards. Proposals should include sufficient documentation to support the stated claim that the Facility will be able to meet the Performance Standards. The Proposal should include information required to make such a determination in an organized manner to ensure this evaluation can be completed within the evaluation review period.

2.10.3 **Reactive Power Control:** Provide the facility's ability to meet the Reactive Power Control capabilities, including Voltage Regulation at the point of interconnection, required in the Performance Standards, including contribution from the inverters of generation and/or storage and means of coordinating the response. Provide the inverter capability curve(s). Confirm ability to provide reactive power at zero active power.

2.10.4 **Ramp Rate** for Generation Facilities: Confirm the ability to meet the ramp rate requirement specified in the Mid-Tier SFC.

2.10.5 **Undervoltage ride-through:** Provide the facility's terminal voltage level(s) and elapsed time at which the facility will disconnect from the utility system during the disturbance, if any. Confirm the ability to meet ride-through requirements and include supporting documentation regarding inverter design, control parameters, etc.

2.10.6 **Overvoltage ride-through:** Provide the facility's terminal voltage level(s) and elapsed time at which the facility will disconnect from the utility system during the disturbance, if any. Confirm the ability to meet ride-through requirements and include supporting documentation regarding inverter design, control parameters, etc.

2.10.7 **Transient stability ride-through:** Provide the facility's ability to stay online during Company System: (1) three-phase fault located anywhere on the Company System and lasting up to __ cycles; and (2) a single line to ground fault located anywhere on the Company System and lasting up to __ cycles. Provide the Facility's ability to withstand subsequent events.

2.10.8 **Underfrequency ride-through:** Provide the facility's terminal frequency level(s) and elapsed time at which the facility will disconnect from the utility system during the disturbance, if any. Confirm the ability to meet ride-through requirements and include supporting documentation regarding inverter design, control parameters, etc.

2.10.9 **Overfrequency ride-through:** Provide the facility's terminal frequency level(s) and elapsed time at which the facility will disconnect from the utility system during the disturbance, if any. Confirm the ability to meet ride-through requirements and include supporting documentation regarding inverter design, control parameters, etc.

2.10.10 **Frequency Response:** Provide the facility's frequency response characteristics as required by the Mid-Tier SFC, including time of response, tunable parameters, alternate frequency response modes and means of implementing such features.

2.10.11 **Auxiliary Power Information:** Proposer must provide the maximum auxiliary power requirements for:

- Start-up
- Normal Operations (from generator)
- Normal Operating Shutdown
- Forced Emergency Shutdown
- Maintenance Outage

2.10.12 **Coordination of Operations:** Provide a description of the control facilities required to coordinate generator operation with and between the Company's System Operator and the Company's System.

- Include a description of the equipment and technology used to facilitate dispatch to the Company and communicate with the Company.
- Include a description of the control and protection requirements of the generator and the Company's System.

2.10.13 **Cycling Capability:** Describe the Facility's ability to cycle on/off and provide limitations.

2.10.14 **Active Power Control Interface:** Describe the means of implementing active power control and the Power Possible, including the contribution to the dispatch signal from paired storage, if any. Provide the Proposer's experience dealing with active power control, dispatch, frequency response, and ride-through.

2.10.15 Provide the details of the **major equipment** (i.e. batteries, inverters, battery management system), including, but not limited to, name of manufacturer, models, key metrics, characteristics of the equipment, and performance specifications.

2.10.16 **Energy Storage performance standards:** For projects that include a storage component, provide additional performance standard descriptions as follows:

- MWh storage output for a full year
- Ramp Rate: Provide the Facility's ramp rate, which should be no more than 2 MW/minute for all conditions other than those under control of the Company System Operator and/or those due to desired frequency response.
- System Response Time – Idle to Design Maximum (minutes)
- Discharge Start-up time (minutes from notification)
- Charge Start-up time (minutes from notification)
- Start and run-time limitations, if any
- Ancillary Services provided, if any (i.e. Spinning Reserves, Non-Spinning Reserves, Regulation Up, Regulation Down, Black Start capability, other)

2.10.17 Provide the description and details of the **grid-charging capabilities of the Facility**. Include a description on the ability to control the charging source.

2.11 INTERCONNECTION SUBMITTAL REQUIREMENTS

2.11.1 A summary of the model requirements and impact study scope can be found in Appx B Att 6 from the “1. Download Documents” tab.

2.11.2 For projects ~~starting from exactly 250 kW and less than 1 MW in size, a complete package of Project Interconnection Data Request worksheets, project single line and three line diagrams, and an equipment list~~ shall be submitted with each Proposal within ~~the timeframes~~ 30 days after selection of a Final Award Group as specified in Section 5.1 of the RFP. If requested by the Company, models for equipment and controls, list(s) to clearly identify the components and respective files (for inverters and power plant controller), and complete documentation with instructions must also be submitted within 30 days after selection to the Final Award Group. Preparation of the models, documentation, and related information may take longer than 30 days, and Proposers shall allow adequate time for this submittal requirement. Proposers may also download the Facility Technical Model Requirements and Review Process documentation labelled as Appx B Att 3 from the “1. Download Documents” tab.

2.11.3 For projects greater than ~~or equal to 1 MW~~ 250 kW in size, provide the ~~appropriate completed Project Interconnection Requirement Study Data Request worksheets 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 Request Worksheet (PV Generation) MSEXcel file.) Also provide all project three line diagram(s) with the Proposal submission. Models, models for equipment and controls, list(s) identifying components and respective files (for inverters and power plant controller), and complete documentation with instructions~~ shall be submitted within 30 days after selection to the timeframes Final Award Group as specified in Section 5.1 of the RFP. Preparation of the models, documentation, and related information may take longer than 30 days, and Proposers shall allow adequate time for this submittal requirement. Proposers may also download the Facility Technical Model Requirements and Review Process documentation labelled as Appx B Att 3 from the “1. Download Documents” tab.

2.12 PROVEN TECHNOLOGY

2.12.1 Provide all supporting information for the Company to assess the **commercial and financial maturity of the technology** being proposed. Provide any supporting documentation that shows examples of projects that:

- Use the technology at the scale being proposed
- Have successfully reached commercial operations
- Demonstrate experience in providing Active Power dispatch

2.13 EXPERIENCE AND QUALIFICATIONS

Proposers, its affiliated companies, partners, and/or contractors and consultants are required to demonstrate project experience and management capability to successfully develop and operate the proposed Project.

2.13.1 Provide a hierarchical **organizational / management chart** for the Project that lists all key personnel and project participants dedicated to this Project and that identifies the management structure and responsibilities. In addition to the chart, Proposers must provide biographies / resumes of the key personnel, including position, years of relevant experience and similar project experience. Proposers must provide

specifics as they relate to financing of renewable energy projects. Identify architects and engineers or provision to provide same that are licensed to practice in the State of Hawaii. Providers must also provide a completed table:

- For each of the project participants (including the Proposer, partners, and proposed contractors), **fill out the table below** and provide statements that list the specific experience of the individual in: financing, designing, constructing, interconnecting, owning, operating, and maintaining renewable energy generating or storage facilities, or other projects of similar size and technology, and
- Provide any evidence that the project participants have worked jointly on other projects.

EXPERIENCE:							
In the applicable columns below, include project details (i.e., project name, location, technology, size) and relevant job duties (role/responsibilities) and time (in years/months) spent on the project. List multiple projects if applicable.							
Participant Name:	Financing	Designing	Constructing	Interconnecting	Owning	Operating	Maintaining
1.							
2.							
3.							
...							

2.13.2 Identify those **member(s) of the team** the Proposer is submitting to meet the experience and qualifications requirement, including the Threshold Requirement. Identify those **members of the team with experience and qualifications**, including affiliates, and their principal personnel who will be involved in the project. If the Proposer consists of multiple parties, such as joint ventures or partnerships, demonstrate each member(s) firm commitment to provide services to the project (e.g., letter of intent); provide this information for each party, clearly indicating the proposed role of each party, including an ownership chart indicating direct and indirect ownership, and percentage interests in the partnership or joint venture.

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

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

2.14 STATE OF PROJECT DEVELOPMENT AND SCHEDULE

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

- The **schedule** must include:
 - Interconnection Requirement Study (IRS) assumptions
 - Anticipated contract negotiation period assumptions
 - Regulatory assumptions
 - Anticipated submittal and approval dates for permitting (including but not limited to environmental and archaeological compliance)
 - Siting and land acquisition
 - Cultural Resource implications and mitigation activities
 - Community outreach and engagement activities
 - Energy resource assessment
 - Financing
 - Engineering
 - Procurement
 - Facility construction including construction management events
 - Applicable reporting milestone events specified in the Mid-Tier SFC
 - Testing
 - Interconnection (including engineering, procurement, and construction)
 - Commercial Operations Date
 - All other important elements outside of the direct construction of the Project
- For each project element, list the start and end date (must be in MM/DD/YY format), and include predecessors to clearly illustrate schedule dependencies and durations.
- Proposers must also list and describe critical path activities and milestone events, particularly as they relate to the integration and coordination of the project components and the Company's Electric System. Proposers must ensure that the schedule provided in this section is consistent with the milestone events contained in the Mid-Tier SFC and/or other agreements.

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

- Identification of contracting/subcontracting plans
- Modular construction
- Safety plans⁹
- Quality control and assurance plan
- Labor availability
- Likely manufacturing sites and procurement plans
- Similar projects where these construction methods have been used by the Proposer.

2.14.3 Provide a description of any **project activities that have been performed to date**.

⁹ A document that describes the various safety procedures and practices that will be implemented on the Project and how applicable safety regulations, standards, and work practices will be enforced on the Project.

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
 - Subscriber fees and payments
 - Upfront payments
 - Ongoing payments
 - Public funding options
 - Extent to which subscribers will be financially responsible for any facility underperformance
- Percentage of the project's capacity that will be available to subscribers vs. unsubscribed capacity
 - Capacity allocation (%) and other commitments to residential Subscribers
 - Capacity allocation (%) and other commitments to low to moderate income ("LMI") subscribers
- Marketing or outreach plans to advertise the proposed project/program to LMI (if applicable) and non-LMI eligible customers
- Strategies for LMI (if applicable) and non-LMI customer retention and maintaining LMI (if applicable) and non-LMI customer participation levels
- Customer protection provisions
- Estimated benefits to LMI (if applicable) and non-LMI customer participants
 - Expected savings
 - Payback periods
 - Payback mechanisms
 - Other benefits
- Prior experience, specifically relating to community-based renewable energy projects
- Plans for CBRE program administration
 - Strategies for subscriber retention
 - How turnover and churn of subscribers will be handled

4.0 MINOR PROPOSAL VARIATION

Proposers submitting a minor variation to their base variation (as allowed in RFP Section 1.8.2 and 1.8.3) must provide the **details of the variation in the below section**. In this proposal variation Section 4.0 below, Proposers must (1) complete a Proposal Summary identical to Section 2.0 of this Appendix B. The information in this table must reflect the information for the variation being proposed. As specified in Section 2.2.2 above, Proposers submitting a variation must also (2) include a table summarizing the differences between the base variation and the minor variation. Additionally, Proposers must (3) identify all changes to any information provided in response to Sections 2.2.4 through 3.0 of this Appendix B for the proposal variation. If differences from any section in Sections 2.2.4 through 3.0 are not identified, the Company will assume that the information contained in the base variation (Sections 2.2.4 through 3.0) also applies to this proposal variation.

4.1 RESERVED

4.2.0 PROPOSAL VARIATION SUMMARY TABLE

Replicate the entire Summary Table here. The responses to all line items must reflect the variation being proposed.

4.2.1 through 4.3.0 RESPECTIVE SECTIONS AS NECESSARY

Identify differences to any Appendix B Section 2.1 through 3.0 here.

Note: Section 2.2.2 above requires a table summarizing the differences between the variations, if variations are proposed. For convenience, please duplicate the table summarizing the differences here.

Updated from 8/31/21 Filing. Redline not included.

Project Interconnection - Data Request

FOR PV/BESS GENERATION

PROJECT: _____

DATE: _____

(Nonexclusive Preliminary List)

ALL ITEMS ARE REQUIRED AND ALL RESPONSES MUST BE FILLED UNLESS NOT APPLICABLE.

	Response
1) Please provide a plan map of the Renewable Generation facility. Please indicate the interconnection point to the HECO system.	
2) Please provide the following generation and load information for the Renewable Generation 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.	

**Project Interconnection - Data Request
FOR PV/BESS GENERATION**

PROJECT: _____

DATE: _____

(Nonexclusive Preliminary List)

ALL ITEMS ARE REQUIRED AND ALL RESPONSES MUST BE FILLED UNLESS NOT APPLICABLE.

	Response
4) For the PV Inverter Based Generating Facility, please provide the following data, as applicable:	
a. Inverter manufacturer, Type, Size, Impedances. Attach copy of inverter data sheet.	
b. Power Factor Range Capability	
c. Inverter Reactive Power Capability Curve	
d. Auxillary loads (P, Q, Power Factor)	
e. Inverter's Internal Isolation Transformer Grounding Method, if used (i.e. effectively grounded, resonant grounded, low inductance grounded, high-resistance grounded, low-resistance grounded, ungrounded). If the transformer is not solidly grounded, provide the impedance value for the grounding neutral and the impedance for the isolation transformer.	
f. Diagram for Inverter's internal isolation transformer	
g. Switching and service restoration practice	
h. Protection data (voltage ride-through and trip settings, frequency ride-through and trip settings etc.). Include setpoint and clearing time ranges for voltage and frequency settings.	
i. Description of harmonic spectrum of inverter injection (order, magnitude)	
5) For the BESS Inverter Based Generating Facility, please provide the following data (if system is DC coupled, please note DC coupling and reference to 4).	
a. Inverter manufacturer, Type, Size, Impedances. Attach copy of inverter data sheet.	
b. Power Factor Range Capability	
c. Inverter Reactive Power Capability Curve	
d. Auxillary loads (P, Q, Power Factor)	
e. Inverter's Internal Isolation Transformer Grounding Method, if used (i.e. effectively grounded, resonant grounded, low inductance grounded, high-resistance grounded, low-resistance grounded, ungrounded). If the transformer is not solidly grounded, provide the impedance value for the grounding neutral and the impedance for the isolation transformer.	
f. Diagram for Inverter's internal isolation transformer	
g. Switching and service restoration practice	
h. Protection data (voltage ride-through and trip settings, frequency ride-through and trip settings etc.). Include setpoint and clearing time ranges for voltage and frequency settings.	
i. Description of harmonic spectrum of inverter injection (order, magnitude)	
6) 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	
7) 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.	

Project Interconnection - Data Request

FOR PV/BESS GENERATION

PROJECT: _____

DATE: _____

(Nonexclusive Preliminary List)

ALL ITEMS ARE REQUIRED AND ALL RESPONSES MUST BE FILLED UNLESS NOT APPLICABLE.

		Response
8)	<p>For the BESS plant's collector system, please provide the following, as applicable (if system is DC coupled, please note DC coupling and reference to 7):</p> <p>a. Conductor data such as size, insulation, etc.</p> <p>b. Continuous and emergency current ratings.</p> <p>c. Voltage rating (nominal and maximum kV).</p> <p>d. BIL rating.</p> <p>e. Positive, negative, and zero-sequence impedances (resistance, reactance, and susceptance).</p> <p>f. Capacitance or charging current.</p> <p>g. Short-circuit current capability.</p>	
9)	<p>Please provide the following software models that accurately represent the Facility, as applicable: (For model requirements, refer to the HECO Facility Technical Model Requirements and Review Process)</p> <p>a. Validated PSS/E load flow model up to the point of interconnection. The PSS/E model shall include the main transformer, collection system, generator step-up transformers, inverter systems, and any other components including capacitor banks, energy storage systems, DVAR, etc. An equivalent representation of the collection system, generator step-up transformers, and inverter systems is acceptable. Documentation on the model shall be provided.</p> <p>b. Validated PSS/E dynamic model for the inverter; and other components including energy storage system, DVAR, etc. if applicable. The inverter model shall include the generator/converter, electrical controls, plant-level controller, and protection relays. Generic and Detailed models shall be provided. Documentation on the model(s) shall be provided, including the PSS/E dyre file with model parameters.</p> <p>i. Generic models shall parameterize models available within the PSS/E standard model library.</p> <p>ii. Detailed models shall be supplied by the vendor/manufacturer as user-written models. The uncompiled source code for the user-written model shall be provided to ensure compatibility with future versions of PSS/E. In lieu of the uncompiled source code, a compiled object file and applicable library files shall be provided in PSS/E versions 33 AND 34 format. Updates of the object file compatible with future PSS/E versions must be provided as requested for the life of the project as written in the power purchase agreement. Documentation shall include the characteristics of the model, including block diagrams, values, names for all model parameters, and a list of all state variables.</p> <p>c. Validated PSCAD model of the inverter; and other components including energy storage system, DVAR, auxiliary plant controllers, etc. if applicable. Documentation on the model(s) shall be provided. Refer to PSCAD Model Requirements Memo for model requirements.</p> <p>d. Overlaid plots validating the performance of the three dynamic models for a three-phase fault. Plots shall include voltage, real and reactive power, real and reactive current.</p> <p>e. Validated Aspen Oneliner short circuit model that accurately represents the facility (including energy storage system if applicable), and is valid for all faults conditions anywhere on the Utility system. Documentation on the model(s) shall be provided. (OTHERWISE SEE ADDITIONAL TABS FOR REQUIRED INFORMATION TO MODEL INVERTER AS A GENERATOR OR A VOLTAGE CONTROLLED CURRENT SOURCE)</p>	
10)	<p>For the main transformer and generator step-up transformers, please provide:</p> <p>a. Transformer voltage and MVA ratings, and available taps. Attach copy of transformer test report or data sheet</p> <p>b. The tap settings used.</p> <p>c. The LTC Control Scheme.</p> <p>d. Transformer winding connections and grounding used. If the transformer is not solidly grounded, provide the impedance value for the grounding method.</p> <p>e. Positive, negative, and zero sequence impedance values.</p>	

Project Interconnection - Data Request

FOR PV/BESS GENERATION

PROJECT: _____

DATE: _____

(Nonexclusive Preliminary List)

ALL ITEMS ARE REQUIRED AND ALL RESPONSES MUST BE FILLED UNLESS NOT APPLICABLE.

		Response
11)	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).	
12)	For the power fuses, please provide: a. The manufacturer, type, size, and interrupting capability. b. The minimum melt and total clearing curves.	
13)	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.	

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"/>	
o sequence	<input type="text" value="9999.0"/>	+j	<input type="text" value="9999.0"/>	

Neutral Impedance (in actual Ohms)

<input type="text" value="0.0"/>	+j	<input type="text" value="0.0"/>
----------------------------------	----	----------------------------------

Scheduled generation. Enter MVAR for PQ buses only

MW= <input type="text" value="0.0"/>	MVAR= <input type="text" value="0.0"/>
--------------------------------------	--

P and Q limits (MW and MVAR)

Pmax= <input type="text" value="9999.0"/>	Qmax= <input type="text" value="9999.0"/>
Pmin= <input type="text" value="-9999.0"/>	Qmin= <input type="text" value="-9999.0"/>

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:

Generator Data

Generators at 200 INVERTER 0.2kV

Unit 1' On-Line

Edit
On/Off-Line
New
Delete

Internal V-Source
p.u. = 1.
Ref. angle = 0.

Current Limits (A)
A: 900. B: 0.

Power Flow Regulation
 Regulates voltage Fixed P+iQ output

Memo:

Tags: None

Done Help

Last changed Apr 18, 2010

Instructions:

Please fill in the data in the green blanks below

[1] Inverter MVA Rating: MVA

[2] Voltage-Current Characteristics:

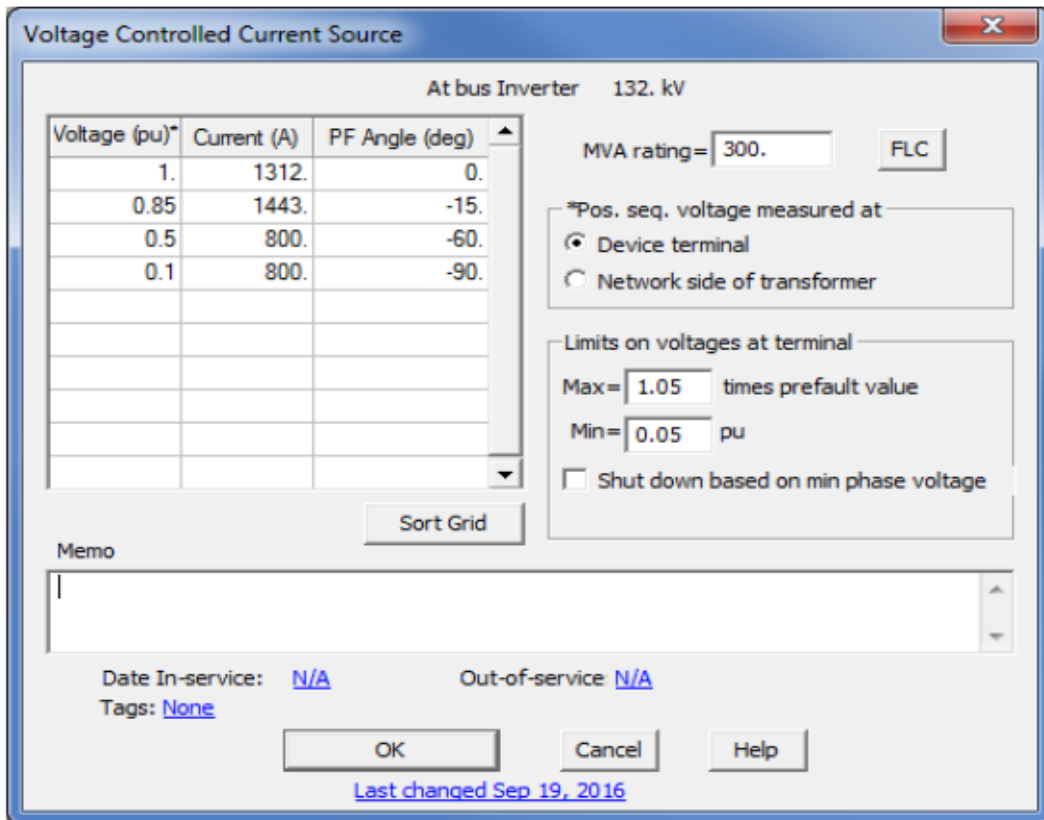
Voltage PU	Current (A)	PF Angle (deg)
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

[3] Location of Voltage Measurement:
 Device Terminal OR
 Network side of Transformer

[4] Maximum Voltage: Times prefault value

[5] Minimum Voltage Per Unit

These parameters will be used to model the inverter in the Aspen Oneliner program as shown in the sample dialog box below:



Instructions:

Please fill in the data in the green blanks below

(Note: This is not required if an internal isolation transformer is not used)

[1] Transformer rated power = kVA

[2] Winding Configuration
 Inverter Side = Delta/Wye
 Customer Side = Delta/Wye

[2] Impedances in **Per Unit** based on kVA
 Positive Sequence =

R	X

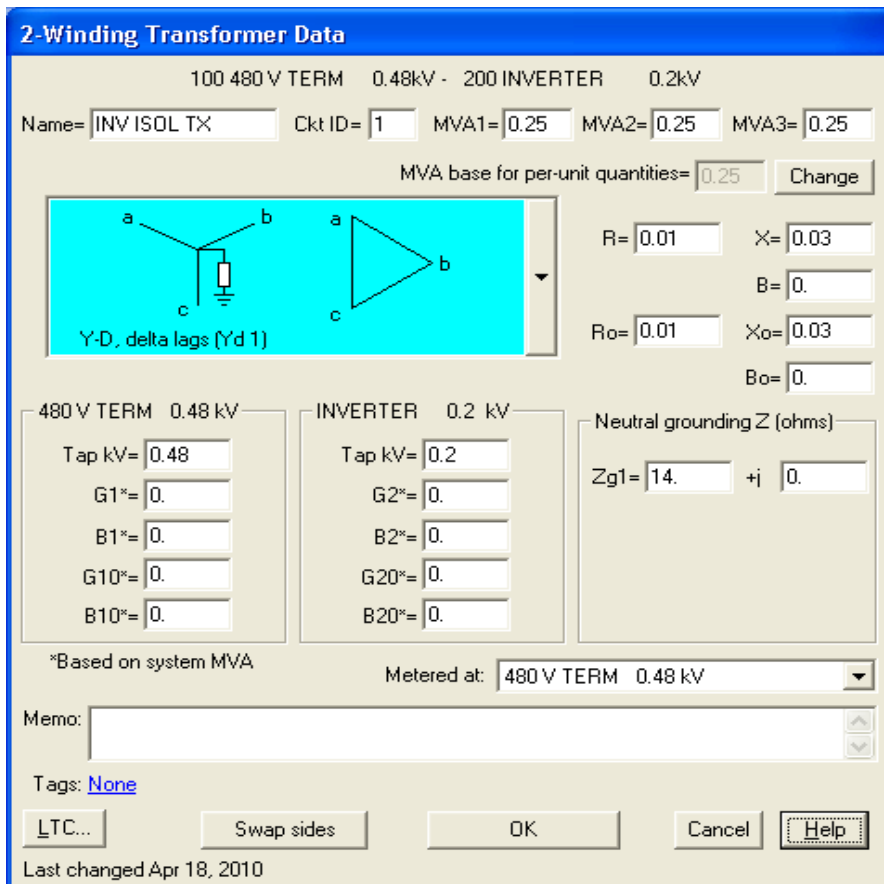
 Zero Sequence =

--

[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:



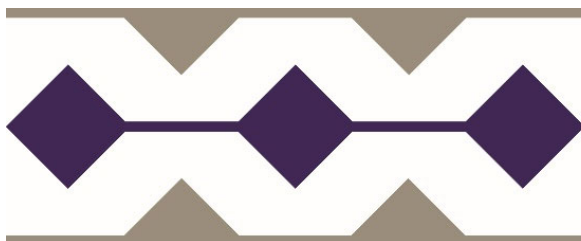
DRAFT
REQUEST FOR PROPOSALS
FOR
COMMUNITY-BASED RENEWABLE ENERGY PROJECTS

ISLAND OF MOLOKA‘I

~~AUGUST 31~~NOVEMBER 4, 2021

Docket No. 2015-0389

*Appendix H – Interconnection Facilities Cost
and Schedule Information*



**Maui
Electric**

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

CONTENTS

Section 1 – Cost Responsibilities..... 3

 1.1 – Definitions..... 3

 1.2 – Abbreviations..... 3

 1.3 – Facilities At Proposer Site 4

 1.4 – Station Power For Company Switching Station 4

 1.5 – Remote Substation Facilities..... 5

 1.6 – Line Extension from Grid Connection Point (GCP) To Proposer Site..... 6

 1.7 – T&D System Upgrades 7

 1.8 – Company-Owned Fiber..... 7

 1.9 – Telecommunication Facilities 7

 1.10 – Proposer Payments..... 9

Section 2 – Interconnection Costs..... 9

 2.1 – Distribution (12kv And Below) Interconnection 9

 A. Typical Distribution Secondary Interconnection For 250 kW Projects (Attachment 1) . 9

 B. Typical Distribution Primary Interconnection For 250 kW Projects (Attachment 2) ... 11

 C. Typical Distribution Primary Interconnection at Pala‘au for Projects ≥ 1 MW
(Attachment 3) 13

 D. Distribution Line Extension Costs 14

 E. Typical Telecommunications Requirements for Distribution Interconnections 15

 F. Security Requirements for Distribution Interconnections 15

 2.2 – [Not Used]..... 15

 2.3 – [Not Used]..... 15

 2.4 – Telecommunications 16

 A. Telecommunications Baseline Costs 16

 2.5 – Security of Company-Owned Facilities..... 18

 A. Proposer Responsibilities at Proposer Facility 18

Section 3 – [Not Used]..... 19

Section 4 – Typical Company Durations for Interconnection Projects 19

 4.1 – Distribution Projects (Company-Build)..... 19

 4.2 – [Not Used]..... 20

 4.3 – [Not Used]..... 20

 4.4 – [Not Used]..... 20

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

Tariff Rule No. 19, approved by the PUC, establishes provisions for Interconnection and Transmission Upgrades (<https://www.hawaiianelectric.com/billing-and-payment/rates-and-regulations/>). The tariff provisions are intended to simplify the rules regarding who pays for, installs, owns, and operates interconnection facilities in the context of competitive bidding. Tariff Rule No. 19 will be utilized as the basis for addressing interconnection and transmission upgrades for any projects developed through this RFP. Proposers will comply with the terms and conditions as specified therein.

SECTION 1 – COST RESPONSIBILITIES

The purpose of Section 1 is to clearly define the cost responsibilities of construction, replacements, and upgrades of Company-Owned Interconnection Facilities (COIF) and existing Company-owned facilities in compliance with Tariff Rule No. 19.

1.1 – DEFINITIONS

1. Betterment – Any upgrading to a facility made solely for the benefit of and at the election of the Company and is not required by applicable laws, codes, Company Standards, and the interconnection requirements in accordance with Tariff Rule No. 19.
2. Company – Hawaiian Electric, Maui Electric, or Hawai‘i Electric Light.
3. Company-Owned Interconnection Facilities – The equipment and devices owned by Company between the Point of Interconnection and the Grid Connection Point that are required to permit a generating facility to operate in parallel with and deliver electric energy to Company’s system and provide reliable and safe operation of, and power quality on, Company’s system.
4. Grid Connection Point – The point that the new interconnection facilities associated with the Proposer’s project interconnects to the Company’s existing electrical grid.
5. Interconnection Agreement – The executed contract between the Company and Proposer (e.g. Power Purchase Agreement, Standard Interconnection Agreement, etc.).
6. Point of Interconnection – The point of delivery of energy supplied by Proposer to Company, where the Facility owned by the Proposer interconnects with the facilities owned or to be owned by the Company.
7. Proposer – The developer proposing a renewable project in response to a Company RFP.

1.2 – ABBREVIATIONS

1. ADSS – All Dielectric Self-Supporting
2. COIF – Company-Owned Interconnection Facilities
3. CT – Current Transformer

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

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

1.3 – FACILITIES AT PROPOSER SITE

1. Proposer shall be responsible for all costs related to COIF at the Proposer site required by any relevant Rule or Tariff, Request for Proposal, and/or the IRS. This may include, but is not limited to:
 - a. Project management, design, permitting/regulatory fees and approvals, land rights, installation labor, inspection, construction management, and testing
 - b. Site work (grading, trenching, manholes/handholes, conduits, cable trench, concrete pads/foundations, fencing, roadways/driveways, ground grid, lighting, etc.)
 - c. Substation structures, design, and configuration (i.e., breaker and a half, ring bus, etc.)
 - d. Control equipment enclosure/cabinet
 - e. Equipment (circuit breakers, transformers, relays, switches, arresters, batteries, HVAC, RTU, DFR, DTT, meters, PTs, CTs, etc.)
 - f. Telecommunication equipment (See Telecommunication Facilities section below)
 - g. Electrical work (bussing, wiring, lightning protection, fiber optic cable, etc.)
 - h. Security systems/equipment
2. Company shall be responsible for Betterment costs.

1.4 – STATION POWER FOR COMPANY SWITCHING STATION

1. Station power is required if a new Company switching station or substation is built to allow the interconnection of the Proposer's project. If station power is required, the Proposer shall be responsible for all costs related to the primary and backup station power sources. This may include, but is not limited to:
 - a. Project management, design, permitting/regulatory fees and approvals, land rights, installation labor, inspection, construction management, and testing

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

- b. Overhead electrical facilities (poles, conductor, insulators, crossarms, guy wires, transformers, etc.)
 - c. Underground electrical facilities (cables, splices, termination, grounding, transformers, switchgears, etc.)
 - d. Step-down transformer
 - e. Civil/structural work (survey, grading, trenching, conduits, manholes/handholes, concrete pads, concrete pier foundations, pole hole excavation, etc.)
 - f. Vegetation trimming and traffic control
2. Options for primary station power sources for the Company's various switching station voltages are:
 - a. Tap off the bus through a step-down transformer for 23kV through 69kV
 - b. 12kV line extension and service transformer for 23kV through 138kV
 - c. Gensets are not an allowable substitute for the above options

1.5 – REMOTE SUBSTATION FACILITIES

1. Proposer shall be responsible for all costs that are solely for the benefit of the Proposer's project, that cannot be used for future system benefit, and that does not provide any benefit to other customers. This may include, but is not limited to:
 - a. Telecommunications cards for DTT (if required)
 - b. Point-to-point microwave facilities between the Proposer's facility and the remote substation (if Proposer chooses that communications option) since there is no way to splice into or multi-link a microwave and it cannot be used for other purposes
2. If the project is interconnecting directly to an existing Company substation, any new equipment required at the substation to accommodate the interconnection will be considered Interconnection Facilities according to Tariff Rule No. 19 and all costs shall be the responsibility of the Proposer. This may include, but is not limited to:
 - a. Project management, design, permitting/regulatory fees and approvals, land rights, installation labor, inspection, construction management, and testing
 - b. Site work (grading, trenching, manholes/handholes, conduits, cable trench, concrete pads/foundations, fencing, roadways/driveways, ground grid, lighting, etc.)
 - c. Substation structures
 - d. New control equipment cabinet or existing enclosure expansion
 - e. Equipment (circuit breakers, transformers, relays, switches, arresters, batteries, HVAC, DFR, DTT, meters, PTs, CTs, etc.)
 - f. Electrical work (bussing, wiring, lightning protection, fiber optic cable, etc.)
 - g. Telecommunications equipment
3. Company shall be responsible for all other costs. This may include, but is not limited to:
 - a. Betterment

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

- b. System upgrades, changes, or replacement of existing facilities (e.g. breaker replacements, relay upgrade, transformer installs, Under-Frequency Load Shed (UFLS) settings, etc.)
- c. Site work associated with those system upgrades (grading, trenching, manholes/handholes, conduits, cable trench, concrete pads/foundations, fencing, roadways/driveways, ground grid, lighting, etc.)
- d. Substation structures
- e. New control equipment cabinet or existing enclosure expansion
- f. Equipment (circuit breakers, transformers, relays, switches, arresters, batteries, HVAC, DFR, DTT, meters, PTs, CTs, SCADA equipment, telecommunications routers, etc.)
- g. Electrical work (bussing, wiring, lightning protection, fiber optic cable, etc.)

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

1. Proposer shall be responsible for all costs related to the line extension between the GCP and the Proposer site. This may include, but is not limited to:
 - a. Project management, design, permitting/regulatory fees and approvals, land rights, installation labor, inspection, construction management, and testing
 - b. Overhead electrical facilities (poles, conductor, insulators, crossarms, guy wires, etc.)
 - c. Underground electrical facilities (cables, splices, terminations, grounding, transformers, switchgears, etc.)
 - d. Civil/structural work (survey, grading, trenching, conduits, manholes/handholes, concrete pads, concrete pier foundations, pole hole excavation, etc.)
 - e. Company fiber (ADSS fiber, OPGW shieldwire, splice boxes, etc.)
 - f. Vegetation trimming and traffic control
2. The Company shall be responsible for the following costs:
 - a. Betterment
 - b. Replacement of overhead and underground facilities due to certain pre-existing conditions and not caused by interconnection of the Proposer's project as follows:
 - i. Asset is identified for replacement in Company's 5-year work plans
 - ii. Poles (if not identified in 5-year work plans) that require replacement based on the Company's standards and practices (e.g. NESC remaining strength requirements, mechanical or insect damage, cracked, and excessive checking, leaning, or corrosion) or poles that are overloaded prior to addition of the new line
 - iii. Conductors, hardware, and equipment that have issues requiring replacement for safe/reliable operation (e.g. corrosion, damage, etc.)
 - iv. Facilities that meet any of these criteria will be identified by Company engineers

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

- v. Company will pay for a one for one equivalent to current standards, and Proposer will pay for anything above that standard required for their interconnection

1.7 – T&D SYSTEM UPGRADES

1. Company shall be responsible for all costs related to system upgrades or changes required to accommodate the Proposer’s project (e.g. re-conductoring or recircuiting of existing lines that do not have the required ampacity, re-fusing or re-programming of protective devices upstream of the GCP, etc.)

1.8 – COMPANY-OWNED FIBER

1. If Company-owned fiber is used to satisfy the communications requirements in the IRS, then the Proposer shall be responsible for all costs related to routing the ADSS fiber or OPGW from the nearest existing splice point to the Proposer site. This may include, but is not limited to:
 - a. Project management, design, permitting/regulatory fees and approvals, land rights, installation labor, inspection, construction management, and testing
 - b. Company fiber-optic cable (ADSS fiber cable or OPGW shieldwire) and associated equipment/hardware (splice boxes, innerduct, vibration dampers, etc.)
 - c. Splicing and Testing of fiber strands
 - d. Pole replacements and additional equipment if needed for additional capacity
 - e. Civil/structural work (survey, grading, trenching, conduits, manholes/handholes, concrete pads, concrete pier foundations, pole hole excavation, etc.)
 - f. Vegetation trimming and traffic control
2. Company will provide ~~a map~~ the location(s) of the existing fiber ~~and the existing splice points~~ point(s) after the Proposer has signed a Non-Disclosure Agreement (NDA).
3. Company shall be responsible for Betterment costs.

1.9 – TELECOMMUNICATION FACILITIES

1. Telecommunication Cabinet
 - a. If a control equipment enclosure will not be built, the Proposer shall be responsible for all costs related to installing a telecommunication cabinet required to accommodate the telecommunication equipment at the Proposer’s facility. This may include, but is not limited to equipment racks and ancillary infrastructure, 48V DC Power System (includes 48V DC Charger w/ at least 12-hr battery backup), alarming, and air conditioning
2. Telecommunication Power
 - a. Proposer shall be responsible for all costs related to providing reliable 48V DC power to Company equipment at a new Company switching station or a

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

- Proposer-owned station. This may include, but is not limited to battery racks, banks, fuse panels, and associated power system equipment.
3. Fiber Termination Equipment
 - a. If Company-owned fiber is used to satisfy the communication requirements in the IRS, then the Proposer shall be responsible for all costs related to terminating the ADSS fiber or OPGW at the new Company switching station and point of interconnection to Company's existing system. This may include, but is not limited to a fiber termination panel and associated equipment/hardware (fiber guide, splice trays, connectors, etc.)
 4. Microwave Radio or Wireless Radio
 - a. If Company-owned microwave radio (6GHz, 10/11 GHz, etc.) or Company-owned wireless radio (900MHz, 450MHz, etc.) is used to satisfy the communications requirements in the IRS, then the Proposer shall be responsible for all costs related to installing the microwave or wireless radio/link at the new Company switching station and remote site(s). This may include, but is not limited to:
 - i. Pre-design requirements (path survey/engineering, FCC frequency coordination, licensing, filings, EME study if required, etc.)
 - ii. Project management, design, permitting, regulatory fees and approvals, land rights, labor, inspection, construction management, and testing
 - iii. Pole or tower facilities to support the microwave dish and its connection to the microwave equipment (waveguide, cables, conduit, etc.)
 - iv. Civil/structural work (survey, grading, trenching, conduits, manholes/handholes, concrete pads, concrete pier foundations, pole hole excavation, etc.)
 - v. Antenna system design and installation
 5. Leased Service
 - a. If 3rd party leased service will provide telecommunication connectivity to the new Company switching station, then the Proposer shall be responsible for all costs related to ordering and installing the leased service at the site. This may include, but not be limited to the initial cost to establish the leased line(s) required for the project, monthly recurring leased cost of the service(s), and on-going maintenance of the service(s).
 6. Telecommunication Service Equipment
 - a. Telecommunication equipment is required to provide circuits to support the various applications at the new Company switching station. The Proposer shall be responsible for all costs related to installing the telecommunication equipment. This may include, but is not limited to:
 - i. Project management, design, installation, and testing
 - ii. Telecommunication routers, multiplexors, and associated equipment/hardware

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

1.10 – PROPOSER PAYMENTS

1. The Company shall require upfront payment prior to the commencement of any phase of work based on an estimate of Company costs for that phase. A true-up at the end of the project shall be completed and a refund or bill shall be processed in accordance with the Interconnection Agreement when necessary.
2. Proposer is also responsible for payments to the Company related to service contracts for service power.

SECTION 2 – INTERCONNECTION COSTS

To assist Proposers in assessing the impacts of location on potential projects, the information provided in Section 2 can be used to approximate the cost for Company-Owned Interconnection Facilities (COIF), including substation, telecommunications, security, transmission or distribution lines, and project management. This information is based on typical interconnections as shown in Attachments 1 through 3 of this Appendix H. Conceptual design is not intended to cover all interconnection requirements. Final interconnection design will be subject to the results of a technical review. The per-unit cost figures below should not be used to create a detailed project estimate. A detailed project estimate typically requires a certain level of engineering to assess project site conditions and to factor in other parameters specific to the project.

The Proposer should identify the components assumed for their project and the quantity assumed for each. Each table below provides notes on the assumptions for each of the unit cost estimates. If a Proposer's project requirements are different than what is assumed in the notes, the Proposer should identify each difference and provide an estimated additional cost or savings resulting from those different requirements. Please see Attachment 4 for examples of how to apply the per-unit costs provided. All costs provided do not include costs related to Proposer responsibilities including, but not limited to, permitting, land rights, community outreach, biological and/or cultural (archeological) surveys. Proposers should do their own due diligence for these costs.

2.1 – DISTRIBUTION (12KV AND BELOW) INTERCONNECTION

Please refer to Attachment 1 (Distribution Secondary Interconnection for 250 kW and larger to less than 1 MW), Attachment 2 (Distribution Primary Interconnection for 250 kW and larger to less than 1 MW), or Attachment 3 (Pala'au Interconnection for Projects 250kW or larger) of this Appendix H for single line diagrams depicting the required interconnection to the Company's system. Please see Attachment 4 for examples of how to apply the per-unit costs provided. All costs provided in Section 2.1 assume the COIF will be built by the Company.

**A. TYPICAL DISTRIBUTION SECONDARY INTERCONNECTION FOR 250 KW
PROJECTS (ATTACHMENT 1)**

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

TYPICAL DISTRIBUTION SECONDARY INTERCONNECTION FOR 250 KW PROJECTS (ATTACHMENT 1)		
Item	Description	Cost
Substation & Meter Baseline Costs		
1	All components shown in <u>Attachment 1</u> except for the T&D Baseline and Distribution line extension costs. <ul style="list-style-type: none"> • Includes costs for engineering, materials, construction, and testing. • Distribution line extension – See Items 2, 3, and 4 and Section 2.1D. • Telecommunications requirements – See Section 2.1E. • Security requirements – See Section 2.1F. 	\$468,000
<u>Notes:</u>		
a) Assumes construction in 2022. b) Civil infrastructure and space for COIF provided by Proposer. c) Substation relay protection requirements have not been identified so costs are based upon typical line protection relaying requirements. d) Does not include costs for permitting, land rights, or a Relay Coordination Study.		
T&D Baseline Costs		
2	Tap to OH (secondary interconnection) <ul style="list-style-type: none"> • Includes costs for engineering, materials, construction for 3ph riser fuses (100A max) or disconnects, 1 wood pole, 100ft UG line extension (1 feeder), padmount transformer, and 3ph, 4W 600V cables from transformer to Proposer switchgear 	\$231,000
3	Tap to UG Main (secondary interconnection) <ul style="list-style-type: none"> • Includes costs for engineering, materials, construction for UG tap, 100ft UG line extension (1 feeder), padmount switch (fuse 100A max), padmount transformer, cable between switch and transformer, and 3ph, 4W 600V cables from transformer to Proposer switchgear • Assumes padmount switch is within 10ft of the Company-owned transformer 	\$285,000
4	Tap to UG Fused Feeder (secondary interconnection) <ul style="list-style-type: none"> • Includes costs for engineering, materials, construction for UG tap, 100ft UG line extension (1 feeder), padmount transformer, and 3ph, 4W 600V cables from transformer to Proposer switchgear 	\$211,000
<u>Notes:</u>		
a) Assumes construction in 2022. b) Interconnection will typically require either Item 2, 3, or 4 depending on the existing facilities in the area and the specific route of the line extension.		

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

TYPICAL DISTRIBUTION SECONDARY INTERCONNECTION FOR 250 KW PROJECTS (ATTACHMENT 1)		
Item	Description	Cost
	c) Includes 100ft UG line extension of one feeder (minimum requirement). d) Proposer can request an additional backup feeder for quicker restoration if a fault occurs. Proposer should add costs for the additional feeder per Item 34. e) OH Line extension – Add applicable costs per Items 30 and/or 32. f) UG Line extension (above 100ft) – Add costs per Item 33. g) Additional OH/UG transitions – Add costs per Item 37. h) Secondary voltage from Proposer is assumed to be 480Y/277V in these scenarios. i) Maximum of 11 secondary connections is allowed on the Company-owned transformer. j) Assumes Proposer switchgear is within 10ft of the Company-owned transformer. k) OH/UG route and civil infrastructure drawings provided by Proposer. l) Civil infrastructure (pads, MH/HHs, conduits, etc.) is designed, procured, and installed by Proposer. m) Includes review of Proposer civil infrastructure designs and materials and inspection of Proposer civil infrastructure construction. n) Does not include vegetation clearing, grading, dewatering, permitting or land rights.	

B. TYPICAL DISTRIBUTION PRIMARY INTERCONNECTION FOR 250 KW PROJECTS (ATTACHMENT 2)

TYPICAL DISTRIBUTION PRIMARY INTERCONNECTION FOR 250 KW PROJECTS (ATTACHMENT 2)		
Item	Description	Cost
Substation & Meter Baseline Costs		
10	Components on the Company side of the demarcation as shown in <u>Attachment 2</u> <ul style="list-style-type: none"> • Includes costs for engineering, materials, construction, and testing. • Distribution line extension – See Items 11, 12, and 13 and Section 2.1D. • Telecommunications requirements – See Section 2.1E. • Security requirements – See Section 2.1F. 	\$468,000
<u>Notes:</u>		
a) Assumes construction in 2022. b) Civil infrastructure and space for COIF provided by Proposer. c) Substation relay protection requirements have not been identified so costs are based upon typical line protection relaying requirements. d) Does not include costs for permitting, land rights, or a Relay Coordination Study.		

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

TYPICAL DISTRIBUTION PRIMARY INTERCONNECTION FOR 250 KW PROJECTS (ATTACHMENT 2)		
Item	Description	Cost
T&D Baseline Costs		
11	Tap to OH (primary interconnection) <ul style="list-style-type: none"> • Includes costs for engineering, materials, construction for 3ph riser fuses (100A max) or disconnects, 1 wood pole, 100ft UG line extension (1 feeder), and primary termination to Proposer switchgear 	\$110,000
12	Tap to UG Main (primary interconnection) <ul style="list-style-type: none"> • Includes costs for engineering, materials, construction for UG tap, 100ft UG line extension (1 feeder), padmount switch (fuse 100A max), and primary cables and terminations between switch and Proposer switchgear • Assumes padmount switch is within 10ft of the Proposer switchgear 	\$158,000
13	Tap to UG Fused Feeder (primary interconnection) <ul style="list-style-type: none"> • If Project < 100A – Includes costs for engineering, materials, construction for UG tap, 100ft UG line extension (1 feeder), and primary termination to Proposer switchgear • If Project ≥ 100A – Not allowed 	\$80,000
Notes: <ol style="list-style-type: none"> a) Assumes construction in 2022. b) Interconnection will typically require either Item 11, 12, or 13 depending on the existing facilities in the area and the specific route of the line extension. c) Assumes Proposer switchgear is within 100ft of the GCP. d) Includes 100ft UG line extension of one feeder (minimum requirement). e) Proposer can request an additional backup feeder for quicker restoration if a fault occurs. Proposer should add costs for the additional feeder per Item 34. f) OH Line extension – Add applicable costs per Items 30, and/or 32. g) UG Line extension (above 100ft) – Add costs per Item 33. h) Additional OH/UG transitions – Add costs per Item 37. i) OH/UG route and civil infrastructure drawings provided by Proposer. j) Civil infrastructure (pads, MH/HHs, conduits, etc.) designed, procured, and installed by Proposer. k) Includes review of Proposer civil infrastructure designs and materials and inspection of Proposer civil infrastructure construction. l) Does not include vegetation clearing, grading, dewatering, permitting or land rights. 		

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

C. TYPICAL DISTRIBUTION PRIMARY INTERCONNECTION TO PALA‘AU FOR
PROJECTS ≥ 250KW (ATTACHMENT 3)

INTERCONNECTION AT PALA‘AU FOR PROJECTS ≥ 250 kW AND ≤ 2.5 MW (<u>ATTACHMENT 3</u>)		
Item	Description	Cost
Substation & Meter Baseline Costs		
21	Components at the Project Site on the Company side of the demarcation as shown in <u>Attachment 3</u> <ul style="list-style-type: none"> • Includes costs for engineering, materials, construction, and testing. • Assumes civil infrastructure and space for COIF is provided by Proposer. • Distribution line extension – See Items 24 and 26 and Section 2.1D. • Telecommunications requirements – See Section 2.1E. • Security requirements – See Section 2.1F. 	\$486,000 / interconnection line
22	Company work for components at Pala‘au PP as shown in <u>Attachment 3</u> <ul style="list-style-type: none"> • Includes engineering, materials, construction, and testing. • Local SCADA equipment is included. • Does not include excavation and fill 	\$600,000 / interconnection line
<u>Notes:</u> <ol style="list-style-type: none"> a) Assumes construction in 2022. b) Substation relay protection requirements have not been identified so costs are based upon typical line protection relaying requirements. c) Does not include costs for permitting, land rights, or a Relay Coordination Study. 		
T&D Baseline Costs		
24	UG Termination to OH Extension <ul style="list-style-type: none"> • Includes costs for engineering, materials, construction for UG termination at Proposer site, 100ft UG line extension (1 feeder), 3ph riser with disconnects, and 1 wood pole • Add OH line extension – See Item 30 or 32. Line extension costs are for one line. If the project is segmented, then costs for two separate OH lines (one for each feeder) should be accounted for. • Add UG line extension (if > 100ft) – See Item 33. • If Proposer’s Facility is segmented, then add an additional UG feeder and riser – See Items 34 and 37. UG feeders can be in the same conduit and MH system. 	\$110,000

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

INTERCONNECTION AT PALA‘AU FOR PROJECTS ≥ 250 kW AND ≤ 2.5 MW (ATTACHMENT 3)		
Item	Description	Cost
	<ul style="list-style-type: none"> Risers and UG line extension should also be added for termination at Pala‘au PP. 	
26	UG Termination to UG Extension <ul style="list-style-type: none"> Includes costs for engineering, materials, construction for UG termination at Proposer site and 100ft UG line extension (1 feeder) Add UG line extension (if > 100ft) – See Item 33. If Proposer’s Facility is segmented, then add an additional feeder for the entire UG length – See Item 34. UG feeders can be run in the same conduit and MH system. 	\$80,000
Notes: <ol style="list-style-type: none"> Assumes construction in 2022. Interconnection will typically require either Item 24 or 26 for work at the Proposer’s site in addition to any line extension above 100ft of UG. Includes 100ft UG line extension of one feeder. OH/UG route and civil infrastructure drawings provided by Proposer. Civil infrastructure (pads, MH/HHs, conduits, etc.) designed, procured, and installed by Proposer. Includes review of Proposer civil infrastructure designs and materials and inspection of Proposer civil infrastructure construction. Does not include vegetation clearing, grading, dewatering, permitting or land rights. 		

D. DISTRIBUTION LINE EXTENSION COSTS

DISTRIBUTION LINE EXTENSION COSTS		
Item	Description	Cost
30	12kV OH accessible (200ft spans, #1/0 AAC)	\$796,000 / mile
32	12kV OH inaccessible (250ft spans, #1/0 AAC)	\$1,692,000 / mile
33	12kV UG (200ft spans, #4/0 AL PEICN)	\$835,000 / mile
34	12kV UG add’l feeder (200ft spans, #4/0 AL PEICN)	\$502,000 / mile
37	12kV 3ph riser w/ disconnects (including pole/anchor)	\$46,000 each
Notes: <ol style="list-style-type: none"> Assumes construction in 2022. OH assumes wood poles and 3ph overhead conductor with neutral underbuild. Accessible assumes vehicles can be used during construction. Inaccessible assumes helicopters are needed during construction. Includes engineering, materials, construction labor for electrical work, inspection for UG civil infrastructure, and contractor costs for pole/anchor digging. 		

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

DISTRIBUTION LINE EXTENSION COSTS		
Item	Description	Cost
f)	OH/UG route and civil infrastructure drawings provided by Proposer.	
g)	Civil infrastructure (pads, MH/HHs, conduits, etc.) designed, procured, and installed by Proposer.	
h)	Does not include vegetation clearing, grading, dewatering, permitting or land rights.	

E. TYPICAL TELECOMMUNICATIONS REQUIREMENTS FOR DISTRIBUTION INTERCONNECTIONS

1. 250 KW Projects – See Section 2.4 for costs
 - a. Primary communications links can consist of cellular, lease line, licensed radio, fiber, or microwave.
 - b. Back-up communications links not required.
 - c. Additional analog leased telephone lines are required to support revenue meters (Proposer shall do their own due diligence for costs on this).
2. Interconnection Project at Pala’au – See Section 2.4 for costs
 - a. Primary communications links can consist of lease line, licensed radio, fiber or microwave.
 - b. Back-up communications links are required (can consist of lease line, licensed radio, fiber, or microwave).
 - c. Back-up communications links must be transport diverse until the “last mile”.
 - d. Additional analog leased telephone lines are required to support revenue meters (Proposer shall do their own due diligence for costs on this).
3. Requirements are subject to change based on project specific evaluations, technical reviews, or IRS.

F. SECURITY REQUIREMENTS FOR DISTRIBUTION INTERCONNECTIONS

1. For Company-owned equipment within Proposer’s Facility, Company requires:
 - a. Standard 8ft high security fence with 3-strand barbed wire V-top.
 - b. Interior mounted 4’ high cattle fencing.
 - c. All gates will be secured using a proprietary padlock system.
 - d. Proposer-owned cabinets/enclosures housing Company equipment shall be secured with a lock provided by Company.
 - e. Company requires 24/7 access to Company facilities within the Proposer facility.
2. See Section 2.5 for more information on Security Requirements.

2.2 – [NOT USED]

2.3 – [NOT USED]

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

2.4 – TELECOMMUNICATIONS

Please refer to Attachment 1 (Distribution Secondary Interconnection for 250 kW and larger to less than 1 MW), Attachment 2 (Distribution Primary Interconnection for 250 kW and larger to less than 1 MW), or Attachment 3 (Pala’au Interconnection for Projects 1 MW or larger) of this Appendix H for single line diagrams depicting the required interconnection to the Company’s system. Please see Attachment 4 for examples of how to apply the per-unit costs provided.

The communications equipment will require a communications channel(s). Some of the communications channel options include cellular, lease line, licensed radio, fiber, or microwave. The number of communication circuits (primary/backup) and type of communication circuits required will vary depending on the type/size of the project.

A. TELECOMMUNICATIONS BASELINE COSTS

The costs below are high level per unit costs for communications requirements in support of the Project. Sections 2.1E and 2.2B above provide typical scenarios of when these options may be utilized.

TELECOMMUNICATIONS BASELINE COSTS		
Item	Description	Cost
Communications Cabinet or Enclosure		
70	Communications Enclosure with circuits to support SCADA <ul style="list-style-type: none"> Only applicable to Cellular, Lease Line, Company-owned fiber options 	\$52,000 / site
72	Communications Cabinet with circuits to support SCADA <ul style="list-style-type: none"> Projects with SCADA and diverse communication circuits 	\$230,000 / site
<u>Notes:</u>		
a) Assumes construction in 2022. b) All projects that require communications will require facilities to store the communications equipment. The example above is provided but other alternatives may be available upon request. c) Cabinet is used to support Company equipment and capable of providing communications circuit for SCADA. d) Communications cabinet cost does not include fiber, microwave, radio equipment or lease circuits. e) Proposer will provide all conduits, foundations, HHs, AC power, grounding as required per Company standards.		
Cellular or Lease Line Options		
73	Cellular or Lease Line one-time and recurring costs	Will vary based on 3 rd party provider

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

TELECOMMUNICATIONS BASELINE COSTS		
Item	Description	Cost
<p><u>Notes:</u></p> <ul style="list-style-type: none"> a) Add cost of Communications Cabinet – See Items 70-72. b) Check with Company to understand the current cellular or lease line requirements. c) Communication circuit requirements will be based on applications needed for the project. d) Company can provide communication circuit interconnection requirements and assist with review of circuit order from the 3rd party provider as needed. e) Proposer to work directly with 3rd party provider if a cellular or lease line circuit is needed. f) Cost will be the responsibility of the Proposer and is to be negotiated with the 3rd party provider. 		
Licensed 900 MHz Radio Option		
74	Licensed 900 MHz Radio Equipment <ul style="list-style-type: none"> • Includes 2 each antenna equipment to create a radio link 	\$168,000 / link
<p><u>Notes:</u></p> <ul style="list-style-type: none"> a) Assumes construction in 2022. b) Add cost of Communications Cabinet – See Items 71-72. The radio equipment will be installed within the Communication Cabinet. c) Assumes there is radio line-of-sight clearance between the communication endpoints. d) Assumes FCC licensed 900MHz Frequencies are available. e) Assumes there is an existing structure/building with space available on the Company side to mount the antenna equipment and house the radio equipment. f) Assumes Telecommunications grounding standards are up to date at both sites. g) Assumes 48 V DC power with 12-hour battery backup is available. h) Does not include special site-specific permit/approval activities that may be required including, but not limited to, Neighborhood Board(s), Conservation District Use Application, Environmental Assessment, Shoreline Management Area approval, biological (endangered species or habitat) surveys, and/or cultural (archeological) surveys or the cost of any migration required for approvals to be granted. Proposers should conduct their own due diligence for these costs. i) Proposer is responsible to install a structure to mount the antenna equipment on the Proposer side and provide any conduit required between the Communications Cabinet and the antenna mount structure. 		
Fiber-Optic Cable Option		
75	New Fiber-only pole line (200' avg spans, 60-strand ADSS) <ul style="list-style-type: none"> • Includes new wood poles 	\$472,000 / mile
76	Fiber underbuild on new or existing pole line (200' avg spans, 60-strand ADSS)	\$218,000 / mile

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

TELECOMMUNICATIONS BASELINE COSTS		
Item	Description	Cost
	<ul style="list-style-type: none"> Assumes no replacements of existing poles are needed 	
<u>Notes:</u>		
a) Assumes construction in 2022. b) Add cost of Communications Cabinet – See Items 70-72. c) Assumes no splices are needed along the route.		
Microwave Option		
77	Point-to-Point Microwave Link <ul style="list-style-type: none"> Includes 2 each antenna equipment to create a radio link 	\$836,000 / link
78	50ft Microwave Tower	\$734,000 each
79	100ft Microwave Tower	\$1,066,000 each
<u>Notes:</u>		
a) Assumes construction in 2022. b) Add cost of Communications Cabinet – See Items 70-72. c) Assumes there is radio line-of-site clearance between the communication endpoints. d) Assumes FCC licensed microwave frequencies are available. e) Assumes there are existing structures/buildings with space available on both ends to house the radio equipment. f) Assumes Telecommunications grounding standards are up to date at both sites. g) Assumes 48 V DC power with 12-hour battery backup is available. h) Does not include special site-specific permit/approval activities that may be required including, but not limited to, Neighborhood Board(s), Conservation District Use Application, Environmental Assessment, Shoreline Management Area approval, biological (endangered species or habitat) surveys, and/or cultural (archeological) surveys or the cost of any migration required for approvals to be granted. Proposers should conduct their own due diligence for these costs. i) Assumes space is available at both ends to construct antenna towers or structures that are rated to survive a Saffir-Simpson category 4 hurricane. j) Other options for Microwave Towers of varying heights may be available.		

2.5 – SECURITY OF COMPANY-OWNED FACILITIES

A. PROPOSER RESPONSIBILITIES AT PROPOSER FACILITY

The Proposer shall be responsible to incorporate security components and systems for **their facilities** that consider the Security Guidelines for the Electricity Sector (CIP-014-2): Physical Security, as published by the North American Electric Reliability Corporation (NERC) and that at a minimum, meet the requirements in Sections 2.1F.

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

SECTION 3 – [NOT USED]

SECTION 4 – TYPICAL COMPANY DURATIONS FOR INTERCONNECTION PROJECTS

The tables below in Section 4 are to be used as a reference when developing a schedule (required in Appendix B – Proposer’s Response, Section 2.14) to assist Proposers in setting realistic durations and deadlines for critical milestones. These tables represent typical durations for the Company to complete the listed critical milestones that assist in moving the interconnection project through the IRS, Engineering, Procurement, and Construction phases. The durations below do not include time for Proposer to complete items they are responsible for. These high-level typical durations are for planning purposes only and is not intended to cover all project specific requirements. Specific project details can increase or decrease these durations. The detailed project schedule will be determined after the IRS is completed.

4.1 – DISTRIBUTION PROJECTS (COMPANY-BUILD)

Hawaiian Electric Durations to be Considered in Schedules (12kV and Below) General Guidelines for Planning Purposes Only Hawaiian Electric Build ≥ 1 MW		
Milestone	Duration	Notes
IRS Phase		
Model Validation	2-3 months	May increase depending on # of iterations
System Impact Study (SIS)	150 calendar days	Following Model Acceptance
Facility Study (FS)	40 business days	Following completion of SIS, SLD Acceptance, and Receipt of Developer Drawings and Schedules
Engineering Phase		
30% Design & Review	40 business days	Designs & Reviews for Company-Owned Interconnection Facilities (COIF) & review of Proposer-Owned Interconnection Facilities (SOIF) supporting/impacting COIF
60% Design & Review	50 business days	Designs & Reviews for COIF & review of SOIF supporting/impacting COIF. Following 30% Design acceptance.
90% Design & Review	50 business days	Designs & Reviews for COIF & review of SOIF supporting/impacting COIF. Following 60% Design acceptance

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

Hawaiian Electric Durations to be Considered in Schedules (12kV and Below) General Guidelines for Planning Purposes Only Hawaiian Electric Build \geq 1 MW		
Milestone	Duration	Notes
Issued for Construction (IFC) Design & Review	30 business days	Designs & Reviews for COIF & review of SOIF supporting/impacting COIF. Following 90% Design acceptance.
Procurement Phase		
Procurement	9 months	Procurement of materials typically happens at 60% design completion
Construction Phase		
Construction	7-8 months	Based on scope/complexity of work
Acceptance Testing	10 business days	Approximately 2 weeks after construction completion
CSAT	30 business days	To occur after commissioning of Proposer's Facility. Duration depends on Proposer's ability to meet the Performance Standards. Required for project \geq 1 MW

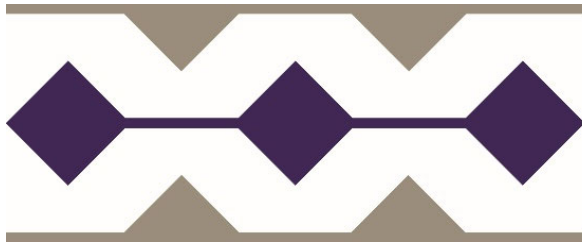
4.2 – [NOT USED]

4.3 – [NOT USED]

4.4 – [NOT USED]

EXHIBIT 7

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



**Maui
Electric**

DRAFT

REQUEST FOR PROPOSALS

FOR

VARIABLE RENEWABLE DISPATCHABLE GENERATION

PAIRED WITH ENERGY STORAGE

AND COMMUNITY-BASED RENEWABLE ENERGY

ISLAND OF LĀNA‘I

~~AUGUST 25~~NOVEMBER 4, 2021

Docket No. 2015-0389

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

Table of Contents

Chapter 1: Introduction and General Information	1
1.1 Authority and Purpose of the Request for Proposals	2
1.2 Scope of the RFP	2
1.3 Competitive Bidding Framework	5
1.4 Role of the Independent Observer	5
1.5 Communications Between the Company and Proposers – Code of Conduct Procedures Manual.....	5
1.6 Company Contact for Proposals	6
1.7 Proposal Submission Requirements.....	6
1.8 Proposal Fee.....	7
1.9 Procedures for the Self-Build or Affiliate Proposals	8
1.10 Dispute Resolution Process.....	10
1.11 No Protest or Appeal.....	11
1.12 Modification or Cancellation of the Solicitation Process	11
1.13 Community Outreach.....	11
Chapter 2: Resource Needs and Requirements	12
2.1 Performance Standards	12
2.2 Distribution-Level System Information.....	12
2.3 Interconnection to the Company System	12
Chapter 3: Instructions to Proposers.....	14
3.1 Schedule for the Proposal Process	14
3.2 Company RFP Website/Electronic Procurement Platform.....	15
3.3 Information Exchange.....	15
3.4 Preparation of Proposals	16
3.5 Organization of the Proposal	16
3.6 Proposal Limitations	16
3.7 Proposal Compliance and Bases for Disqualification.....	17
3.8 Power Purchase Agreement	18
3.9 Pricing Requirements.....	19
3.10 Project Description.....	20
3.11 Project Site	21

3.12	Confidentiality	22
3.13	Credit Requirements Under the PPA	22
Chapter 4: Evaluation Process and Evaluation Criteria		23
4.1	Proposal Evaluation and Selection Process	23
4.2	Eligibility Requirements Assessment	25
4.3	Threshold Requirement Assessment	26
4.4	Evaluation – Price and Non-Price Analysis	27
4.5	Selection of the Final Award Group	35
Chapter 5: Post Evaluation Process		35
5.1	Interconnection Requirements Study Process	35
5.2	Contract Negotiation Process	37
5.3	Final Award Group Commitments	37
5.4	Greenhouse Gas Emissions Analysis	39
5.5	PUC Approval of PPA	39
5.6	Facility In-Service	40

List of Appendices

Appendix A	Definitions
Appendix B	Proposer’s Response Package / Project Interconnection Data Request
Appendix C	Code of Conduct Procedures Manual
Appendix D	PowerAdvocate User Information
Appendix E	Mutual Confidentiality and Non-Disclosure Agreement
Appendix F	Description of the Pūlama Site
Appendix G	Self-Build Option and Self Build Option Team Certification Form
Appendix H	Interconnection Facilities and Cost Information
Appendix I	RESERVED
Appendix J	Rule 29 Tariff
Appendix K	Lāna‘i Community Comments
Appendix L	Lāna‘i RDG PPA (PV + Storage only)
Appendix L-1	Term Sheet for Large CBRE DC-Coupled Projects (PV + BESS)

Chapter 1: Introduction and General Information

Maui Electric Company, Ltd. (“Maui Electric” or the “Company”) seeks proposals for the supply of qualified variable renewable dispatchable generation paired with energy storage for the Maui Electric System on the island of Lāna‘i in accordance with this Request for Proposals (“RFP”). The total amount of variable renewable dispatchable generation being solicited in this RFP is 35,800 megawatt hours (“MWh”) annually of photovoltaic (“PV”) paired with a Battery Energy Storage System (“BESS”) in a single project. The BESS must be sized to store at least 70 percent of the photovoltaic energy.¹ Of the total amount of capacity being solicited 3 MW and its associated energy must be reserved for Community-Based Renewable Energy (“CBRE”), also referred to as shared solar². The total targeted amount assumes Lāna‘i Sustainability Research (“LSR”) and Mānele Bay Combined Heat and Power (“CHP”) facilities are no longer available as further described in this RFP.

The Company or its Affiliates may submit a Proposal in response to this RFP subject to the requirements of this RFP.

The Company seeks a PV project that is paired with a BESS in this RFP. The Company intends to contract for a single project through this RFP using its Model Renewable Dispatchable Generation Power Purchase Agreement (“RDG PPA”), which treats variable renewable generation facilities as fully dispatchable. The Company has created a PV + BESS version of its RDG PPA attached as Appendix L to this RFP.³

The successful Proposer will provide variable renewable dispatchable generation paired with a BESS to the Company pursuant to the terms of the RDG PPA, which will be subject to review and approval by the State of Hawai‘i Public Utilities Commission (“PUC”).

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

The Company will evaluate Proposals using the evaluation and selection process described in Chapter 4. The Company will evaluate and select a Proposal based on both price and non-price

¹ For example, 17.5MW/35,800MWh of PV paired with 17.5MW/25,060MWh energy storage or 14MW/35,800 MWh of PV paired with 15 MW/25,060MWh energy storage.

² In response to some confusion in the community over the acronym “CBRE” that the Companies have experienced during its latest efforts to publicize the CBRE Program, the Companies are introducing the more descriptive term “shared solar” for the CBRE Program in an effort to alleviate any further confusion in the community. The Companies intent is to use both terms, “CBRE” in regulatory filings and “shared solar” in marketing and other Company literature to refer to the Community-Based Renewable Energy Program first introduced by the CBRE Framework. The term, “shared solar” will be used even though the CBRE Program is not necessarily limited to PV projects only.

³ The RDG PPA for PV + BESS is available on the Company’s RFP website and through the Electronic Procurement Platform for the RFP.

factors that impact the Company, its customers, and communities affected by the proposed Project.

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 RDG PPA attached as Appendix L.

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

1.1 Authority and Purpose of the Request for Proposals

- 1.1.1 This RFP is issued in response to Order No. 36776 issued on November 15, 2019 in Docket No. 2019-0178 and supplemented by Order No. 37070 issued on April 9, 2020, Order No. 37139 issued on May 14, 2020, Order No. 37796 issued on May 21, 2021, ~~and~~ Order No. 37879 issued on July 27, 2021, and Order No. 38038 issued on October 25, 2021 in Docket No. 2015-0389; as part of a procurement process established by the PUC. On June 8, 2020, the Company filed a letter in Docket No. 2019-0178 explaining its intention to combine its Request for Proposals for Variable Renewable Dispatchable Generation Paired with Energy Storage, Island of Lāna‘i with the Community Based Renewable Energy Request for Proposals for the Island of Lāna‘i specified in Order No. 37070.
- 1.1.2 This RFP is subject to Decision and Order (“D&O”) No. 23121 in Docket No. 03-0372 (To Investigate Competitive Bidding for New Generating Capacity in Hawai‘i), which sets forth the PUC’s Framework for Competitive Bidding (“Framework” or “Competitive Bidding Framework”).

1.2 Scope of the RFP

- 1.2.1 The targeted amount of variable renewable dispatchable generation is 35,800 MWh annually. This amount assumes both the LSR and CHP facilities will be removed from service. The Company consulted with the Independent Observer during the selection of the targeted amount of variable renewable dispatchable generation and the modeling assumptions, including assumptions of maximum displacement of fossil generation.
- 1.2.2 The Company will only accept Proposals that utilize PV technology combined with a BESS and include a CBRE portion as specified in this Chapter 1. No other generation technologies may be proposed.
- 1.2.3 The proposed Project must reserve 3 MW of its contract capacity for the Project’s CBRE portion (the “CBRE Project”). The Proposer’s CBRE Project must meet the CBRE Program and eligibility requirements identified in Part II of Rule 29 Community-Based Renewable Energy Program Phase 2 attached as Appendix J. Throughout the term of the RDG PPA, the Proposer shall endeavor to achieve 3 MW of CBRE subscriptions at all times and will be required to accept eligible CBRE subscriptions up to 3 MW. Notwithstanding the required 3 MW CBRE Project capacity, only the first 1 MW of

CBRE Project capacity shall be subject to the CBRE Project subscription requirements for (a) number of CBRE Subscribers, (b) limit on percentage of Unsubscribed RDG for the CBRE portion of the Project, (c) minimum percentage of residential Subscribers and (d) any Proposer-submitted Low to Moderate Income (“LMI”) Subscriber percentage for the CBRE Project. Accordingly, and to ensure understanding of the above, at least 1 MW of CBRE subscriptions is required for purposes of determining whether liquidated damages are assessed under Rule 29, and the CBRE Project will not be measured or assessed liquidated damages on CBRE subscriptions above 1 MW. Such provisions are more fully set forth in the RDG PPA.

- 1.2.4 Based on the required 1 MW of subscriptions for the CBRE Project, under Rule 29, at least 40% or 400 kilowatts (kW) (0.40 MW) must be reserved for residential Subscribers. Preference will be given to proposed Projects that reserve an amount greater than 0.40 MW for residential Subscribers. In addition, preference will be given to proposed Projects that reserve a percentage of CBRE subscriptions for LMI Customers, as defined in Rule 29. As these Proposer-submitted percentages (for residential and/or LMI subscriptions) will be used and evaluated in the RFP evaluation process, Proposers will be held to their provided values. Additional liquidated damages, to a lesser extent, may be assessed if a Proposer fails to meet the greater amount of residential Subscribers (above 40%) or LMI Customers (any percentage) that a Proposer commits to in its Proposal. Proposers are directed to Rule 29 which more fully sets forth such terms.
- 1.2.5 Each Proposal submitted in response to this RFP must represent a Project that is capable of meeting the requirements of this RFP without having to rely on the completion or implementation of any other Project, or without having to rely on a proposed change in law, rule, or regulation.
- 1.2.6 Proposed Projects must be located on the Site specified in Section 3.11 and Appendix F; no other Project locations may be proposed. Projects must interconnect to the Company’s System at the Miki Basin switchyard located on the Island of Lāna‘i (see Appendix H). The interconnection must include two feeds to the Miki Basin switchyard, both of which must be sized to accommodate the 10 MVA BESS minimum size requirement as described in Section 1.2.9.
- 1.2.7 To prevent adverse impacts to a single point of failure of 2.2 MW the interconnection designs must limit single point of failure to no greater than 2.2 MW to meet this requirement. When dispatched by the Company, the Facility must be configured such that no single point of failure from the equipment will exceed 2.2 MW loss to the interconnection. Revisions will need to be made to the RDG PPA to account for multiple points of interconnection. The Company will provide such revisions upon completion of the Interconnection Requirements Study for the Final Award Group.
- 1.2.8 The contract for the project selected through this RFP shall use the RDG PPA, as described in Section 3.8. Under the RDG PPA, the Company will maintain exclusive rights to fully direct dispatch of the Facility, subject to availability of the resource and Section 1.2.9 below. The term of the PPA will be 20 years.

- 1.2.9 Proposals must be submitted with a BESS component. The BESS component can be charged during periods when full potential export of the generation Facility is not being dispatched by the Company and can be used to provide energy to the Company during other times that are beneficial to the system. The BESS component must be able to store and discharge 70 percent of the PV produced energy, continuously charge and discharge at a minimum of 10 MVA (8.5 MW at a 0.85 power factor), and be sufficiently sized to be capable of accepting the rated power (MW) capacity of the paired PV system and achieve the energy target throughout the term of the PPA.
- 1.2.10 After the 5-year federal Investment Tax Credit (“ITC”) recapture period has lapsed, the energy storage component must be capable of being 100% charged from the grid at the direction of the Company. BESS components that are incapable of claiming the ITC must be capable of being 100% charged from the grid from the Guaranteed Commercial Operations Date (“GCOD”).
- 1.2.11 The maximum amount of energy discharged from the BESS component in a year will be limited to 70 percent of the MWh target (or approximately 70 MWh) BESS contract capacity multiplied by the number of Days in that year. The BESS component may be dispatched more than once per Day, subject to such discharge energy limitations.
- 1.2.12 Proposals must specify a GCOD no later than August 31, 2025. Preference will be given to Proposals that specify an earlier GCOD in both the price and non-price evaluation.
- 1.2.13 A Proposer’s GCOD set forth in its Proposal will be the GCOD in any resulting PPA 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.
- 1.2.14 The selected Proposer will be responsible for all Project costs throughout the term of the PPA, including but not limited to Project development, completion of an Interconnection Requirements Study (“IRS”), the cost of conducting a greenhouse gas analysis, land leasing, permitting, financing, construction of the Facility and all Interconnection Facilities, and the operations and maintenance (“O&M”) of the Facility.
- 1.2.15 The selected Proposer 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.
- 1.2.16 The selected Proposer 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. 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
- Monitor the ongoing discussions between Maui Electric and Pūlama Lāna'i

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

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

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

1.5.2 All pre-Proposal communication with prospective Proposers will be conducted via the Company's RFP website, Electronic Procurement Platform, and/or electronic mail ("Email") through the address specified in Section 1.6 (the "RFP Email Address").

Phone communication or face-to-face meetings will not be supported. Frequently asked questions submitted by prospective Proposers and the answers to those questions may be posted on the Company's RFP website. The Company reserves the right to respond only to comments and questions it deems are appropriate and relevant to the RFP. Proposers shall submit questions no later than fifteen Days before the Proposal Due Date (see RFP Schedule in Section 3.1, Items 6 and 7). 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 Mutual Confidentiality and Non-Disclosure Agreement⁴ ("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:

Mery Apple
Energy Contract Manager
Hawaiian Electric Company, Inc.

RFP Email Address: LanaiCompetitiveBidding@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

⁴ See Section 3.12.1 of this RFP.

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.

- 1.7.5 All proposals must be submitted via the Electronic Procurement Platform by 2:00 pm Hawai'i Standard Time ("HST") on the Proposal Due Date shown in the RFP Schedule in Section 3.1, Table 1, ~~Item 9 and Item 10.~~ No hard copies of these Proposals will be accepted by the Company.

It is the Proposer's sole responsibility to ensure that complete and accurate information has been submitted on time and consistent with the instructions of this RFP. With this assurance, Company shall be entitled to rely upon the completeness and accuracy of every Proposal. Any errors identified by the Proposer or Company after the Proposal Due Date has passed may jeopardize further consideration and success of the Proposal. If an error or errors are later identified, Company, in consultation with the Independent Observer, may permit the error(s) to be corrected without further revision to the Proposal, or may require Proposer to adhere to terms of the Proposal as submitted without correction. Additionally, and in Company's sole discretion, if such error(s) would materially affect the Final Award Group, Company reserves the right, in consultation with the Independent Observer, to remove or disqualify a Proposal upon discovery of the material error(s). The Proposer of such Proposal shall bear the full responsibility for such error(s) and shall have no recourse against Company's decision to address Proposal error(s), including removal or disqualification. The Energy Contract Manager, in consultation with the Independent Observer, will confirm that the Self-Build Proposal is submitted by the Self-Build Proposal Due Date in Section 3.1, Table 1, ~~Item 9.~~ The Electronic Procurement Platform automatically closes to further submissions after the IPP and Affiliate Proposal Due Date in Section 3.1, Table 1, ~~Item 10.~~

1.8 Proposal Fee

- 1.8.1 IPP and Affiliate proposers are required to tender a non-refundable Proposal Fee of \$5,000 for each Proposal submitted.
- 1.8.2 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, Table 1, ~~Item 10.~~ The cashier's check should include a reference to the Proposal for which the Proposal Fee is being provided. Proposers must identify in the Proposal Response Package (instructions in Appendix B Section 1.3.1) the

delivery information for its Proposal Fee. Proposers are strongly encouraged to utilize a delivery service method that provides proof of delivery to validate delivery date and time.

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

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

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

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

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

1.9 Procedures for the Self-Build or Affiliate Proposals

- 1.9.1 Order No. 37070 states that the CBRE RFPs will be open to all bidders, including the Company. The Competitive Bidding Framework allows the Company the option to offer a Proposal(s) in response to this RFP (“Self-Build Option” or “SBO”). Accordingly, the Company must follow certain requirements and procedures designed to safeguard against and address concerns associated with: (1) preferential treatment of the SBO or members, agents, or consultants of the Company formulating the SBO (the “Self-Build Team”); and (2) preferential access to proprietary information by the Self-Build Team. These requirements are specified in the Code of Conduct (“CBRE Code of Conduct”) required under the Framework and implemented by certain rules and procedures found in the Procedures Manual submitted to the PUC in Docket No. 2015-0389 on July 9, 2020. The CBRE Code of Conduct will apply to all CBRE Phase 2 RFPs, regardless of whether the Company will submit an SBO Proposal. A copy of the Procedures Manual is attached as Appendix C.

The Competitive Bidding Framework also allows Affiliates of the Company to submit Proposals⁵ to RFPs issued by the Company. All Self-Build and Affiliate Proposals are subject to the Company’s Code of Conduct and the Procedures Manual. Affiliate Proposals are also subject to any applicable Affiliate Transaction Requirements issued by

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

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. Affiliate Proposals will be treated identically to an IPP Proposal and must be submitted electronically through the Electronic Procurement Platform by the IPP and Affiliate Proposal Due Date in RFP Table 1, ~~Item 10~~.

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

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

At the core of an SBO Proposal are its total project capital cost and any associated annual operations and maintenance ("O&M") costs. During the RFP's pricing evaluation step, these capital costs⁶ and O&M costs will be used in a revenue requirement calculation to determine the estimated revenues needed from customers which would allow the Company to recover the total cost of the project. The SBO revenue requirements are then

⁶ SBO Proposals will be required to provide a table identifying project costs by year. These capital costs should be all inclusive, including but not limited to costs associated with equipment, Engineering, Procurement, and Construction ("EPC"), interconnection, overhead, and Allowance for Funds Used During Construction ("AFUDC").

used to calculate a Levelized Energy Price (\$/MWh) for comparison to IPP and any Affiliate Proposals.

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

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

1.10 Dispute Resolution Process

- 1.10.1 If disputes arise under the RFP, the provisions of Section 1.10 and the dispute resolution process established in the Framework will control (see Part V of the Framework).
- 1.10.2 Proposers who challenge or contest any aspect of the RFP process must first attempt to resolve their concerns with the Company and the Independent Observer (“Initial Meeting”). The Independent Observer will seek to work cooperatively with the parties to resolve any disputes or pending issues and may offer to mediate the Initial Meeting to resolve disputes prior to such issues being presented to the PUC.
- 1.10.3 Any and all disputes arising out of or relating to the RFP which remain unresolved for a period of twenty (20) Days after the Initial Meeting takes place may, upon the agreement of the Proposer and the Company, be submitted to confidential mediation in Honolulu, Hawai‘i, pursuant to and in accordance with the Mediation Rules, Procedures, and Protocols of Dispute Prevention Resolution, Inc. (“DPR”) (or its successor) or, in its absence, the American Arbitration Association then in effect (“Mediation”). The Mediation will be administered by DPR. If the parties agree to submit the dispute to Mediation, the Proposer and the Company shall each pay fifty percent (50%) of the cost of the Mediation (i.e., the fees and expenses charged by the mediator and DPR) and shall otherwise each bear their own Mediation costs and attorneys’ 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 this Section 1.10 of this RFP (e.g., a court proceeding), then such Proposer shall be responsible for any and all attorneys' fees and costs that may be incurred by the Company or the PUC in order to resolve such claim.

1.11 No Protest or Appeal

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

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

1.12 Modification or Cancellation of the Solicitation Process

- 1.12.1 Unless otherwise expressly prohibited, the Company may, at any time up to the final execution of an RDG PPA, 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.

1.13 Community Outreach

The Company held a community meeting on Lāna‘i to explain the RFP process and the Company’s intent to procure a PV with storage project on the island of Lāna‘i. At the community meeting, the Company solicited feedback from the community of Lāna‘i regarding the RFP process and planned procurement. The Company has provided the comments received at the meeting in Appendix K. Proposers are encouraged to review

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.

such comments and take such comments into account when developing Proposals in response to this RFP.

Chapter 2: Resource Needs and Requirements

2.1 Performance Standards

Proposals must meet the attributes set forth in this RFP and the requirements of the RDG PPA. This RFP and the RDG PPA set forth the minimum requirements that all Proposals must satisfy to be eligible for consideration in this RFP. Additional Performance Standards may be required based on the results of the IRS.

Facilities must be able to operate in grid-forming mode as defined in the RDG PPA. The ability to startup without requiring energy from the grid (black start capability⁸) is required including energization of the interconnection transformers. The facility may be also utilized as the cranking path for island system restoration, based upon energy availability and storage state of charge.

The functionality and characteristics of the storage must be maintained throughout the term of the PPA. To be clear, Proposers may not propose any degradation for either capacity or efficiency in their Proposals.

2.2 Distribution-Level System Information

The Company has performed a preliminary evaluation of the Distribution System which indicates that a PV project of the requested size is able to be supported at the Miki Basin switchyard. A detailed IRS will be required to assess whether additional system mitigation measures will be required to integrate any specific project selected through this RFP. Per [Section 3.11](#) and [Appendix F](#), projects must interconnect to the Miki Basin switchyard. The estimated configuration of the interconnection is provided in [Appendix H](#). Any questions regarding the interconnection may be directed to the RFP Email Address in [Section 1.6](#).

2.3 Interconnection to the Company System

The Proposer must provide information pertaining to the design, development, and construction of the Interconnection Facilities. Interconnection Facilities include both: (1) Seller-Owned Interconnection Facilities; and (2) Company-Owned Interconnection Facilities.

2.3.1 All Proposals must include a description and conceptual or schematic diagrams of the Proposer's plan to transmit power from the Facility to the Company System. The

⁸ The ability to start itself and provide power to the Company's grid without relying on any services or energy from the Company's grid in order to assist the grid in recovering from a total or partial shutdown. During such a total or partial shutdown of the grid, the Project may experience step changes in load and other transient and dynamic conditions as it picks up load without support from other resources on the grid during start-up (if the Project remains connected) or while connecting to the loads the Project is picking up (not the start-up and connecting of the Facility itself).

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.

All Proposals must include a completed Project Interconnection Data Request worksheets (see Appendix B, Attachment 2) and single-line diagram(s). Additional information is required to be submitted within 30 days of selection to the Final Award Group as described in Section 5.1.

- 2.3.1.1 In addition to the Performance Standards and findings of the IRS, the design of the Interconnection Facilities, including power rating, Point(s) of Interconnection (“POI”) 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 an NDA as specified in Section 3.12.1. These specifications are intended to illustrate the scope of work typically required to administer and perform the design and construction of a Maui Electric substation and power line.
- 2.3.1.2 Interconnection Facilities must be designed such that it meets or exceeds the applicable single line diagram in Appendix H- and meets or exceeds all interconnections requirements identified in Section 1.2.6 and 1.2.7.
- 2.3.1.3 Tariff Rule No. 19 establishes provisions for Interconnection and Transmission Upgrades and can be found at <https://www.hawaiianelectric.com/billing-and-payment/rates-and-regulations/>. While the Lāna‘i System does not have a traditional Transmission System, the tariff provisions are intended to simplify the rules regarding who pays for, installs, owns, and operates interconnection facilities in the context of competitive bidding. The Company will be responsible for building all Company-Owned Interconnection Facilities for a selected Project.
- 2.3.2 The Proposer shall be responsible for all costs required to interconnect a Project to the Company System, including but not limited to any work in the Company’s existing energized facilities, the final tap, and all Seller-Owned Interconnection Facilities and Company-Owned Interconnection Facilities.
- 2.3.3 Proposers are required to include in their pricing proposal all costs for interconnection and distribution equipment expected to be required between their Facility and their proposed Point of Interconnection. Appendix H includes some information related to Company-Owned Interconnection Facilities and costs that may be helpful to Proposers. The selected Proposer shall be responsible for the actual final costs of all Seller-Owned Interconnection Facilities and Company-Owned Interconnection Facilities (see Appendix H), whether or not such costs exceed the costs set forth in a Proposer’s Proposal. No adjustments will be allowed to the proposed price in a Proposal if actual costs for Interconnection Facilities exceed the amounts proposed.

- 2.3.4 Proposers are required to account for all costs for distribution-level service interconnection for station power in their pricing proposal.
- 2.3.5 All Projects will be screened for general readiness to comply with the requirements for interconnection. The selected Proposal will be subject to further study in the form of an IRS. The IRS process is further described in Section 5.1. The results of the completed IRS, as well as any mitigation measures identified, will be incorporated into the terms and conditions of a final executed RDG PPA.

Chapter 3: Instructions to Proposers

3.1 Schedule for the Proposal Process

Table 1 sets forth the proposed schedule for the proposal process (the “RFP Schedule”). The RFP Schedule is subject to PUC approval. The Company reserves the right to revise the RFP Schedule as necessary. Changes to the RFP Schedule prior to the RFP Proposal Due Date will be posted to the RFP website. Changes to the RFP Schedule after the Proposal Due Date will be communicated via email to the Proposers and posted on the RFP Website.

**Table 1
RFP Schedule**

Milestone	Schedule Dates
(1) Draft RFP filed	July 9, 2020
(2) Technical Status Conference	July 29, 2020
(3) Parties and Participants file Comments by	August 12, 2020
(4) Proposed Final RFP filed	September 8, 2020
(5) Updated RFP Draft filed Per Order 37592	March 30, 2021
(6) Parties and Participants file Comments by	April 14, 2021
(7) Proposed Final RFP filed per Order 37796 and Order 37879	August 25, 2021 ⁹
(8) <u>Proposed Final RFP filed per Order 38038</u>	<u>November 4, 2021</u> ¹⁰
(8) <u>(9)</u> Final RFP is Issued	September 16 <u>November 22, 2021</u> ¹¹
(9) <u>(10)</u> Self-Build Proposal Due Date	November 15, 2021 <u>February 14, 2022</u> at 2:00 pm HST
(10) <u>(11)</u> IPP and Affiliate Proposal Due Date	November 16, 2021 <u>February 15, 2022</u> at 2:00 pm HST
(11) <u>(12)</u> Selection of Final Award Group	January 25 <u>April 20, 2022</u>
(12) <u>(13)</u> Contract Negotiations Start	February 1 <u>April 27, 2022</u>

⁹ ~~All subsequent dates in the proposed schedule may be modified based on further guidance provided by the PUC.~~

¹⁰ ~~All subsequent dates in the proposed schedule may be modified based on further guidance provided by the PUC.~~

¹¹ Per Order 3787938038, page 69, “6. “These final RFPs shall and supporting documents for Molokai and Lanai will be approved automatically 1510 days after their filing they are filed, unless the Commission orders otherwise.” The schedule reflects the RFP being issued one week after its anticipated approval date.

3.2 Company RFP Website/Electronic Procurement Platform

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 the receipt of Proposals in this RFP. Proposers who do not already have an existing account with PowerAdvocate and who intend to submit a Proposal for this RFP will need to register as a “Supplier” with PowerAdvocate.

- 3.2.1 There are no license fees, costs, or usage fees to Proposers for the use of the Electronic Procurement Platform.

See Appendix D for user information on and screenshots of PowerAdvocate’s Sourcing Intelligence procurement platform.

3.3 Information Exchange

The PUC conducted a Technical Status Conference on July 29, 2020 to discuss this draft RFP. Parties and Participants had the opportunity to submit comments on the draft RFP. The Company then revised the RFP after considering comments received and filed a final RFP for PUC review and approval. Subsequently, the PUC issued Order No. 37592 which among other things, directed the Companies to further collaborate with the Parties and Participants. As a result, the Company held several meetings with the Parties and Participants, which helped inform further updates to the RFP that were reflected in the Company’s submittal of an updated RFP to the PUC.

Additionally, the Company will hold a prerecorded webinar for CBRE in accordance with the Competitive Bidding Framework for prospective Proposers to learn about the provisions and requirements of this RFP. This prerecorded webinar will be posted to the Company’s website within one week of the issuance of the final RFP.

Prospective Proposers may also submit written questions regarding the RFP to the RFP Email Address set forth in Section 1.6. The Company will endeavor to address all questions that will be helpful to prospective Proposers via a Q&A section on the RFP website.

Prospective Proposers should review the RFP Website’s Q&A section prior to submission of their Proposal. Duplicate questions will not be answered.

3.4 Preparation of Proposals

- 3.4.1 Each Proposer shall be solely responsible for reviewing the RFP (including all attachments and links) and for thoroughly investigating and informing itself with respect to all matters pertinent to this RFP, the Proposer's Proposal, and the Proposer's anticipated performance under the RDG PPA. It is the Proposer's responsibility to ensure it understands all requirements of the RFP, to seek clarification if the RFP's requirements or Company's request is not clear, and to ask for any confirmation of receipt of submission of information. Under Section 1.7.5, the Proposer is solely responsible for all errors in its Proposal(s). The Company will not accept any assertion 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 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.
- 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 agent¹² of the Proposer.

3.5 Organization of the Proposal

- 3.5.1 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:

¹² Proposer's officer or agent must be authorized to sign the Proposal. Such authorization must be in writing and may be granted via Proposer's organizational documents (i.e., Articles of Incorporation, Articles of Organization, By-laws, etc.), resolution, or similar documentation.

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

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

3.7 Proposal Compliance and Bases for Disqualification

Proposers may be deemed non-responsive and/or Proposals may not be considered for reasons including, but not limited to, the following:

- Any unsolicited contact by a Proposer or prospective Proposer with personnel of the Company pertaining to this RFP as described in Section 1.5.5.
- Any illegal or undue attempts by or on behalf of the Proposer or others to influence the Proposal Review process.
- The Proposal does not meet one or more of the Eligibility Requirements specified in Section 4.2.
- The Proposal does not meet one or more of the Threshold Requirements specified in Section 4.3.
- The Proposal is deemed to be unacceptable through a fatal flaws analysis as described in Section 4.4.2.
- The Proposer does not respond to a Company request for additional information to clarify the contents of its Proposal within the timelines specified by the Company.

- The Proposal contains misrepresentations or errors.

3.8 Power Purchase Agreement

- 3.8.1 The Power Purchase Agreement for proposals selected under this RFP will be in the form of the RDG PPA, attached as Appendix L. In addition, Appendix L-1 is provided for use if the Project is designed with a single inverter system such that the PV System and BESS are “DC Coupled.”
- 3.8.2 If selected, any Affiliate Proposer will be required to enter into the RDG PPA with the Company.
- 3.8.3 If selected, a Self-Build Proposer will not be required to enter into a PPA with the Company. However, the Self-Build Proposer will be held to the proposed modifications to the RDG PPA, if any, it submits as part of the SBO in accordance with Section 3.8.5. Moreover, the SBO will be held to the same performance metrics and milestones set forth in the RDG PPA to the same extent as all Proposers, as attested to in the SBO’s Appendix G, Attachment 1, Self-Build Option Certification submittal. If liquidated damages are assessed, they will be paid from shareholder funds and returned to customers through the Purchased Power Adjustment Clause (“PPAC”) or other appropriate rate adjustment mechanisms.

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

- 3.8.4 In general, under the RDG PPA, payment to the Seller consists of a Lump Sum Payment component to cover the costs of the Project. In return, the Seller shall guarantee minimum performance and availability metrics to ensure that the Facility is maintained and available for energy storage and dispatch, as well as provide an indication of the available energy in near real-time for the Company’s dispatch. Company shall not be obligated to accept, nor shall it be required to pay for, test energy generated by the Facility during acceptance testing or other test conditions.
- 3.8.5 The Performance Standards identified in Section 2.1 in the RDG PPA 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 included in the RDG PPA 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 Proposals, Proposers who elect to propose modifications shall provide a Microsoft Word red-line version of the relevant document identifying specific proposed modifications to the model language that the Proposer is agreeable to, as well as a detailed explanation and supporting rationale for each modification.

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

3.9 Pricing Requirements

- 3.9.1 Proposers are responsible for understanding the terms of the RDG PPA. 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 is prohibited.
- 3.9.3 Pricing information must only be identified within specified sections of the Proposal as instructed by this RFP’s Appendix B Proposer’s Response Package (i.e., Proposal pricing information must be contained within defined Proposal sections of the Proposal submission). Pricing information contained anywhere else in a Proposal will not be considered during the evaluation process.
- 3.9.4 The Proposer’s Response Package must include the following prices for each Proposal:
- For IPP or Affiliate proposals:
- **Lump Sum Payment (\$/year):** Payment amount for full dispatchability of the Facility. Payment will be made in monthly increments.

For the Self-Build Proposal:

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

Additional description and detail on the Total Project Capital Costs, Annual O&M Costs, and Annual Revenue Requirement for the SBO Proposal is located in Appendix G.

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 Net Energy Potential (“NEP”) RFP Projection for the Project. The NEP RFP Projection associated with the proposed Project represents the estimated annual net energy (in MWh) that could be produced by the Facility and delivered to the Point of Interconnection over a ten-year period with a probability of exceedance of 95%. The energy generated by the Facility in excess of Company dispatch but below the Facility’s Allowed Capacity that is stored in the Facility’s BESS component and can later be discharged to the POI considering the BESS Contract Capacity and Maximum Rated Output should be included in the NEP RFP Projection. Any energy in excess of what is allowed to be delivered to the POI and would exceed the BESS Contract Capacity shall be excluded from the Net Energy Potential. Any energy generated outside of the proposed Facility that is used to charge the BESS component should not be factored into the NEP RFP Projection. Any losses that may be incurred from energy being stored and then discharged from the energy storage (round trip efficiency losses) should be excluded from the NEP RFP Projection, but the NEP should consider auxiliary loads in developing the value relative to the POI. The NEP RFP Projection will be used in the RFP evaluation process and therefore Proposers will be held to their provided value.¹³

3.10.2 Proposals are required to provide a single value Round Trip Efficiency (“RTE”), measured at the Point of Interconnection, that the Facility’s BESS component is required to maintain throughout the term of the PPA. This RTE value will be used in the RFP

¹³ If a PPA is executed between the Company and the selected Proposer, the NEP RFP Projection will be further evaluated at several steps throughout the process as set forth in the RDG PPA, 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 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. See Article 2 and Attachment U of the RDG PPA.

evaluation process and therefore Proposers will be held to this provided value as it will become the RTE Performance Metric in Section 2.10 of the RDG PPA. Please review the RDG PPA for potential liquidated damages assessed against the Seller if the BESS does not maintain the required RTE. The RTE is further specified in Appendix B Section 2.

- 3.10.3 Each Proposer must also agree to provide Project financial information, including proposed Project finance structure information specified in Appendix B. Such information will be used to evaluate Threshold Requirements and non-price criteria (e.g., Financial Viability of Proposer, Financial Strength and Financing Plan, State of Project Development and Schedule) set forth in Sections 4.3 and 4.4.2. Upon selection, the Final Award Group may be requested to provide further detailed cost information if requested by the PUC or the Consumer Advocate as part of the PPA approval process. If requested, such information would be provided to the PUC, Consumer Advocate, and Company pursuant to a protective order in the docket.
- 3.10.4 The Proposer agrees that no material changes or additions to the Facility from what is submitted in its Proposal will be made without the Proposer first having obtained prior written consent from the Company. Evaluation of all Proposals in this RFP is based on the information submitted in each Proposal at the Proposal Due Date. If any Proposer requests that any Proposal information 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 Project Site

All proposals must be sited on a pre-determined Project Site owned by Pūlama Lāna‘i, referred to as the Pūlama Site.¹⁴ The available area is approximately seventy-three (73) acres and is located adjacent to Miki Road and Miki Basin Plant, less than one (1) mile from the airport.

The selected Proposer will be required to execute a lease for the Pūlama Site coterminous with the term of the PPA with the landowner. A draft copy of the proposed form of lease and lease term sheet are included as Attachment 2 and Attachment 3, respectively, to Appendix F. The terms of the lease will be negotiable with the landowner. Additional information regarding the site, including a link to an Environmental Assessment and associated studies can also be found in Appendix F.

Due to the Company’s COVID-19 travel restrictions, a site visit will not be available at this time. The Company will provide photos of the Company’s Miki Basin Plant on the Company’s website. For information on the Pūlama Site, Proposers may contact Keiki-Pua Dancil at kdancil@pulamalanai.com.

¹⁴ The location and acreage of the Pūlama Site in this RFP is different from the Pūlama Site identified in the RFP for Variable Renewable Dispatchable Generation Paired with Energy Storage, Island of Lāna‘i, dated November 27, 2019 and revised March 10, 2020.

3.12 Confidentiality

- 3.12.1 Each prospective Proposer must submit an executed NDA in the form attached as Appendix E by the Proposal Due Date specified in the RFP Schedule in Section 3.1. If a Proposer had previously executed an NDA for the Request for Proposal for Variable Renewable Dispatchable Generation Paired with Energy Storage, Island of Lāna‘i, dated November 29, 2019, that executed NDA will be accepted. The form of the 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 NDA will be considered. 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 NDA, the Company reserves the right to share any information, even if marked confidential, with 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 to Company in response to this RFP, certify that such Proposer has not shared its Proposal, or any part thereof, with any other Proposer of a Proposal 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 Under the PPA

- 3.13.1 The Proposer with whom the Company enters into a PPA 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. Cash, a parent guaranty, or other forms of security will not be accepted in lieu of the irrevocable standby letter of credit.
- 3.13.2 The Development Period Security and Operating Period Security identified in the RDG PPA are minimum requirements. Proposers shall not propose an amount lower than that set forth in the RDG PPA.

- 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 relocation costs in excess of Total Estimated Relocation Costs that are payable to Company as required and set forth in Attachment G to the RDG PPA.
- 3.13.4 Proposers may be required to provide an irrevocable standby letter of credit in favor of the Company from a bank chartered in the United States in lieu of the required Source Code Escrow in an amount and as required and set forth in Attachment B to the RDG PPA.

Chapter 4: Evaluation Process and Evaluation Criteria

4.1 Proposal Evaluation and Selection Process

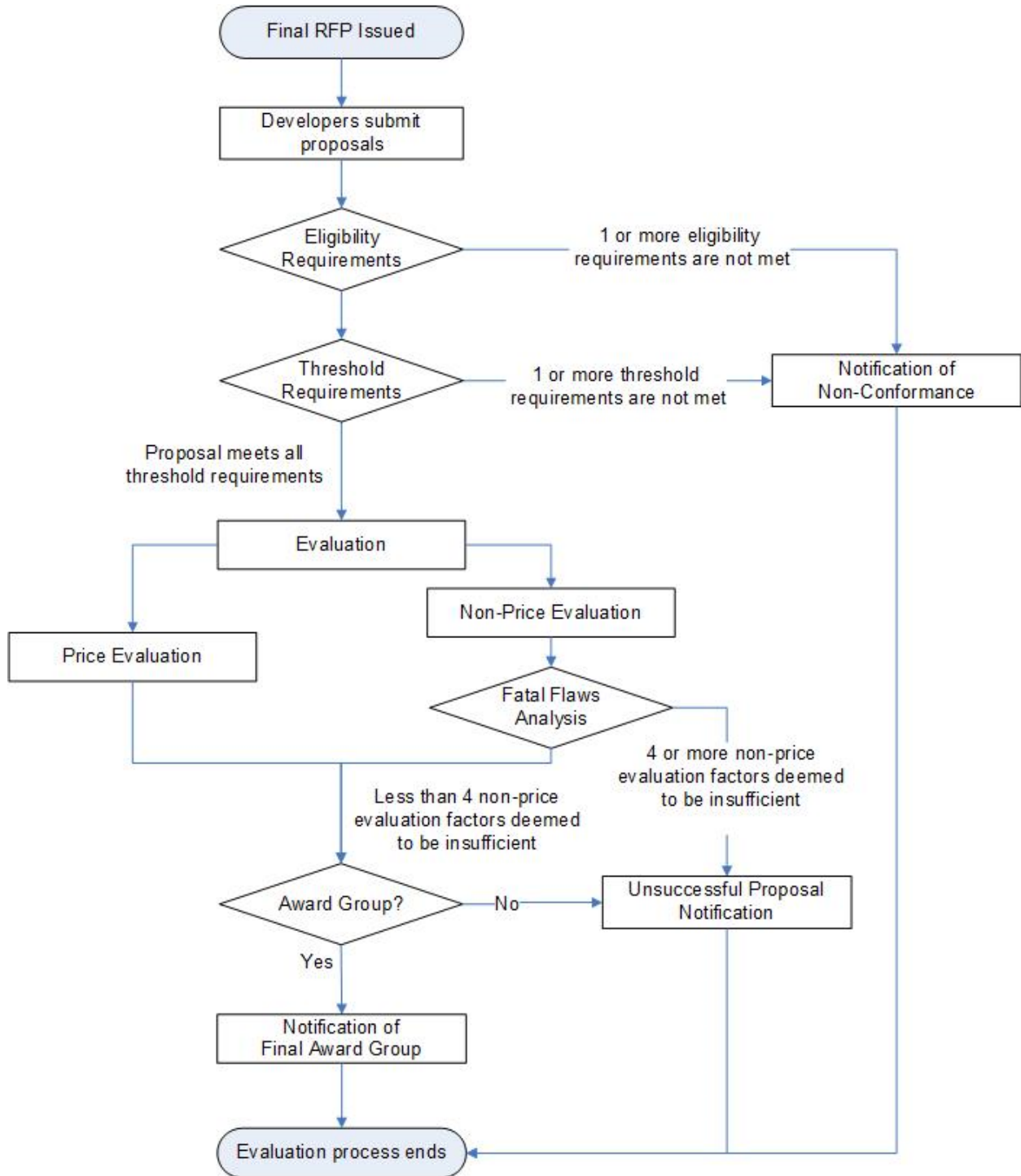
The Company will employ a multi-step evaluation process. This Chapter provides a description of each step of the process, along with the requirements of Proposers at each step. Figure 1 sets forth the flowchart for the proposal evaluation and selection process.

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 will be eliminated based on failure to meet either Eligibility or Threshold Requirements.¹⁵ 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 cure¹⁶. Proposals that have successfully met the Eligibility and Threshold Requirements will then enter a price and non-price evaluation process, ultimately ending in a Proposal being selected to the Final Award Group.

¹⁵ 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 Eligibility Requirements.

¹⁶ 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.

- The Proposer is not eligible to participate in this RFP if the Proposer, its parent company, or an affiliate of the Proposer has:
 - defaulted on a current contract with the Company, or
 - had a contract terminated by the Company, or
 - any pending litigation in which the Proposer has made claims against the Company.
- The Proposal, including required uploaded files, must be received on time via the Electronic Procurement Platform.
- The Proposal Fee must be received on time on or before the Proposal Due Date.¹⁷
- The Proposal must not contain material omissions.
- The Proposal must be signed and certified by an officer or other authorized agent of the Proposer.
- The Proposer must fully execute the NDA and any other documents 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 Proposal must be sited on the Pūlama Site.
- The Proposal must be for a PV project and must include an energy storage component.
- The largest contingency size shall be limited to 2.2 MW net export at the Miki Basin switchyard. The design to achieve this must be acceptable to the Company.
- The Proposal must reserve 3 MW of the Facility's contract capacity for CBRE subscriptions.
- A minimum of 0.40 MW of the CBRE Project capacity must be reserved for residential Subscribers as described in Section 1.2.4.
- The energy storage component must be able to be charged from the grid at the direction of the Company as described in Section 1.2.11.
- The Proposal must provide grid-forming and black start capabilities as described in Section 2.1.
- The Proposal must specify a GCOD no later than August 31, 2025.
- The Proposer shall agree to post Development Period Security and Operating Period Security as described in Section 3.13.

¹⁷ Proposal Fees will not be required for the SBO Proposal.

4.3 Threshold Requirement Assessment

Proposals that meet all the Eligibility Requirements will then be evaluated to determine compliance with the Threshold Requirements, which have been designed to screen out Proposals that are insufficiently developed, lack demonstrated technology, or will impose unacceptable execution risk for the Company.

Proposals must provide explanations and contain supporting information demonstrating how and why the Project proposed meets each of the Threshold Requirements. Proposals that fail to provide this information or meet a Threshold Requirement will be eliminated from further consideration upon concurrence with the Independent Observer.

The Threshold Requirements for this RFP are the following:

1. **RESERVED**

2. **Performance Standards:** The proposed Facility must be able to meet the performance attributes identified in this RFP and the Performance Standards identified in Section 2.1 of this RFP. Proposals should include sufficient documentation to support the stated claim that the Facility will be able to meet the Performance Standards. The Proposal should include information required to make such a determination in an organized manner to ensure this evaluation can be completed within the evaluation review period.

3. **Proven Technology:** This criterion is intended as a check to ensure that the technology proposed is viable and can reasonably be relied upon to meet the objectives of this RFP. The Company will only consider Proposals utilizing technologies that have successfully reached commercial operations in commercial applications (i.e., a PPA) at the scale being proposed. Proposals should include any supporting information for the Company to assess the commercial and financial maturity of the technology being proposed as noted in Attachment B, Section 2.12.

4. **Experience of the Proposer:** The Proposer, its affiliated companies, partners, and/or contractors and consultants on the Proposer's Project team must have experience in financing, designing, constructing, interconnecting, owning, operating, and maintaining at least one (1) electricity generation project, including all components of the project (i.e., BESS or other attributes), similar in size, scope, technology, and structure to the Project being proposed by Proposer. The Company will consider a Proposer to have reasonably met this Threshold Requirement if the Proposer can provide sufficient information in its Proposal's RFP Appendix B Section 2.13 tables demonstrating that at least one member of the Proposer's team (identified in the Proposal) has specific experience in each of the following categories: financing, designing, constructing, interconnecting, owning, operating, and maintaining projects similar to the Project being proposed.

5. **Financial Compliance:** The proposed Project must not cause the Company to be subject to consolidation, as set forth in Financial Accounting Standards Board ("FASB") Accounting Standards Codification Topic 810, Consolidation ("ASC 810"), as issued and

amended from time to time by FASB. Proposers are required to state to the best of their knowledge, with supporting information to allow the Company to verify such conclusion, that the Proposal will not result in the Seller under the PPA being a Variable Interest Entity (“VIE”) and result in the Company being the primary beneficiary of the Seller that would trigger consolidation of the Seller’s finances on to the Company’s financial statements under FASB ASC 810. The Company will perform a preliminary consolidation assessment based on the Proposals received. The Company reserves the right to allow a Proposal to proceed through the evaluation process through selection of the Priority List and work with the Proposer on this issue prior to or during PPA negotiations. The Company has determined that for purposes of FASB ASC 842, a generation plus BESS facility will be treated as two separate measurements of account. For accounting purposes, the BESS portion will be treated as a lease, while the generation facility will not. As a result, no lease evaluation will be completed as part of the Proposal evaluation.

6. Community Outreach: Gaining community support is an important part of a Project’s viability and success. A comprehensive community outreach and communications plan (“Community Outreach Plan”) is an essential roadmap that guides a developer as they work with various communities and stakeholders to gain their support for a Project. Proposers must include a Community Outreach Plan that describes the Proposer’s commitment to work with the neighboring community and stakeholders and to provide them timely Project information during all phases of the Project. The Community Outreach Plan shall include, but not be limited to, the following information: Project description, community scoping (including stakeholders and community concerns), Project benefits, government approvals, development process (including Project schedule), and a comprehensive communications plan.

4.4 Evaluation – Price and Non-Price Analysis

Proposals that meet both the Eligibility and Threshold Requirements are Eligible Proposals which will then be subject to a price and non-price assessment. Two teams have been established to undertake the Proposal evaluation process: a Price Evaluation Team and Non-Price Evaluation Team. The results of the price and non-price analysis will be a relative ranking and scoring of all Eligible Proposals. Price-related criteria will account for sixty percent (60%) of the total score and non-price-related criteria will account for forty percent (40%) of the total score. The non-price criteria and methodology for applying the criteria are explained in Section 4.4.2.

The Company will employ a closed-bidding process for this solicitation in accordance with Part IV.H.3 of the Framework where the price and non-price evaluation models to be used will not be provided to Proposers. However, the Company will provide the Independent Observer with all necessary information to allow the Independent Observer to understand the evaluation models and to enable the Independent Observer to observe the entire analysis to ensure a fair process.

4.4.1 Evaluation of the Price Related Criteria

For the price analysis, a total of 600 points will be awarded. Price-related criteria will be based on the GCOD and the results of a capacity expansion model.

The eligible Proposal with the earliest GCOD will receive 50 points. All other eligible Proposals will receive points of a proportionate reduction based on the difference between the earliest GCOD and the latest acceptable GCOD (August 31, 2025), rounded by months. For example, if the earliest GCOD proposed is March 1, 2024, that proposal will receive 50 points. The total months between the earliest GCOD and the latest acceptable GCOD then becomes 18 months. If another proposal has a GCOD of December 1, 2024, it is 9 months later than the earliest GCOD and will then receive $50 \times (1 - (9/18)) = 25$ points.

The eligible Proposal with the lowest Levelized Energy Price will receive 550 points. All other eligible Proposals will receive points based on a proportionate reduction using the percentage by which the eligible Proposal's Levelized Energy Price exceeds the lowest Levelized Energy Price. For example, if a Proposal's value is ten percent (10%) higher than the lowest Levelized Energy Price, the Proposal will be awarded 495 points (that is, 550 points less 10%). The result of this assessment will be a ranking and scoring of each Proposal.

The Company may complete additional analyses of Projects, in consultation with the Independent Observer, if the time and capability exist to perform such analyses to evaluate the potential of additional benefits and costs of integrating the proposed Project onto the Company's System which includes:

1. The cost to dispatch the Project and the energy under the RDG PPA;
2. The fuel cost savings (benefits) and any other direct savings (Subscriber Organization savings from dispatchable fossil fuel savings, where applicable) resulting from the displacement of generation, including consideration of round-trip efficiencies for facilities with a BESS; and
3. The estimated increase (or decrease) in operating cost, if any, incurred by the Company to maintain system reliability.
4. The cost of imputed debt, if applicable.

As noted, 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.

4.4.2 Evaluation of the Non-Price Related Criteria

For the non-price analysis, each Proposal will be evaluated on each of the non-price criteria categories set forth below:

1. Community Outreach
2. State of Project Development and Schedule
3. Performance Standards
4. RESERVED
5. Commitment to Residential Subscriber Participation
6. CBRE Program
7. Environmental Compliance and Permitting Plan
8. Experience and Qualifications
9. Financial Strength and Financing Plan
10. RDG PPA Contract Exceptions
11. Guaranteed Commercial Operations Date
12. Cultural Resource Impacts

Criteria 1 through 6 (as applicable) – 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 applicable individual non-price criteria. The Company will then award non-price evaluation points in accordance with the relative ranking of scores. The Proposal with the highest total non-price score will receive 400 points, and all other Proposals will receive points equal to the Proposal's score divided by the top score, multiplied by 400.

During the non-price criteria evaluation, a fatal flaws analysis will also be conducted such that any Proposal that is deemed not to meet the minimum standards level for four (4) or more applicable non-price criteria will be disqualified given that the Proposal has failed to meet the required number of non-price factors that are indicative as to the general feasibility and operational viability of a proposed Project. Non-price criteria numbers 5 and 11 above will be excluded from the fatal flaws analysis.

The Company's evaluation of the non-price criteria will be based on the materials provided by a Proposer in its Proposal. Acceptance of any Proposal into the Final Award Group shall not be assumed or construed to be an endorsement or approval that the materials provided by Proposer are complete, accurate or in compliance with applicable law. The Company assumes no obligation to correct, confirm or further research any of the materials submitted by Proposers. Proposers retain sole responsibility to ensure their Proposals are accurate and in compliance with all laws.

The non-price criteria are:

1. **Community Outreach** – Gaining community support is an important part of a Project’s viability and success. An effective Community Outreach Plan will call for early meaningful communications with stakeholders and will reflect a deep understanding and respect for the community’s desire for information to enable them to make informed decisions about future projects in their communities. Therefore, Proposals will be evaluated on the quality of the Community Outreach Plan to inform the Project’s impacted communities.

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

- 1) Project description. A thorough description including a map of the location of the Project. This information will help the community understand the impact that the Project may have on the community.
- 2) Community scoping. Identify stakeholders (individuals, community leaders, organizations), community issues and concerns, and community sentiment.
- 3) Project benefits. An explanation of the need for the Project. 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 Company’s community engagement expectation whereby all developers will be required to engage in community outreach prior to signing a PPA with the Company. This process is also outlined in RFP Section 5.3. Further information and instructions regarding expectations for the Community Outreach Plan are included as Attachment 4 and 5 to Appendix B.

2. **State of Project Development and Schedule** – Projects that are further along in development generally have lower project execution risk and a greater probability of being able to be successfully placed into service prior to the GCOD (specifically identified in each Proposal). At a minimum, Projects should demonstrate how they plan to capture any ITC safe harbor and reach their GCOD specified, including identification of risks and schedule assumptions. (Schedules must identify the IRS completion date and PUC approval dates assumed.) Proposals should also demonstrate, via a detailed critical path schedule, that there is a high likelihood that the Project will be able to reach commercial operations as specified. Proposals shall include a Gantt chart that clearly illustrates the overall schedule and demonstrates achievement of any ITC safe harbor, if applicable, and commercial operations by their specified GCOD. The Gantt chart shall include task durations and dependencies, identify tasks that will be fast tracked, and identifies slack time and contingencies. This criterion will also look at the high-level Project costs set forth in the Proposal including: costs for equipment, construction, engineering, Seller-Owned Interconnection Facilities, Company-Owned Interconnection Facilities, land, annual O&M, the reasonableness of such costs and the assumptions used for such costs. Project costs that do not appear reasonable for a project of the size proposed may result in a lower ranking for this criterion if the Company reasonably determines that the cost information is unrealistic based on prior experience in the market which may result in a risk that the Project can be built on time and for the price proposed by the Proposer. The Company reserves the right to discuss any cost and financial information with a Proposer to ensure the information provided is accurate and correct.
3. **Performance Standards:** The proposed Facility must be able to meet the performance attributes identified in this RFP and the Performance Standards identified in the RDG PPA. 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 and in this RFP. At a minimum, in addition to meeting the Performance Standards, the Proposal should include sufficient documentation, provided in an organized manner, to support the stated claim that the Facility will be able to meet the Performance Standards. The Proposal should include information required to make such a determination in an organized manner to ensure this evaluation can be completed on a timely basis. Preference will be given to Proposals that provide detailed technical and design information showing how each standard can be met by the proposed Facility. Preference will also be provided on facilities that offer additional capabilities.
4. **RESERVED**
5. **Commitment to Residential Subscriber Participation** – Proposals will be evaluated on the stated commitments of the Project’s Subscriber Organization to residential Subscribers. At a minimum, Subscriber Organizations will be required to set aside 0.40 MW of the CBRE Project capacity for residential Subscribers.

Proposers that commit to reserving a portion larger than 0.40 MW of their CBRE Project capacity for residential Subscribers will be given more favorable scoring. In addition, Proposals will also be evaluated on the stated commitments of the Project's CBRE Subscriber Organization to LMI Customers. Proposers that commit to reserving a portion of the CBRE Project capacity for LMI Customers will be given more favorable scoring.

6. **CBRE Program:** Proposals will be evaluated on several facets of the CBRE Program being proposed.
 - 1) **Program Offering:** Proposals will be evaluated to give preference to program offerings that provide the most benefits to residential and LMI Customers, as applicable. Financing options, upfront fees, payment over time, public funding options, and other creative approaches will be preferred along with programs that offer higher expected customer level savings, favorable payback periods and mechanisms, and other customer benefits. In addition, Proposals shall describe the extent to which residential Subscribers will be financially responsible for the Facility's underperformance.
 - 2) **Marketing and Outreach Plans:** Proposals will be evaluated on the proposed strategies and methods to educate, inform, and stimulate the market in order to achieve their target levels of participation.
 - 3) **Program Experience:** Proposals will also be evaluated on Proposers documented success in reaching and retaining participation of residential and LMI Customers, as applicable, in other community-based renewable energy programs.
7. **Environmental Compliance and Permitting Plan** – This criterion relates to the potential (short- and long-term) environmental impacts associated with each project, the quality of the plan offered by the Proposer to mitigate and manage any environmental impacts (including any pre-existing environmental conditions), and the plan of Proposers to remain in environmental compliance over the term of the contract. These impacts are reflected on a technology-specific basis. Completing any necessary environmental review and obtaining the required permitting in a timely manner is also important and Proposals will be evaluated on their plan to identify, apply for, and secure the required permits for the Project, any permitting activity that has been completed to date, including having initial discussions with the applicable regulating agencies such as U.S. Fish and Wildlife and the State of Hawai'i Department of Land and Natural Resources' Division of Forestry and Wildlife, prior to submitting a Proposal, and the degree of certainty offered by the Proposer in securing the necessary permits.

At a minimum, proposed Projects should be expected to have minimal environmental impact for most areas and Proposals should provide a comprehensive plan to mitigate the identified potential or actual significant environmental impacts to remain in environmental compliance. The proposed mitigation plans should be included in the Project timeline. Preference will be given to Proposals that provide a more detailed plan as well as those that have proactively taken steps to mitigate

potential environmental impacts.

Also, this criterion requires that, at a minimum, Proposers should have identified, and disclosed in their Proposal(s) all major permits, approvals, appurtenances and entitlements (including applicable access, rights of way and/or easements) (collectively, the “permits”) required and have a preliminary plan for securing such permits. Preference will be given to Proposals that are able to provide a greater degree of certainty that its plan to secure the required permits is realistic and achievable, or have already received all or a majority of the required permits. The Proposer should disclose all identified (a) discretionary permits required, i.e., those requiring public or contested case hearings and/or review and discretionary approval by an appropriate government agency and (b) ministerial conditions without discretionary approval conditions. In all cases, the Proposer must provide a credible and viable plan to secure all necessary and appropriate permits necessary for the project. For example, if the project is located within an agricultural district, the Proposer shall provide evidence of Proposer’s verification with the appropriate government agency that the project complies with HRS Section 205-2 and Section 205-4.5, relating to solar energy facilities placed on agricultural land, provided, however that where a special use permit (under Section 205-6), exemption (under Section 205-6), or amendment to land use district boundary lines (under Section 205-4) is required to secure such compliance, Proposer shall identify the need for such permit, exemption or amendment and provide a list of required prerequisites and/or conditions and a realistic timeline necessary to obtain such permit, exemption or amendment satisfactory for Proposer to still meet its designated Guaranteed Commercial Operations Date.

8. **Experience and Qualifications** – Proposals will be evaluated based on the experience of the Proposer in financing, designing, constructing, interconnecting, owning, operating, and maintaining projects (including all components of the project) of similar size, scope and technology. At a minimum, Proposals must show via the table format specified in RFP [Appendix B Section 2.13](#) that at least one (1) member must have specific experience in each of the following categories: financing, designing, constructing, interconnecting, owning, operating, and maintaining at least one electricity generation project including all components of the project similar to the Project being proposed. Preference will be given to Proposers with experience in successfully developing multiple projects that are similar to the one being proposed and/or that have prior experience successfully developing and interconnecting a utility scale project to the Company’s System.
9. **Financial Strength and Financing Plan** – This criterion addresses the comprehensiveness and reasonableness of the financial plan for the Project as well as assesses the financial strength and capability of the Proposer to develop the Project. A complete financial plan addresses the following issues: Project ownership, capital cost and capital structure, sources of debt and equity, and evidence that credit-worthy entities are interested in financing the Project. The financial strength of Proposers or their credit support providers will be considered, including their credit ratings. The financing participants are expected to be reasonably strong financially. Developers

and their sources of capital that have investment grade credit ratings from a reputable credit rating agency (S&P, Moody's, Fitch) will also be given preference, with those that have higher credit ratings ranked higher.

10. **RDG PPA Contract Proposed Modifications** – Proposers are encouraged to accept the contract terms identified in the model RDG PPA in its entirety in order to expedite the overall RFP process and potential contract negotiations. Proposers who accept the model RDG PPA without edits, will receive a higher score and will be the only proposals that can achieve the highest scoring for this non-price evaluation criterion. Technology-specific or operating characteristic-required modifications, with adequate explanation as to the necessity of such modifications, will not jeopardize a project's ability to achieve the highest score. Proposers who elect to propose modifications to the model agreements shall provide a Microsoft Word red-line version of the applicable document identifying specific proposed modifications to the model agreement language, as well as a detailed explanation and supporting rationale for each modification. General comments without proposed alternate language, drafting notes without explanation or alternate language, footnotes such as “parties to discuss,” or a reservation of rights to make additional modifications to the model agreements at a later time are unacceptable, will be considered unresponsive, and will result in a lower score. See also Section 3.8. The Company and Independent Observer will evaluate the impact that the proposed modifications will have on the overall risk assessment associated with the evaluation of each Proposal.
11. **Guaranteed Commercial Operations Date** – Proposers that are able to design for and commit to an earlier GCOD will be given more favorable scoring. Proposers will be held to the GCOD identified in their Proposal. The GCOD will be a Guaranteed Milestone and will be inserted without amendment into the RDG PPA, as applicable.
12. **Cultural Resource Impacts** – Proposers need to be mindful of the Project's potential impacts to historical and cultural resources. Proposers should have identified (1) valued cultural, historical, or natural resources in the area in question, including the extent to which traditional and customary native Hawaiian rights are exercised in the area; (2) the extent to which those resources – including traditional and customary native Hawaiian rights – will be affected or impaired by the proposed action; and (3) the feasible action, if any, to be taken to reasonably protect any identified cultural, historical, or natural resources in the area in question, and the reasonable protection of traditional and customary native Hawaiian rights in the affected area.

Also, Proposers should have already contracted with a consultant with expertise in this field to begin a cultural impact plan for the Project. Proposals will be evaluated on the commitment to addressing cultural resource impacts on their Project, if any. Therefore, in order to be evaluated for this criterion, Proposers should, at least, provide the following documentation, as applicable: (1) Proposer's or its consultant's experience with cultural resource impacts on past projects; (2) the status of their cultural impact plan. Proposals will be evaluated on the extent to which their cultural impact plan has been developed, and preference will be given to Proposals

that are further along in the process, including but not limited to, whether a mitigation/action plan has been provided that addresses any identified cultural resource issues, or a date for when such a plan will be available has been identified, or any portions of such plan have been completed.

4.5 Selection of the Final Award Group

At the conclusion of both the price and non-price analysis, a total score will be calculated for each Eligible Proposal using the 60% price-related criteria/ 40% non-price-related criteria weighting outlined above. The price and non-price analysis, and the summation of both price and non-price scores described above, will result in a ranking of Proposals.

Based on the results of this Evaluation and review with the Independent Observer, the Company will select a Proposal to the Final Award Group from which to begin contract 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 has a material effect on any of the evaluation processes, including selection of the Final Award Group, the Company reserves the right, at any time prior to submission of the PPA application with the PUC, in consultation with the Independent Observer, to disqualify the Proposer from the RFP. If discovery of the incorrect or misrepresented information is made after the Company has filed its PUC application for approval of the PPA with the Proposer, the Company will disclose the incorrect or misrepresented information to the PUC for evaluation and decision as to whether such Proposer should be disqualified and the Company's application dismissed.

Following any removal of a Proposal from 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 on 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 determine if another Proposal should be added to the Final Award Group.

Chapter 5: Post Evaluation Process

5.1 Interconnection Requirements Study Process

A summary of the model requirements and impact study scope can be found in Appendix B, Attachment 6.

~~A complete package of Project Interconnection Data Request worksheets, Project single line and three line diagrams, diagram(s), models for equipment and controls, (see Appendix B, Attachments 3 and 6), list(s) to clearly identify the components and respective files (for inverters and power plant controller), and complete documentation with instructions, shall be submitted for each Proposal within 30 days after selection to a Final Award Group (see Section 2.11 of Appendix B). —the Final Award Group (see Section 2.11 of Appendix B). In addition, updated Project Interconnection Data Request worksheets and single line diagram(s) shall be submitted within 30 days after selection to the Final Award Group. Preparation of the models, documentation, and related information, and may take longer than 30 days, and Proposers shall allow adequate time for this submittal requirement.~~

PSSE Generic models, PSSE User models, and ASPEN models shall be configured to represent all of the functional equipment with settings in place to comply with the Company's performance requirements. These must be checked for functionality by the Proposer or its vendors and consultants prior to submission to the Company. Similarly, fully accurate PSCAD models shall be submitted in a condition that complies with the PSCAD modeling guidelines provided by the Company. PSSE generic models shall be provided promptly after the PSSE user models have been approved by the Company.

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 from being selected to the Final Award Group or may terminate PPA negotiations or executed PPAs, if their submission requirements are deemed incomplete for the lack of requested models. Proposals that are complete will be considered for further evaluation. A formal, technical model checkout will be deferred until a later date when IRS Agreements and deposits are in place, so that the expert subject matter work can be provided by the Company's IRS consultant(s).

Upon notification of selection to the Final Award Group, the Company will provide a draft IRS Agreement for the selected Project, with a statement of required deposit for individual and prorated work as part of an IRS Scope for a System Impact Study that will involve (a) technical model checkout for the project and (b) any considerations that are specific to the particular project and location. Interconnection cost and schedule, including cost of any required system upgrades, will be determined in a subsequent Facility Study.

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 for IRS analyses, 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 the Final Award Group.

Proposers shall be responsible for the cost of the IRS, under separate agreements for the System Impact Study and the Facility Study. The overall IRS will provide information including, but not limited to, an estimated cost and schedule for the required Interconnection Facilities for a particular Project and any required mitigation measures. Proposers will be responsible for the actual final costs of all Seller-Owned Interconnection Facilities and Company-Owned Interconnection Facilities. Upon reviewing the results of the IRS, Proposers will have the opportunity to declare the PPA (see Section 12.4) null and void in the event that the estimated interconnection costs and schedule for the Project are higher than what was estimated in the Project Proposal.

5.2 Contract Negotiation Process

Within five (5) business days of being notified by the Company of its intent to enter into RDG PPA contract negotiations, the Proposer selected for the Final Award Group will be required to indicate, in writing to the Company's primary contact for this RFP, whether it intends to proceed with its Proposal. The awarded Proposer will be required to keep its 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 Final Award Group Commitments

5.3.1 Community Outreach and Engagement / Cultural Resource Impacts

The public meeting and comment solicitation process described in this Section and Section 29.21 of the RDG 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 five (5) business days after the notification is given to Proposers who are selected to the Final Award Group. Selected Proposers shall not disclose their selection to the public before the Company publicly announces the Final Award Group selection.

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

Within five (5) business days of notification of selection to the Final Award Group, Proposers must have provided 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 website for the term of the PPA and made available to the public upon request. As an option, Proposers may provide their updated Community Outreach Plan and website information to the Company for review and feedback. If provided at least 30 days prior to the dates required, the Company will endeavor to review such information and provide feedback on the information before it is made available to the public. Details on the Community Outreach Plan can be found in Appendix B, Attachments 4 and 5.

Prior to the execution date of the PPA, Proposers shall also provide reasonable advance notice and 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 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 has provided Proposers with detailed instructions regarding the community meeting requirement after the selection of the Final Award Group (Attachment 4 to Appendix B). (For example, notice will be published in county 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 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.

Within 5 Days of the start of PPA negotiations, the Proposer shall contract with a consultant to begin a cultural impact assessment for the Project. The consultant shall identify (1) valued cultural, historical, or natural resources in the area in question, including the extent to which traditional and customary native Hawaiian rights are exercised in the area; (2) the extent to which those resources – including traditional and customary native Hawaiian rights – will be affected or impaired by the proposed action; and (3) the feasible action, if any, to be taken to reasonably protect native Hawaiian rights if they are found to exist.

5.3.2 Ocular Impact Study

Due to the proximity to the Lāna‘i Airport, the Proposer shall complete an ocular impact study for review by the State of Hawai‘i Department of Transportation and any other federal or state agency that may request such study. When designing the facility, the developer should take care to develop panel placement and select materials that will not result in glint and glare issues for air traffic at the Lāna‘i Airport.

5.4 Greenhouse Gas Emissions Analysis

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

Any signed PPA resulting from this RFP is subject to PUC approval as described in the RDG PPA, including Article 12 and Section 29.20 thereof.

5.6 Facility In-Service

In order to facilitate the timely commissioning of the project 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 Proposer and ready for operation prior to Company testing.

If approved drawings are not available, or if the Facility is otherwise not test ready as scheduled, the Project may lose its place in the queue, with the Company retaining the flexibility to adjust scheduling as it sees fit. If tests are not completed within the allotted scheduled testing time, the Project will be moved to the end of the Company's testing queue. The Proposer will be allowed to cure if successful testing is completed within the allotted scheduled time. No adjustments will be made to PPA milestones if tests are not completed within the original allotted time. Liquidated damages for missed milestones will be assessed pursuant to the PPA.

DRAFT

REQUEST FOR PROPOSALS

FOR

VARIABLE RENEWABLE DISPATCHABLE GENERATION

PAIRED WITH ENERGY STORAGE

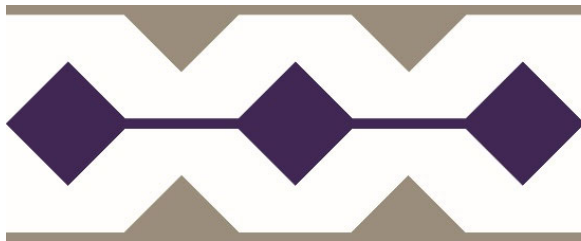
AND COMMUNITY-BASED RENEWABLE ENERGY

ISLAND OF LĀNA‘I

~~AUGUST 25~~NOVEMBER 4, 2021

Docket No. 2015-0389

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



**Maui
Electric**

1.0 GENERAL INSTRUCTIONS TO PROPOSERS

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, 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 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.

If a Proposer is already registered on Sourcing Intelligence, the Proposer may use their current login information to submit their Proposal. Proposers are asked to refer to their chosen unique company name throughout when referring to it in text responses.

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

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).

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. 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.

After registering and prior to the opening of the RFP, Proposers are encouraged to familiarize themselves with the Electronic Procurement Platform, including tabs, the dashboard, PowerAdvocate Users Guide (RFP Appendix D), etc. Proposers should note that they will not be able to access any bid documents until the event officially opens.

Proposers may contact PowerAdvocate Support for help with registration or modification of registration if desired. Support is available from 8 AM to 8 PM Eastern Time (2 AM to 2 PM Hawai‘i Standard Time when daylight savings is in effect) Monday to Friday, except for Holidays posted on the PowerAdvocate website, both by phone (857-453-5800) and by Email (support@poweradvocate.com).

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

Once the RFP event is opened, registered Proposers will have online access to general notices and RFP-related documents via the Electronic Procurement Platform. Proposers should also monitor the RFP Website throughout the RFP event.

1.2 PROPOSAL SUBMISSION PROCEDURES

An Email notification will be sent to all registered Proposers when the event has been opened to receive Proposals.

After logging onto the Electronic Procurement Platform, the RFP will be visible on the Proposer’s dashboard with several tabs, including the following:

- **“1. Download Documents:”** Documents stored under this tab are provided for the Proposer’s use and information. All documents can be downloaded and/or printed, as required.
- **“2. Upload Documents:”** Proposal submission documents requested in Appendix B must be uploaded using this tab.
- Note that “3. Commercial Data:”, “4. Technical Data:”, and “5. Pricing Data:” tabs are NOT USED for this event.

Step-by-step instructions for submitting a complete Proposal are provided below:

1. Proposers must upload their Proposal files, including all required forms and files, to submit a complete Proposal. Self-Build, IPP and Affiliates must upload all files before their respective Proposal Due Date (RFP Section 3.1, Table 1, Item 9 for Self-Build and Item 10 for IPP and Affiliates).

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.pdf.
(example: AceEnergy.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 AceEnergy_2.5_SiteMap.kmz”). Such additional files must follow the naming convention below:
 - a. File names must include, in order, Company Name, Appendix B section number, and a file descriptor, as shown in the example file name below:
AceEnergy_2.5_SiteMap.kmz
Proposers may use abbreviations if they are clear and easy to follow.

4. Upload files using the "**2. Upload Documents**" tab on the Electronic Procurement Platform.
 - a. For all documents identify the "Document Type" as “Technical Information.” (Do not identify any documents as “Commercial and Administrative” or “Pricing.”)
 - b. "Reference ID" may be left blank.
 - c. Select "Choose File..." Navigate to and choose the corresponding file from your computer. Select "Open" and then "Submit Document."

There is no limit to the number or size of files that can be uploaded. Multiple files may be grouped into a .zip archive for upload. (Any zipped files must still adhere to the naming directions in #3 above.) When successfully uploaded, documents will appear under the "Bid Submissions" section on the bottom of the tab's page, organized within the “Technical Information” Document Type. Repeat steps a, b, and c, as required for each file upload.

If a file with the same name is uploaded twice, the Platform will automatically append a unique numerical extension to the Document Name. To delete a file that has been previously uploaded, click on the “X” button in the “Actions” column for the file to be deleted. Do not upload any files prior to the issuance of the Final RFP.

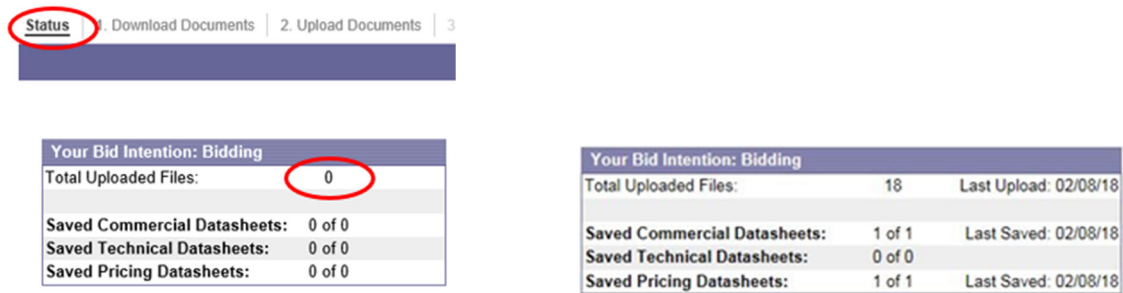
5. The Company will not be responsible for technical problems that interfere with the upload or download of Proposal information. Support is available to answer technical questions about PowerAdvocate’s Sourcing Intelligence from 8 AM to 8 PM Eastern Time (2 AM to 2 PM Hawai‘i Standard Time when daylight savings is in effect) Monday to Friday, except for Holidays posted on the PowerAdvocate website, both by phone (857-453-5800) and by Email (support@poweradvocate.com).

6. Proposers are strongly encouraged to start early and avoid waiting until the last minute to submit the required information. Proposers are allowed to add, modify, and/or delete documents that have been previously submitted any time prior to the event close deadline. For clarity, it is the Proposer’s responsibility to ensure a complete Proposal is uploaded into PowerAdvocate before the Proposal Due Date.
7. Any questions or concerns regarding the RFP may be submitted to the Company Contact via the RFP Email address provided in Section 1.6 of the RFP. Per RFP Section 1.4.2, the Independent Observer will monitor messages within the bid event. Proposers are responsible for following instructions and uploading documents in their appropriate locations. Documents uploaded in the wrong tab will not be considered by the Company.

1.3 PROPOSAL COMPLETION AND CONFIRMATION PROCEDURES

To confirm the submission of all proposal files, in the “Status” tab on the Electronic Procurement Platform, confirm that the “Total Uploaded Files” is the number of expected files to be included in the submission by checking it against your list of submitted files.

Example “Status” tab view:



As stated above in Section 1.2, nothing should be uploaded to the Commercial, Technical, or Pricing Datasheet tabs. Documents uploaded there will not be included in your Proposal submission.

1.3.1 **Proposal Fee Delivery Information.** Provide the Proposal Fee submission information for this Proposal. Include:

- The Date the Proposal Fee was sent.
- The delivery service used and the tracking number for the parcel.
- The U.S.-chartered bank name that issued the cashier’s check and the check number.

2.0 PROPOSAL SUMMARY TABLE

To be filled out completely by IPP or Affiliate Proposers:

1	Proposer Name (Company Name)	
2	Parent Company/Owner/Sponsor/Business Affiliation/etc.	
3	Project Name	
4	Net nameplate capacity (MW)²	
4a	Installed nameplate capacity: the aggregate sum of the net nameplate active power capabilities of all generator and converter equipment (i.e. storage) installed.	
5	Net Energy Potential (NEP) Projection for the Facility (MWh)	
6	Lump Sum Payment (\$/Year)	
7	Project Energy Storage Technology	
7a	AC or DC interconnected with the source energy resource	
8	Energy Storage Capability for the Facility (MW and MWh)	
9	Is the Project capable of being 100% charged from the grid after the 5 year ITC recapture period? (Yes/No)	
10	The Proposer hereby certifies that no single point of failure from the Facility shall result in a decrease in net electrical output greater than 2.2 MW. (Yes/No)	
11	Is the Project grid-forming and black start capable? (Yes/No)	
12	Proposal Guaranteed Commercial Operations Date (MM/DD/YYYY)	
13	The Proposer hereby certifies that the Project meets all performance attributes identified in this Section 2.1 of the RFP? (Yes/No)	
14	The Proposer hereby certifies that the Proposal (including its pricing elements) is not contingent upon changes to existing County, State, or Federal laws or regulations. (Yes/No)	
15	The Proposer hereby agrees to provide Development Period Security and Operating Period Security as set forth in the applicable RDG PPA. (Yes/No)	
16	The Proposer hereby certifies under penalties of perjury that this Proposal has been made in good faith and without collusion or fraud with any other person. As used in this certification, the word “person” shall mean any natural person, business partnership, corporation, union, committee, club, or organization, entity, or group of individuals. (Yes/No)	
17	The Proposer hereby certifies that the Proposer, its parent company, or any affiliate of the Proposer has not either defaulted on a current contract with the Company, had a contract terminated by the	

² A Project’s net nameplate capacity is the net maximum instantaneous output (MWac) of the Facility at the point(s) of interconnection, whether that maximum is based on: nameplate power rating of energy generating equipment sizing; expected losses in delivery of power to the point(s) of interconnection; and/or any project control system involved in managing the delivery of power to the point(s) of interconnection. This value, subject to verification by the Company, will determine, how a project is evaluated relative to the terms and requirements of the RFP, including, but not limited to: classification as a Mid-Tier or Large Project, ability to interconnect to a distribution circuit, impact to circuit hosting capacity, and validation of the maximum output levels used to calculate the NEP RFP Projection. For the purposes of calculating the NEP RFP Projection it should be assumed all energy is being delivered directly to the point(s) of interconnection from the renewable resource as it is generated and never in excess of the Project’s capacity, independent of the existence of any storage device. In the applicable PPA, this value will be the default Contract Capacity.

	Company, or has any pending litigation in which the Proposer has made claims against the Company (Yes/No)	
18	Does the Proposer accept the contract terms identified in the RDG PPA in its entirety? (Yes/No)	
18a	If the response to item 18 is “No,” specify the name of the Microsoft Word red-line file that identifies the proposed modifications to the agreement, provided, however, that such proposed modifications shall be limited to targeted revisions to, and not deletions or waivers of, the agreement’s terms, conditions, covenants, requirements or representations.	

To be filled out completely by Self-Build Proposers:

1	Proposer Name (Company Name)		
2	Parent Company/Owner/Sponsor/Business Affiliation/etc.		
3	Project Name		
4	Net nameplate capacity (MW)		
4a	Installed nameplate capacity: the aggregate sum of the net nameplate active power capabilities of all generator and converter equipment (i.e. storage) installed.		
5	Net Energy Potential (NEP) Projection for the Facility (MWh)		
6	Project Energy Storage Technology		
6a	AC or DC interconnected with the source energy resource		
7	Energy Storage Capability for the Facility (MW and MWh)		
8	Is the Project capable of being 100% charged from the grid after the 5 year ITC recapture period? (Yes/No)		
9	The Proposer hereby certifies that no single point of failure from the Facility shall result in a decrease in net electrical output greater than 2.2 MW. (Yes/No)		
10	Is the Project grid-forming and black start capable? (Yes/No)		
11	Proposal Guaranteed Commercial Operations Date (MM/DD/YYYY)		
12	The Proposer hereby certifies that the Project meets all performance attributes identified in Section 2.1 of the RFP? (Yes/No)		
13	The Proposer hereby certifies that the Proposal (including its pricing elements) is not contingent upon changes to existing County, State or Federal laws or regulations. (Yes/No)		
14	The Proposer hereby agrees to provide Development Period Security and Operating Period Security as set forth in the applicable Model RDG PPA or Model Mid-Tier SFC. (Yes/No)		
15	The Proposer hereby certifies under penalties of perjury that this Proposal has been made in good faith and without collusion or fraud with any other person. As used in this certification, the word “person” shall mean any natural person, business partnership, corporation, union, committee, club, or organization, entity, or group of individuals. (Yes/No)		
16	Year (YYYY)	Project Capital Cost (\$)	Extend the table for questions 16, 17, and 18 for as many years as needed up to the 20-year PPA term.

Extend the table for questions 16, 17, and 18 for as many years as needed up to the 20-year PPA term.

17	Year (YYYY)	O&M Cost (\$)
18	Year (YYYY)	Annual Revenue Requirement (\$)

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 (“NDA”)** (Appendix E to the RFP, may be downloaded from the “1. Download Documents” tab in the Electronic Procurement Platform) or fully executed **NDA** for the Request for Proposal for Variable Renewable Dispatchable Generation Paired with Energy Storage, Island of Lāna‘i, dated November 29, 2019.
- **Certificate of Vendor Compliance** for the Proposer
 - **Certificate of Good Standing** for the Proposer and **Federal and State tax clearance certificates** for the Proposer may be provided in lieu of the Certificate of Vendor Compliance
- **Certification of Counsel for Proposer**, if applicable. (See Appendix B Attachment 1.)
- Completed applicable **Project Interconnection Data Request ~~worksheet~~worksheets** for the proposed technology and **project single line diagram(s)**. ~~Models~~**Note that three line diagram(s), models** for equipment and controls, list(s) identifying components and respective files (for inverters and power plant controller), and complete documentation with instructions as specified in the Project Interconnection Data Request worksheet shall be submitted within **30 days after selection to the respective timeframesFinal Award Group** as specified in Section 5.1 of the RFP.³ (See Section 2.11.1 below)
- [For Self-Build Only] **Self-Build Option Team Certification Form**. See Appendix G Attachment 1.
- [For Self-Build Only] **Revenue Requirements Worksheets** that support the annual revenue requirements estimates shall be submitted. A starter revenue requirements template file can be requested by the Self-

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.

Build Team via email to the RFP Email Address or through the PowerAdvocate Messaging function once the RFP event opens. The revenue requirements worksheets submitted will be modified to reflect the details of the Project's Proposal. All assumptions used will be reflected in an assumptions input tab.

2.2 PROPOSAL SUMMARY/CONTACT INFORMATION

2.2.1 Provide a **primary point of contact** for the Proposal being submitted:

- Name
- Title
- Mailing Address
- Phone Number
- Email Address - this will be the official communication address used during the RFP process

2.2.2 **Executive Summary of Proposal.** The executive summary must include an approach and description of the important elements of the Proposal.

2.2.3 **Pricing information.** Pricing information must be filled out in the Section 2.0 Proposal Summary Table above. 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:

- Installed nameplate capacity (MW_{AC} and MW_{DC}) (see section 2.0 for definition)
- Net nameplate capacity of the Facility at the Point of Interconnection (MW_{AC}) (see section 2.0 for definition)
- Technology Type
- Number of Generators
- Rated Output and Type of each Generator (PV modules, BESS modules, and inverters)
- Generator Facility Design Characteristics
- Facility SCADA and control systems: Describe the SCADA and control system utilized for facility monitoring and control

For paired storage component:

- Technology Type (i.e. lithium ion battery)
- Interconnection type (AC or DC)
- Maximum Rated Output, as defined in the applicable contract (MW)
- Discharge Duration at Maximum Rated Output (hours)
- BESS energy capacity (MWh); minimum of 4 times the net nameplate capacity
- Operational Limitations, such as, but not limited to: grid charging limits (with respect to ITC), energy throughput limits (daily, monthly, annually), State of Charge restrictions (min/max SOC while at rest (not charging/discharging)), etc. Proposed Operational Limits cannot be in conflict with the energy discharge requirement in Sections 1.2.10 and 1.2.11 of the RFP. If such a conflict is identified, the Proposal may be disqualified.
- Round Trip Efficiency ("RTE") Specify a single value (percentage) that the Facility is required to maintain throughout the term of the applicable contract. The RTE must consider and reflect:

- the technical requirements of the Facility (as further set forth in the applicable contract);
- that the measurement location of charging and discharged energy is at the point of interconnection;
- electrical losses associated with the point of interconnection measurement location;
- any auxiliary and station loads that need to be served by BESS energy during charge and discharge that may not be done at Maximum Rated Output or over a fixed duration; and
- that the data used to validate the RTE will be captured during a full charge cycle (0%-100% SOC) directly followed by a full discharge cycle (100%-0% SOC).
- Describe any augmentation plans for the storage component to maintain the functionality and characteristics of the storage during the term of the applicable contract. Include any expected interval of augmentation (months/years).
- Estimated useful life of the storage component (including augmentation if used) (years).

2.3 FINANCIAL

Provide the following financial information identified below. As specified in the General Instructions in Section 1.0 above, all information (including attachments) must be provided in English, be provided in U.S. Dollars and use U. S. credit ratings.

2.3.1 Identification of Equity Participants

2.3.1.1 Who are the **equity participants** in the Project (or the equity partners' other partners)?

2.3.1.2 Provide an **organizational structure** for the Proposer including any general and limited partners and providers of capital that identifies:

- Associated responsibilities from a financial and legal perspective
- Percentage interest of each party

2.3.2 Project Financing

2.3.2.1 **How will the Project be financed** (including construction and term financing)? Address at a minimum:

- The Project's projected financial structure
- Expected source of debt and equity financing

2.3.2.2 [For IPP and Affiliate Proposals] Identify all **estimated development and capital costs** for, at a minimum:

- Equipment
 - Identify the manufacturer and model number for all major equipment
- Construction
- Engineering
- Seller-Owned Interconnection Facilities
- Company-Owned Interconnection Facilities
- Land
- Annual O&M

- Specify a percentage of the total project cost that is estimated to be attributed to the storage functionality of the Facility. As the storage functionality is treated as a lease, the Company will use the percentage for its preliminary calculation of the lease liability only. This percentage requested for the Company's accounting purposes does not affect nor alter the liquidated damage provisions of the PPA, as those provisions reflect the benefit the Company seeks from the Project's storage functionality.

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

- Facility (including any generation and storage components)
- Outside Services
- Interconnection
- Overhead Costs
- Allowance for Funds Used During Construction
- Annual O&M
- Specify a percentage of the total project cost that is estimated to be attributed to the storage functionality of the Facility. As the storage functionality is treated as a lease, the Company will use the percentage for its preliminary calculation of the lease liability only. This percentage requested for the Company's accounting purposes does not affect nor alter the liquidated damage provisions of the RDG PPA, as those provisions reflect the benefit the Company seeks from the Project's storage functionality.

2.3.2.3 Discuss and/or provide **supporting information on any project financing guarantees**.

2.3.2.4 Describe any **written commitments obtained from the equity participants**.

2.3.2.5 Describe any **conditions precedent to project financing**, and the Proposer's plan to address them, other than execution of the Power Purchase Agreement or any other applicable project agreements and State of Hawai'i Public Utilities Commission approval of the Power Purchase Agreement and other agreements.

2.3.2.6 Provide any **additional evidence to demonstrate that the Project is financeable**.

2.3.3 Project Financing Experience of the Proposer

Describe **the project financing experience of the Proposer** in securing financing for projects of a similar size (i.e., no less than two-thirds the size) and technology as the one being proposed including the following information for any referenced projects:

- Project Name
- Project Technology
- Project Size
- Location
- Date of Construction and Permanent Financing
- Commercial Operations Date
- Proposer's Role in Financing of the Project
- Off-taker

- Term of the Interconnection Agreement
- Financing Structure
- Major Pricing Terms
- Name(s) of Finance Team Member(s); Time (i.e., years, months) worked on the project and Role/Responsibilities

2.3.4 Evidence of the Proposer's Financial Strength

2.3.4.1 Provide **copies of the Proposer's audited financial statements** (balance sheet, income statement, and statement of cash flows):

- Legal Entity
 - Three (3) most recent fiscal years
 - Quarterly report for the most recent quarter ended
- Parent Company
 - Three (3) most recent fiscal years
 - Quarterly report for the most recent quarter ended

2.3.4.2 Provide the **current credit ratings** for the Proposer (or Parent Company, if not available for Proposer), affiliates, partners, and credit support provider:

- Standard & Poor's
- Moody's
- Fitch

2.3.4.3 Describe any **current credit issues** regarding the Proposer or affiliate entities raised by rating agencies, banks, or accounting firms.

2.3.4.4 Provide any **additional evidence that the Proposer has the financial resources and financial strength** to complete and operate the Project as proposed.

2.3.5 Provide evidence that the Proposer can provide the required securities

2.3.5.1 Describe the Proposer's **ability (and/or the ability of its credit support provider) and proposed plans to provide the required securities** including:

- Irrevocable standby letter of credit
- Sources of security
- Description of its credit support provider

2.3.6 Disclosure of Litigation and Disputes

Disclose any **litigation, disputes, and the status of any lawsuits or dispute resolution** related to projects owned or managed by the Proposer or any of its affiliates.

2.3.7 State to the best of the Proposer's knowledge: Will the Project result in **consolidation** of the Developer entity's finances onto the Company's financial statements under FASB 810. **Provide supporting information** to allow the Company to verify such conclusion.

2.4 CONTRACT EXCEPTIONS AND FINANCIAL COMPLIANCE

2.4.1 If Proposers elect to propose modifications to the RDG PPA, **provide a Microsoft Word red-line version of the RDG PPA** identifying specific proposed modifications to the model language that the Proposer is agreeable to and a detailed explanation and supporting rationale for each modification. General comments, drafting notes, and footnotes such as “parties to discuss” are unacceptable and will be considered non-responsive.

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

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

2.5 PŪLAMA SITE INFORMATION

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

- Proposed location of all equipment
- Proposed location of all facilities on the Pūlama Site, including any proposed line extensions
- Site boundaries (if the proposed Project does not cover the entire Pūlama Site)

2.5.2 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)
- Description of the rationale for the interconnection route

2.6 ENVIRONMENTAL COMPLIANCE AND PERMITTING PLAN

Scoring of proposals for the non-price evaluation criteria of this section will be based on the completeness and thoroughness of responses to each of the criteria listed below. The Company recommends that each Proposal incorporate the list below as an outline together with complete and thorough responses to each item in the list. Proposals that closely follow this recommendation will typically be awarded higher scores than proposals that do not.

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

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

2.6.2 Discuss the **city zoning and state land use classification**:

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

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

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

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

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

- Natural Environment
 - Air quality
 - Biology (Natural habitats and ecosystems, flora/fauna/vegetation, and animals, especially if threatened or endangered)
 - Climate
 - Soils
 - Topography and geology
- Land Regulation
 - Land Uses, including any land use restrictions and/or pre-existing environmental conditions/contamination
 - Flood and tsunami hazards
 - Noise
 - Roadways and Road and Air Traffic
 - Utilities
- Socio-Economic Characteristics
- Aesthetic/Visual Resources and Impact
- Solid Waste

- Hazardous Materials
- Water Quality
- Public Safety Services (Police, Fire, Emergency Medical Services)
- Recreation
- Potential Cumulative and Secondary Impacts

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

- Developing and implementing program for recycling to the fullest extent possible, or otherwise properly disposing of installed infrastructure, if any, and
- Demonstrating how restoration of the Site to its original ecological condition is guaranteed in the event of default by the Proposer in the applicable Site Control documentation.

2.7 CULTURAL RESOURCE IMPACTS

2.7.1 Provide a **proposal to ensure cultural sites are identified and carefully protected** as part of a cultural impact plan as it pertains to the Project Site and interconnection route. This proposal must include at a minimum:

- An initial analysis that identifies:
 - 1) valued cultural, historical, or natural resources in the area in question, including the extent to which traditional and customary native Hawaiian rights are exercised in the area;
 - 2) the extent to which those resources – including traditional and customary native Hawaiian rights – will be affected or impaired by the proposed action; and
 - 3) the feasible action, if any, to be taken to reasonably protect any identified cultural, historical, or natural resources in the area in question, and the reasonable protection of traditional and customary native Hawaiian rights in the affected area.
- Proposer’s experience with cultural resource impacts on past projects
- Consultant’s experience with cultural resource impacts on past projects (name, firm, relevant experience)
- Status of the cultural impact plan (including, but not limited to: Cultural Impact Assessment, Cultural Landscape Study, Cultural Resource Management Plan, Ethnographic Survey, Consultation on Section 106 Process, and/or Traditional Cultural Property Studies)

2.8 COMMUNITY OUTREACH

Gaining community support is an important part of a Project’s viability and success. An effective Community Outreach Plan will call for early meaningful communications with stakeholders and will reflect a deep understanding and respect for the community’s desire for information. The public meeting and comment solicitation process described in Section 5.3 of the RFP is intended to support that premise and the Commission’s desire to increase bid transparency within the RFP process. When developers neglect to demonstrate transparency and a willingness to engage in early and frequent communication with Hawaii’s communities, costly and timely challenges to their projects have resulted. In some instances, projects have failed. Incorporating transparency during the competitive bidding phase may seem unconventional, but it has become an essential community expectation. Developers must share information and work with communities to address concerns through careful listening, thoughtful responsiveness, and a commitment to respect the environmental and cultural values of Hawai‘i.

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

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

Proposers are reminded of RFP Section 3.4.2 including Proposals must provide all referenced material if it is to be considered during the Proposal evaluation.

2.8.2 Provide any **documentation of local community support or opposition** including any letters from local organizations, newspaper articles, or communications from local officials.

2.8.3 Provide a **description of community outreach efforts** already taken or currently underway, including the names of organizations and stakeholders contacted about the proposed Project.

2.8.4 Describe any anticipated or negotiated investment in the community and other **community benefits** that the Proposer proposes to provide in connection with the Project, along with an estimated value of the community benefits in dollars (including the cost to Proposers providing the benefits and supporting details on how those costs and benefits were derived).

2.8.5 Proposer selected to the Final Award Group must display the below table of information on their website described in Section 5.3 of the RFP to provide communities Project information that is of interest to them in a standard format. All information in this table must be included in all community presentations in addition to the Proposer’s project website.

PROJECT SUMMARY AND COMMUNITY OUTREACH PLAN

*	Proposer Name (Company name)	
*	Parent Company/Owner/Sponsor/Business Affiliate/etc.	
*	Project Name	
*	Net nameplate capacity (MW)	

	(must match Proposal information)	
*	Proposed Facility Location, Street Address if available, or what City/Area on the island it is near	
*	TMK(s) of Facility Location (must match Proposal information)	
*	Point of Interconnection's Circuit (must match Proposal information)	
*	Project Description (in 200 words or less)	<i>(A description that includes information about the project that will enable the community to understand the impact that the Project might have on the community.)</i>
*	Project site map	<i>(provide a map similar to what was provided in Section 2.5.2)</i>
*	Site layout plan	<i>(provide a layout similar to what was provided in Section 2.5.3)</i>
*	Interconnection route	<i>(provide a map of the route similar to what was provided in Section 2.5.4)</i>
Environmental Compliance and Permitting Plan		
*	Overall land use and environmental permits and approvals strategy	<i>(provide information in level of detail as provided in Section 2.6.1)</i>
*	Gantt format schedule which identifies the sequencing of permit applications and approval activities and critical path. Schedule must be in MM/DD/YY format)	<i>(provide information in level of detail as provided in Section 2.6.1)</i>
*	City Zoning and Land Use Classification	<i>(provide information in level of detail as provided in Section 2.6.2)</i>
*	Discretionary and non-discretionary Land use, environmental and construction permits and approvals	<i>(provide information in level of detail as provided in Section 2.6.3)</i>
*	Listing of Permits and approvals	<i>(provide information in level of detail as provided in Section 2.6.3)</i>
*	Preliminary environmental assessment of the Site (including any pre-existing environmental conditions)	<i>(provide information in level of detail as provided in Section 2.6.4)</i>
Cultural Resource Impacts		
*	Proposer's updated Community Outreach Plan must include a plan that (1) identifies any cultural, historic or natural resources that will be impacted by the Project (2) describes the potential impacts on these	<i>(provide information in level of detail as provided in Section 2.7)</i>

	resources and (3) identifies measures to mitigate such impacts.	
Community Outreach		
*	Detailed Community Outreach Plan	<i>(provide key information from Community Outreach Plan as specified in Section 2.8.1 or provide a link to updated comprehensive Community Outreach Plan)</i>
*	Local community support or opposition	<i>(provide latest comprehensive information)</i>
*	Community outreach efforts	<i>(provide latest comprehensive information)</i>
*	Community benefits	<i>(provide latest comprehensive information)</i>

2.9 OPERATIONS AND MAINTENANCE (O&M)

2.9.1 To demonstrate the long-term operational viability of the proposed Project, describe the **planned operations and maintenance**, including:

- Operations and maintenance funding levels, annually, throughout the term of the contract.
- Description of the operational requirements by frequency (daily, weekly, monthly, yearly, as-necessary, run hour interval) and maintenance requirements by frequency (daily, weekly, monthly, yearly, as-necessary, run hour interval).
- A discussion of the staffing levels proposed for the Project and location of such staff. If such staff is offsite, describe response time and ability to control the Project remotely.
- Technology specific maintenance experience records.
- Identification of any O&M providers.
- The expected role of the Proposer (Owner) or outside contractor.
- Scheduling of major maintenance activity.
- Plan for testing equipment.
- Estimated life of Generation and/or Storage Facilities and associated Interconnection Facilities.
- Safety plan, including historical safety records with environmental history records, violations, and compliance plans.
- Security plan.
- Site maintenance plan.
- Substation equipment maintenance plan.

2.9.2 State whether the Proposer would **consider 24-hour staffing**. Explain how this would be done.

2.9.3 Describe the **Proposer’s contingency plan**, including the Proposer’s mitigation plans to address failures. Such information should be described in the Proposal to demonstrate the Project’s reliability with regard to potential operational issues.

2.9.4 Describe if the Proposer will **coordinate their maintenance schedule** for the Project with the Company’s annual planned generation maintenance. See Article 5 of the 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.

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 NEP RFP Projection.

2.10.1.2 Provide the **sample rate of critical telemetry** (i.e., frequency and voltage) based on inputs to the facility control systems.

2.10.1.3 Provide a description of the Facility's **capability to be grid-forming and have black-start capability**.

2.10.1.4 Provide the explanation of the methodology and underlying **information used to derive the Project's NEP RFP Projection**, including the preliminary design of the Facility and the typical meteorological year file used to estimate the Renewable Resource Baseline, as required in Article 6.6 of the RDG PPA. The explanation of the methodology should include, but not be limited to, the long-term resource data used, the gross and net generation MWh, and assumptions (loss factors, uncertainty values, any grid or project constraints).2.10.2 **Capability of Meeting Performance Standards**. The proposed Facility must meet the performance attributes identified in Section 2.1 of the RFP. Provide **confirmation that the proposed Facility will meet the requirements identified** or provide clarification or comments about the Facility's ability to meet the performance standards. Proposals should include sufficient documentation to support the stated claim that the Facility will be able to meet the Performance Standards. The Proposal should include information required to make such a determination in an organized manner to ensure this evaluation can be completed within the evaluation review period.

2.10.3 **Reactive Power Control**: Provide the facility's **ability to meet the Reactive Power Control capabilities**, including Voltage Regulation at the point of interconnection, required in the Performance Standards, including contribution from the inverters of generation and/or storage and means of coordinating

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.

the response. Provide the inverter capability curve(s). Confirm ability to provide reactive power at zero active power.

2.10.4 **Ramp Rate** for Generation Facilities: Confirm the ability to meet the ramp rate requirement specified in the RDG PPA.

2.10.5 **Undervoltage ride-through:** Provide the facility's terminal voltage level(s) and elapsed time at which the facility will disconnect from the utility system during the disturbance, if any. Confirm the ability to meet ride-through requirements and include supporting documentation regarding inverter design, control parameters, etc.

2.10.6 **Overvoltage ride-through:** Provide the facility's terminal voltage level(s) and elapsed time at which the facility will disconnect from the utility system during the disturbance, if any. Confirm the ability to meet ride-through requirements and include supporting documentation regarding inverter design, control parameters, etc.

2.10.7 **Transient stability ride-through:** Provide the facility's ability to stay online during Company System: (1) three-phase fault located anywhere on the Company System and lasting up to __ cycles; and (2) a single line to ground fault located anywhere on the Company System and lasting up to __ cycles. Provide the Facility's ability to withstand subsequent events.

2.10.8 **Underfrequency ride-through:** Provide the facility's terminal frequency level(s) and elapsed time at which the facility will disconnect from the utility system during the disturbance, if any. Confirm the ability to meet ride-through requirements and include supporting documentation regarding inverter design, control parameters, etc.

2.10.9 **Overfrequency ride-through:** Provide the facility's terminal frequency level(s) and elapsed time at which the facility will disconnect from the utility system during the disturbance, if any. Confirm the ability to meet ride-through requirements and include supporting documentation regarding inverter design, control parameters, etc.

2.10.10 **Frequency Response:** Provide the facility's frequency response characteristics as required by the RDG PPA, 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:** Provide additional performance standard descriptions as follows:

- MWh storage output for a full year
- Ramp Rate: Provide the Facility's ramp rate, which should be no more than 2 MW/minute for all conditions other than those under control of the Company System Operator and/or those due to desired frequency response.
- System Response Time – Idle to Design Maximum (minutes)
- Discharge Start-up time (minutes from notification)
- Charge Start-up time (minutes from notification)
- Start and run-time limitations, if any
- Ancillary Services provided, if any (i.e., Spinning Reserves, Non-Spinning Reserves, Regulation Up, Regulation Down, Black Start capability, other)

2.10.17 Provide the description and details of the **grid-charging capabilities of the Facility**. Include a description on the ability to control the charging source.

2.11 INTERCONNECTION SUBMITTAL REQUIREMENTS

2.11.1 A summary of the model requirements and impact study scope can be found in Appx B Att 6 from the "1. Download Documents" tab.

2.11.2 Provide the completed **Project Interconnection Requirement Study Data Request worksheet** for the proposed technology with the Proposal submission. (The form can be found in the "1. Download Documents" tab as Appx B Att 2 Project Interconnection Data Request Worksheet (PV Generation) MS Excel file.) Also provide all **project single line diagram(s)** with the Proposal submission. **Models**

Project three line diagram(s), models for equipment and controls, list(s) identifying components and respective files (for inverters and power plant controller), and **complete documentation with instructions** shall be submitted within the timeframes specified in Section 5.1 of the RFP, 30 days after selection of a Final Award Group as specified in Section 5.1 of the RFP. Preparation of the models, documentation, and related information may take longer than 30 days, and Proposers shall allow adequate time for this submittal

requirement. Proposers may also download the PSCAD model requirements memo labelled as Appx B Att 3 from the “1. Download Documents” tab.

2.12 PROVEN TECHNOLOGY

2.12.1 Provide all supporting information for the Company to assess the **commercial and financial maturity of the technology** being proposed. Provide any supporting documentation that shows examples of projects that:

- Use the technology at the scale being proposed
- Have successfully reached commercial operations (for example, by submitting a PPA)
- Demonstrate experience in providing Active Power dispatch

2.13 EXPERIENCE AND QUALIFICATIONS

Proposers, its affiliated companies, partners, and/or contractors and consultants are required to demonstrate project experience and management capability to successfully develop and operate the proposed Project.

2.13.1 Provide a hierarchical **organizational / management chart** for the Project that lists all key personnel and project participants dedicated to this Project and that identifies the management structure and responsibilities. In addition to the chart, Proposers must provide biographies / resumes of the key personnel, including position, years of relevant experience and similar project experience. Proposers must provide specifics as they relate to financing of renewable energy projects. Identify architects and engineers or provision to provide same that are licensed to practice in the State of Hawaii. Providers must also provide a completed table:

- For each of the project participants (including the Proposer, partners, and proposed contractors), fill out the table below and provide statements that list the specific experience of the individual in: financing, designing, constructing, interconnecting, owning, operating, and maintaining renewable energy generating or storage facilities, or other projects of similar size and technology, and
- Provide any evidence that the project participants have worked jointly on other projects.

EXPERIENCE:							
In the applicable columns below, include project details (i.e., project name, location, technology, size) and relevant job duties (role/responsibilities) and time (in years/months) spent on the project. List multiple projects if applicable.							
Participant Name:	Financing	Designing	Constructing	Interconnecting	Owning	Operating	Maintaining
1.							
2.							
3.							
...							

2.13.2 Identify those **member(s) of the team** the Proposer is submitting to meet the experience and qualifications requirement, including the Threshold Requirement. Identify those **members of the team with experience and qualifications**, including affiliates, and their principal personnel who will be involved in the

project. If the Proposer consists of multiple parties, such as joint ventures or partnerships, demonstrate each member(s) firm commitment to provide services to the project (e.g., letter of intent); provide this information for each party, clearly indicating the proposed role of each party, including an ownership chart indicating direct and indirect ownership, and percentage interests in the partnership or joint venture.

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

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

2.14 STATE OF PROJECT DEVELOPMENT AND SCHEDULE

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

- The **schedule** must include:
 - Interconnection Requirement Study (IRS) assumptions
 - Anticipated contract negotiation period assumptions
 - Regulatory assumptions
 - Anticipated submittal and approval dates for permitting (including but not limited to environmental and archaeological compliance)
 - 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 RDG PPA
 - Testing
 - Interconnection (including engineering, procurement, and construction)
 - Commercial Operations Date
 - All other important elements outside of the direct construction of the Project
- For each project element, list the start and end date (must be in MM/DD/YY format), and include predecessors to clearly illustrate schedule dependencies and durations.
- Proposers must also list and describe critical path activities and milestone events, particularly as they relate to the integration and coordination of the project components and the Company’s

Electric System. Proposers must ensure that the schedule provided in this section is consistent with the milestone events contained in the RDG PPA 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.

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:

- Financing Options
 - Subscriber fees and payments
 - Upfront payments
 - Ongoing payments
 - Public funding options
 - Extent to which subscribers will be financially responsible for any facility underperformance
- Percentage of the project's capacity that will be available to subscribers vs. unsubscribed capacity
 - Commitments to residential Subscribers
 - Commitments to Low- and Moderate- Income Customers ("LMI Customers")
- Marketing or outreach plans to advertise the proposed project/program to LMI (if applicable) and non-LMI eligible customers
- Strategies for LMI (if applicable) and non-LMI customer retention and maintaining LMI (if applicable) and non-LMI customer participation levels
- Estimated benefits to LMI (if applicable) and non-LMI customer participants
 - Expected savings
 - Payback periods
 - Payback mechanisms
 - Other benefits
- Prior experience, specifically relating to community-based renewable energy projects
- Plans for CBRE program administration

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.

Updated from 8/25/21 Filing. Redline not included.

Project Interconnection - Data Request

FOR PV/BESS GENERATION

PROJECT: _____

DATE: _____

(Nonexclusive Preliminary List)

ALL ITEMS ARE REQUIRED AND ALL RESPONSES MUST BE FILLED UNLESS NOT APPLICABLE.

	Response
1) Please provide a plan map of the Renewable Generation facility. Please indicate the interconnection point to the HECO system.	
2) Please provide the following generation and load information for the Renewable Generation 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.	

**Project Interconnection - Data Request
FOR PV/BESS GENERATION**

PROJECT: _____

DATE: _____

(Nonexclusive Preliminary List)

ALL ITEMS ARE REQUIRED AND ALL RESPONSES MUST BE FILLED UNLESS NOT APPLICABLE.

	Response
4) For the PV Inverter Based Generating Facility, please provide the following data, as applicable:	
a. Inverter manufacturer, Type, Size, Impedances. Attach copy of inverter data sheet.	
b. Power Factor Range Capability	
c. Inverter Reactive Power Capability Curve	
d. Auxillary loads (P, Q, Power Factor)	
e. Inverter's Internal Isolation Transformer Grounding Method, if used (i.e. effectively grounded, resonant grounded, low inductance grounded, high-resistance grounded, low-resistance grounded, ungrounded). If the transformer is not solidly grounded, provide the impedance value for the grounding neutral and the impedance for the isolation transformer.	
f. Diagram for Inverter's internal isolation transformer	
g. Switching and service restoration practice	
h. Protection data (voltage ride-through and trip settings, frequency ride-through and trip settings etc.). Include setpoint and clearing time ranges for voltage and frequency settings.	
i. Description of harmonic spectrum of inverter injection (order, magnitude)	
5) For the BESS Inverter Based Generating Facility, please provide the following data (if system is DC coupled, please note DC coupling and reference to 4).	
a. Inverter manufacturer, Type, Size, Impedances. Attach copy of inverter data sheet.	
b. Power Factor Range Capability	
c. Inverter Reactive Power Capability Curve	
d. Auxillary loads (P, Q, Power Factor)	
e. Inverter's Internal Isolation Transformer Grounding Method, if used (i.e. effectively grounded, resonant grounded, low inductance grounded, high-resistance grounded, low-resistance grounded, ungrounded). If the transformer is not solidly grounded, provide the impedance value for the grounding neutral and the impedance for the isolation transformer.	
f. Diagram for Inverter's internal isolation transformer	
g. Switching and service restoration practice	
h. Protection data (voltage ride-through and trip settings, frequency ride-through and trip settings etc.). Include setpoint and clearing time ranges for voltage and frequency settings.	
i. Description of harmonic spectrum of inverter injection (order, magnitude)	
6) 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	
7) 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.	

**Project Interconnection - Data Request
FOR PV/BESS GENERATION**

PROJECT: _____

DATE: _____

(Nonexclusive Preliminary List)

ALL ITEMS ARE REQUIRED AND ALL RESPONSES MUST BE FILLED UNLESS NOT APPLICABLE.

		Response
8)	<p>For the BESS plant's collector system, please provide the following, as applicable (if system is DC coupled, please note DC coupling and reference to 7):</p> <p>a. Conductor data such as size, insulation, etc.</p> <p>b. Continuous and emergency current ratings.</p> <p>c. Voltage rating (nominal and maximum kV).</p> <p>d. BIL rating.</p> <p>e. Positive, negative, and zero-sequence impedances (resistance, reactance, and susceptance).</p> <p>f. Capacitance or charging current.</p> <p>g. Short-circuit current capability.</p>	
9)	<p>Please provide the following software models that accurately represent the Facility, as applicable: (For model requirements, refer to the HECO Facility Technical Model Requirements and Review Process)</p> <p>a. Validated PSS/E load flow model up to the point of interconnection. The PSS/E model shall include the main transformer, collection system, generator step-up transformers, inverter systems, and any other components including capacitor banks, energy storage systems, DVAR, etc. An equivalent representation of the collection system, generator step-up transformers, and inverter systems is acceptable. Documentation on the model shall be provided.</p> <p>b. Validated PSS/E dynamic model for the inverter; and other components including energy storage system, DVAR, etc. if applicable. The inverter model shall include the generator/converter, electrical controls, plant-level controller, and protection relays. Generic and Detailed models shall be provided. Documentation on the model(s) shall be provided, including the PSS/E dyre file with model parameters.</p> <p>i. Generic models shall parameterize models available within the PSS/E standard model library.</p> <p>ii. Detailed models shall be supplied by the vendor/manufacturer as user-written models. The uncompiled source code for the user-written model shall be provided to ensure compatibility with future versions of PSS/E. In lieu of the uncompiled source code, a compiled object file and applicable library files shall be provided in PSS/E versions 33 AND 34 format. Updates of the object file compatible with future PSS/E versions must be provided as requested for the life of the project as written in the power purchase agreement. Documentation shall include the characteristics of the model, including block diagrams, values, names for all model parameters, and a list of all state variables.</p> <p>c. Validated PSCAD model of the inverter; and other components including energy storage system, DVAR, auxiliary plant controllers, etc. if applicable. Documentation on the model(s) shall be provided. Refer to PSCAD Model Requirements Memo for model requirements.</p> <p>d. Overlaid plots validating the performance of the three dynamic models for a three-phase fault. Plots shall include voltage, real and reactive power, real and reactive current.</p> <p>e. Validated Aspen Oneliner short circuit model that accurately represents the facility (including energy storage system if applicable), and is valid for all faults conditions anywhere on the Utility system. Documentation on the model(s) shall be provided. (OTHERWISE SEE ADDITIONAL TABS FOR REQUIRED INFORMATION TO MODEL INVERTER AS A GENERATOR OR A VOLTAGE CONTROLLED CURRENT SOURCE)</p>	
10)	<p>For the main transformer and generator step-up transformers, please provide:</p> <p>a. Transformer voltage and MVA ratings, and available taps. Attach copy of transformer test report or data sheet</p> <p>b. The tap settings used.</p> <p>c. The LTC Control Scheme.</p> <p>d. Transformer winding connections and grounding used. If the transformer is not solidly grounded, provide the impedance value for the grounding method.</p> <p>e. Positive, negative, and zero sequence impedance values.</p>	

Project Interconnection - Data Request

FOR PV/BESS GENERATION

PROJECT: _____

DATE: _____

(Nonexclusive Preliminary List)

ALL ITEMS ARE REQUIRED AND ALL RESPONSES MUST BE FILLED UNLESS NOT APPLICABLE.

		Response
11)	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).	
12)	For the power fuses, please provide: a. The manufacturer, type, size, and interrupting capability. b. The minimum melt and total clearing curves.	
13)	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.	

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= 0.25 MVA

Impedances (pu based on unit MVA)

Subtransient	<input type="text"/> 0.	+j	<input type="text"/> 0.1	Fill
Transient	<input type="text"/> 0.	+j	<input type="text"/> 0.1	
Synchronous	<input type="text"/> 0.	+j	<input type="text"/> 0.1	
- sequence	<input type="text"/> 0.	+j	<input type="text"/> 0.15	
o sequence	<input type="text"/> 0.	+j	<input type="text"/> 9999.	

Neutral Impedance (in actual Ohms)

<input type="text"/> 0.	+j	<input type="text"/> 0.
-------------------------	----	-------------------------

Scheduled generation. Enter MVAR for PQ buses only

MW= 0. MVAR= 0.

P and Q limits (MW and MVAR)

Pmax=	<input type="text"/> 9999.	Qmax=	<input type="text"/> 9999.
Pmin=	<input type="text"/> -9999.	Qmin=	<input type="text"/> -9999.

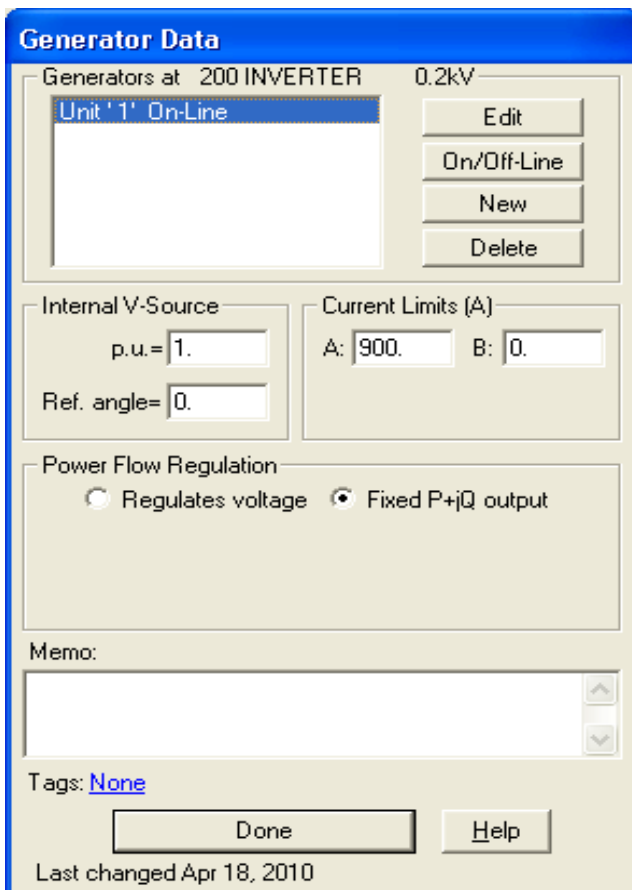
OK Cancel Help

Instructions:
Please fill in the data in the green blanks below

- [1] Internal open circuit voltage
Magnitude = Per Unit
Angle = Degrees
- [2] AC Output Current Limit = Amps

NOTE: These parameters should reflect the inverter response for all types of faults at any point on the electrical system to which the inverter is connected. This includes faults at the inverter output terminals, and also on the 138 kV transmission system. If the stated parameters do not cover this range, please state the adjustments needed to these parameters to accurately represent the inverter response across this range.

These parameters will be used to model the inverter in the Aspen Oneliner program as shown in the sample dialog box below:



Instructions:

Please fill in the data in the green blanks below

[1] Inverter MVA Rating: MVA

[2] Voltage-Current Characteristics:

Voltage PU	Current (A)	PF Angle (deg)
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

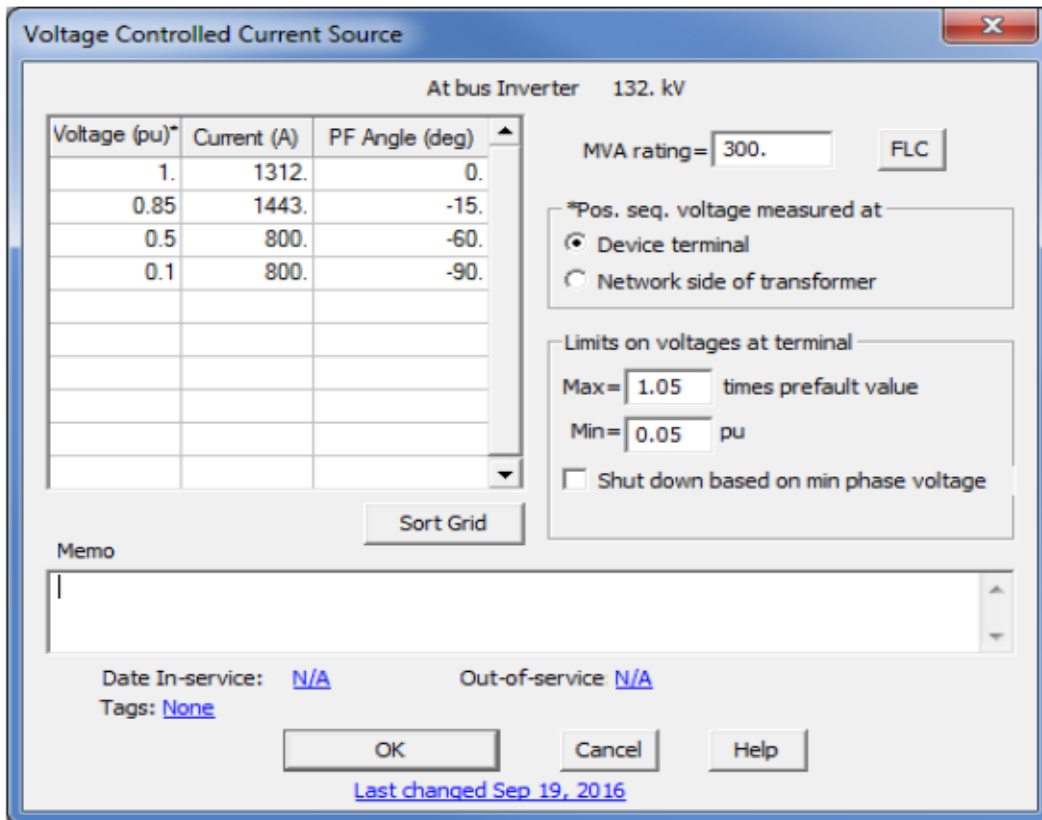
[3] Location of Voltage Measurement:

Device Terminal OR
 Network side of Transformer

[4] Maximum Voltage: Times prefault value

[5] Minimum Voltage Per Unit

These parameters will be used to model the inverter in the Aspen Oneliner program as shown in the sample dialog box below:



Instructions:

Please fill in the data in the green blanks below

(Note: This is not required if an internal isolation transformer is not used)

[1] Transformer rated power = kVA

[2] Winding Configuration
 Inverter Side = Delta/Wye
 Customer Side = Delta/Wye

[2] Impedances in **Per Unit** based on kVA
 Positive Sequence =

R	X

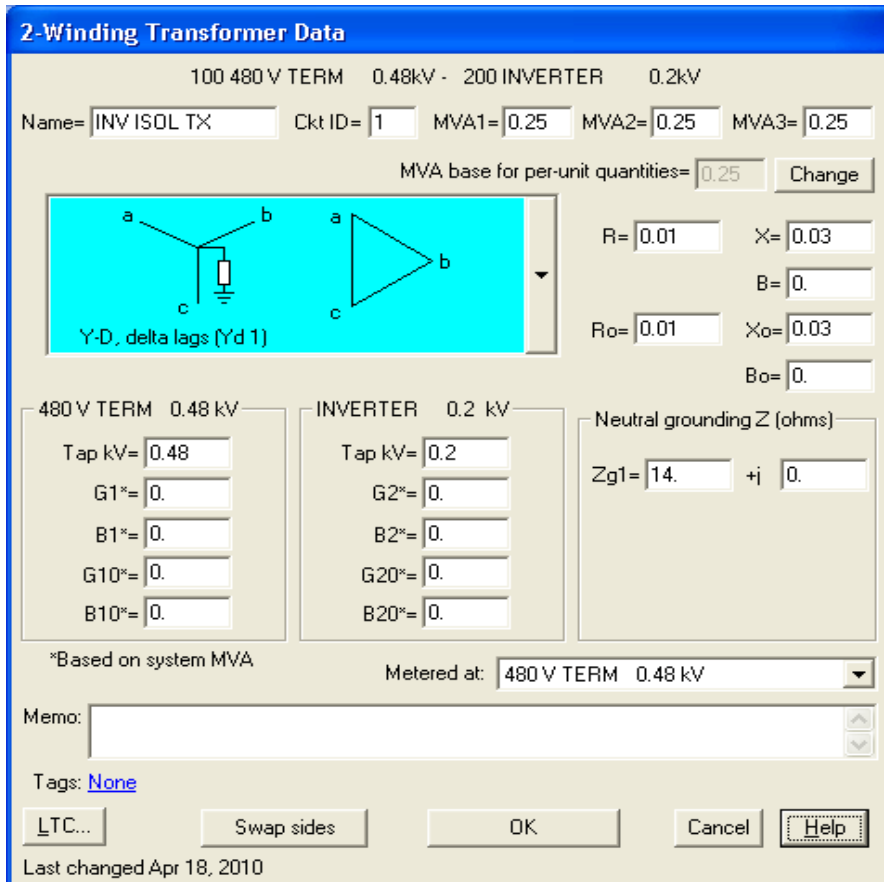
 Zero Sequence =

--

[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:



DRAFT

REQUEST FOR PROPOSALS

FOR

VARIABLE RENEWABLE DISPATCHABLE GENERATION

PAIRED WITH ENERGY STORAGE

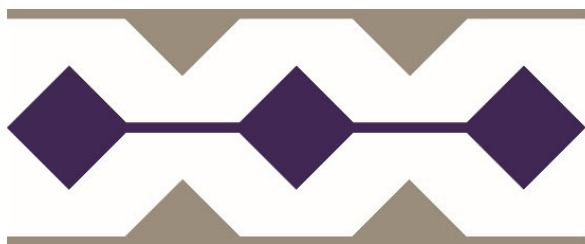
AND COMMUNITY-BASED RENEWABLE ENERGY

ISLAND OF LĀNA‘I

~~AUGUST 25~~NOVEMBER 4, 2021

Docket No. 2015-0389

Appendix F – Description of the Pūlama Site



**Maui
Electric**

**APPENDIX F
VARIABLE RENEWABLE DISPATCHABLE GENERATION
DESCRIPTION OF THE PŪLAMA SITE**

Pūlama Site

All proposals submitted in response to this RFP must be sited at the Pūlama Site which is an undeveloped site located adjacent to Miki Road, less than 1 mile from the airport. The site is adjacent to the Company's Miki Basin Plant allowing for strategic interconnection to the switchyard. A map of the available area is included as Attachment 1 to this Appendix F. A draft copy of the proposed form of the lease and lease term sheet are included as Attachment 2 and Attachment 3, respectively, to this Appendix F. The terms of the lease will be negotiable with the landowner, Pūlama Lāna'i. For information regarding the lease, Proposers may contact Keiki-Pua Dancil at kdancil@pulamalanai.com.

Proposers must include the cost for interconnecting into the switchyard in their Proposals.

Additional Information

Pūlama Lāna'i commissioned an Environmental Assessment (EA) of the Pūlama Site in compliance with HRS Chapter 343. Information on the EA is provided for use at Proposer's sole discretion 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/>

Additionally, the following links to a few publicly available resources relating to renewable energy project permitting and collaboration from the Hawaii State Energy Office are being provided for use at Proposers' sole discretion:

Project Permitting Assistance and Resources

<http://energy.hawaii.gov/developer-investor/project-permitting-assistance-and-resources>

Provides numerous resources to support more informed and appropriate project siting and permitting, including the Permit Guide, Renewable Energy Permitting Consultants, DOH, ePermitting Portal, Renewable EnerGIS, Permitting Wizard, and the Renewable Energy Projects Directory.

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 Hawaii.

Reports Prepared for Nearby Site

Two reports that were completed in 2019 in support of the Stage 2 Lana‘i RFP (which was not ultimately released) will be made available upon request to interested developers. One report is a Preliminary Subsurface Investigation, and the other is an Archaeological Literature Review and Field Inspection Report. Proposers should note that the Stage 2 Lana‘i RFP was planned for a different location near the Pulama Site identified in this Lana‘i CBRE RFP and therefore the information in these reports are not necessarily indicative of the conditions at the Pulama Site.

Please note, that any party requesting these documents must have an executed CBRE NDA with the Company, as these reports will be provided pursuant to the terms of conditions of that NDA. Requests for these reports should be sent to LanaiCompetitiveBidding@hawaiianelectric.com.

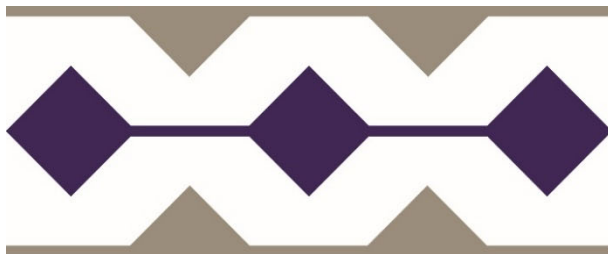
DRAFT
REQUEST FOR PROPOSALS
FOR
COMMUNITY-BASED RENEWABLE ENERGY PROJECTS

ISLAND OF LĀNA‘Ī

~~AUGUST 25~~NOVEMBER 4, 2021

Docket No. 2015-0389

*Appendix H – Interconnection Facilities Cost
and Schedule Information*



**Hawaiian
Electric**

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

CONTENTS

Section 1 – Cost Responsibilities.....	3
1.1 – Definitions.....	3
1.2 – Abbreviations.....	3
1.3 – Facilities At Proposer Site	4
1.4 – Station Power For Company Switching Station	4
1.5 – Remote Substation Facilities.....	5
1.6 – Line Extension from Grid Connection Point (GCP) To Proposer Site.....	6
1.7 – T&D System Upgrades	7
1.8 – Company-Owned Fiber.....	7
1.9 – Telecommunication Facilities.....	7
1.10 – Proposer Payments.....	8
Section 2 – Interconnection Costs.....	8
2.1 – Distribution (12kv And Below) Interconnection	9
A. Typical Distribution Primary Interconnection at Miki Basin (Attachment 1).....	9
B. Distribution Line Extension Costs.....	10
C. Typical Telecommunications Requirements for Distribution Interconnections	11
D. Security Requirements for Distribution Interconnections	11
2.2 – [Not Used].....	12
2.3 – [Not Used].....	12
2.4 – Telecommunications	12
A. Telecommunications Baseline Costs	12
2.5 – Security of Company-Owned Facilities.....	13
A. Proposer Responsibilities at Proposer Facility	13
Section 3 – [Not Used].....	14
Section 4 – Typical Company Durations for Interconnection Projects	14
4.1 – Distribution Projects (Company-Build).....	14
4.2 – [Not Used].....	15
4.3 – [Not Used].....	15
4.4 – [Not Used].....	15

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

Tariff Rule No. 19, approved by the PUC, establishes provisions for Interconnection and Transmission Upgrades (<https://www.hawaiianelectric.com/billing-and-payment/rates-and-regulations/>). The tariff provisions are intended to simplify the rules regarding who pays for, installs, owns, and operates interconnection facilities in the context of competitive bidding. Tariff Rule No. 19 will be utilized as the basis for addressing interconnection and transmission upgrades for any projects developed through this RFP. Proposers will comply with the terms and conditions as specified therein.

SECTION 1 – COST RESPONSIBILITIES

The purpose of Section 1 is to clearly define the cost responsibilities of construction, replacements, and upgrades of Company-Owned Interconnection Facilities (COIF) and existing Company-owned facilities in compliance with Tariff Rule No. 19.

1.1 – DEFINITIONS

1. **Betterment** – Any upgrading to a facility made solely for the benefit of and at the election of the Company and is not required by applicable laws, codes, Company Standards, and the interconnection requirements in accordance with Tariff Rule No. 19.
2. **Company** – Hawaiian Electric, Maui Electric, or Hawai‘i Electric Light.
3. **Company-Owned Interconnection Facilities** – The equipment and devices owned by Company between the Point of Interconnection and the Grid Connection Point that are required to permit a generating facility to operate in parallel with and deliver electric energy to Company’s system and provide reliable and safe operation of, and power quality on, Company’s system.
4. **Grid Connection Point** – The point that the new interconnection facilities associated with the Proposer’s project interconnects to the Company’s existing electrical grid.
5. **Interconnection Agreement** – The executed contract between the Company and Proposer (e.g. Power Purchase Agreement, Standard Interconnection Agreement, etc.).
6. **Point of Interconnection** – The point of delivery of energy supplied by Proposer to Company, where the Facility owned by the Proposer interconnects with the facilities owned or to be owned by the Company.
7. **Proposer** – The developer proposing a renewable project in response to a Company RFP.

1.2 – ABBREVIATIONS

1. **ADSS** – All Dielectric Self-Supporting
2. **COIF** – Company-Owned Interconnection Facilities
3. **CT** – Current Transformer
4. **DFR** – Digital Fault Recorder
5. **DTT** – Direct Transfer Trip

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

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

1.3 – FACILITIES AT PROPOSER SITE

1. Proposer shall be responsible for all costs related to COIF at the Proposer site required by any relevant Rule or Tariff, Request for Proposal, and/or the IRS. This may include, but is not limited to:
 - a. Project management, design, permitting/regulatory fees and approvals, land rights, installation labor, inspection, construction management, and testing
 - b. Site work (grading, trenching, manholes/handholes, conduits, cable trench, concrete pads/foundations, fencing, roadways/driveways, ground grid, lighting, etc.)
 - c. Substation structures, design, and configuration (i.e., breaker and a half, ring bus, etc.)
 - d. Control equipment enclosure/cabinet
 - e. Equipment (circuit breakers, transformers, relays, switches, arresters, batteries, HVAC, RTU, DFR, DTT, meters, PTs, CTs, etc.)
 - f. Telecommunication equipment (See Telecommunication Facilities section below)
 - g. Electrical work (bussing, wiring, lightning protection, fiber optic cable, etc.)
 - h. Security systems/equipment
2. Company shall be responsible for Betterment costs.

1.4 – STATION POWER FOR COMPANY SWITCHING STATION

1. Station power is required if a new Company switching station or substation is built to allow the interconnection of the Proposer's project. If station power is required, the Proposer shall be responsible for all costs related to the primary and backup station power sources. This may include, but is not limited to:
 - a. Project management, design, permitting/regulatory fees and approvals, land rights, installation labor, inspection, construction management, and testing
 - b. Overhead electrical facilities (poles, conductor, insulators, crossarms, guy wires, transformers, etc.)

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

- c. Underground electrical facilities (cables, splices, termination, grounding, transformers, switchgears, etc.)
 - d. Step-down transformer
 - e. Civil/structural work (survey, grading, trenching, conduits, manholes/handholes, concrete pads, concrete pier foundations, pole hole excavation, etc.)
 - f. Vegetation trimming and traffic control
2. Options for primary station power sources for the Company's various switching station voltages are:
- a. Tap off the bus through a step-down transformer for 23kV through 69kV
 - b. 12kV line extension and service transformer for 23kV through 138kV
 - c. Gensets are not an allowable substitute for the above options

1.5 – REMOTE SUBSTATION FACILITIES

1. Proposer shall be responsible for all costs that are solely for the benefit of the Proposer's project, that cannot be used for future system benefit, and that does not provide any benefit to other customers. This may include, but is not limited to:
 - a. Telecommunications cards for DTT (if required)
 - b. Point-to-point microwave facilities between the Proposer's facility and the remote substation (if Proposer chooses that communications option) since there is no way to splice into or multi-link a microwave and it cannot be used for other purposes
2. If the project is interconnecting directly to an existing Company substation, any new equipment required at the substation to accommodate the interconnection will be considered Interconnection Facilities according to Tariff Rule No. 19 and all costs shall be the responsibility of the Proposer. This may include, but is not limited to:
 - a. Project management, design, permitting/regulatory fees and approvals, land rights, installation labor, inspection, construction management, and testing
 - b. Site work (grading, trenching, manholes/handholes, conduits, cable trench, concrete pads/foundations, fencing, roadways/driveways, ground grid, lighting, etc.)
 - c. Substation structures
 - d. New control equipment cabinet or existing enclosure expansion
 - e. Equipment (circuit breakers, transformers, relays, switches, arresters, batteries, HVAC, DFR, DTT, meters, PTs, CTs, etc.)
 - f. Electrical work (bussing, wiring, lightning protection, fiber optic cable, etc.)
 - g. Telecommunications equipment
3. Company shall be responsible for all other costs. This may include, but is not limited to:
 - a. Betterment
 - b. System upgrades, changes, or replacement of existing facilities (e.g. breaker replacements, relay upgrade, transformer installs, Under-Frequency Load Shed (UFLS) settings, etc.)

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

- c. Site work associated with those system upgrades (grading, trenching, manholes/handholes, conduits, cable trench, concrete pads/foundations, fencing, roadways/driveways, ground grid, lighting, etc.)
- d. Substation structures
- e. New control equipment cabinet or existing enclosure expansion
- f. Equipment (circuit breakers, transformers, relays, switches, arresters, batteries, HVAC, DFR, DTT, meters, PTs, CTs, SCADA equipment, telecommunications routers, etc.)
- g. Electrical work (bussing, wiring, lightning protection, fiber optic cable, etc.)

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

1. Proposer shall be responsible for all costs related to the line extension between the GCP and the Proposer site. This may include, but is not limited to:
 - a. Project management, design, permitting/regulatory fees and approvals, land rights, installation labor, inspection, construction management, and testing
 - b. Overhead electrical facilities (poles, conductor, insulators, crossarms, guy wires, etc.)
 - c. Underground electrical facilities (cables, splices, terminations, grounding, transformers, switchgears, etc.)
 - d. Civil/structural work (survey, grading, trenching, conduits, manholes/handholes, concrete pads, concrete pier foundations, pole hole excavation, etc.)
 - e. Company fiber (ADSS fiber, OPGW shieldwire, splice boxes, etc.)
 - f. Vegetation trimming and traffic control
2. The Company shall be responsible for the following costs:
 - a. Betterment
 - b. Replacement of overhead and underground facilities due to certain pre-existing conditions and not caused by interconnection of the Proposer's project as follows:
 - i. Asset is identified for replacement in Company's 5-year work plans
 - ii. Poles (if not identified in 5-year work plans) that require replacement based on the Company's standards and practices (e.g. NESC remaining strength requirements, mechanical or insect damage, cracked, and excessive checking, leaning, or corrosion) or poles that are overloaded prior to addition of the new line
 - iii. Conductors, hardware, and equipment that have issues requiring replacement for safe/reliable operation (e.g. corrosion, damage, etc.)
 - iv. Facilities that meet any of these criteria will be identified by Company engineers
 - v. Company will pay for a one for one equivalent to current standards, and Proposer will pay for anything above that standard required for their interconnection

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

1.7 – T&D SYSTEM UPGRADES

1. Company shall be responsible for all costs related to system upgrades or changes required to accommodate the Proposer's project (e.g. reconductoring or recircuiting of existing lines that do not have the required ampacity, re-fusing or re-programming of protective devices upstream of the GCP, etc.)

1.8 – COMPANY-OWNED FIBER

1. If Company-owned fiber is used to satisfy the communications requirements in the IRS, then the Proposer shall be responsible for all costs related to routing the ADSS fiber or OPGW from the nearest existing splice point to the Proposer site. This may include, but is not limited to:
 - a. Project management, design, permitting/regulatory fees and approvals, land rights, installation labor, inspection, construction management, and testing
 - b. Company fiber-optic cable (ADSS fiber cable or OPGW shieldwire) and associated equipment/hardware (splice boxes, innerduct, vibration dampers, etc.)
 - c. Splicing and Testing of fiber strands
 - d. Pole replacements and additional equipment if needed for additional capacity
 - e. Civil/structural work (survey, grading, trenching, conduits, manholes/handholes, concrete pads, concrete pier foundations, pole hole excavation, etc.)
 - f. Vegetation trimming and traffic control

2. Company will provide the location(s) of the existing fiber splice point(s) after the Proposer has signed a Non-Disclosure Agreement (NDA).

2.3. Company shall be responsible for Betterment costs.

1.9 – TELECOMMUNICATION FACILITIES

1. Telecommunication Cabinet
 - a. If a control equipment enclosure will not be built, the Proposer shall be responsible for all costs related to installing a telecommunication cabinet required to accommodate the telecommunication equipment at the Proposer's facility. This may include, but is not limited to equipment racks and ancillary infrastructure, 48V DC Power System (includes 48V DC Charger w/ at least 12-hr battery backup), alarming, and air conditioning
2. Telecommunication Power
 - a. Proposer shall be responsible for all costs related to providing reliable 48V DC power to Company equipment at a new Company switching station or a Proposer-owned station. This may include, but is not limited to battery racks, banks, fuse panels, and associated power system equipment.
3. Fiber Termination Equipment
 - a. If Company-owned fiber is used to satisfy the communication requirements in the IRS, then the Proposer shall be responsible for all costs related to terminating the ADSS fiber or OPGW at the new Company switching station

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

and point of interconnection to Company's existing system. This may include, but is not limited to a fiber termination panel and associated equipment/hardware (fiber guide, splice trays, connectors, etc.)

4. [NOT USED]
5. Leased Service
 - a. If 3rd party leased service will provide telecommunication connectivity to the new Company switching station, then the Proposer shall be responsible for all costs related to ordering and installing the leased service at the site. This may include, but not be limited to the initial cost to establish the leased line(s) required for the project, monthly recurring leased cost of the service(s), and on-going maintenance of the service(s).
6. Telecommunication Service Equipment
 - a. Telecommunication equipment is required to provide circuits to support the various applications at the new Company switching station. The Proposer shall be responsible for all costs related to installing the telecommunication equipment. This may include, but is not limited to:
 - i. Project management, design, installation, and testing
 - ii. Telecommunication routers, multiplexors, and associated equipment/hardware

1.10 – PROPOSER PAYMENTS

1. The Company shall require upfront payment prior to the commencement of any phase of work based on an estimate of Company costs for that phase. A true-up at the end of the project shall be completed and a refund or bill shall be processed in accordance with the Interconnection Agreement when necessary.
2. Proposer is also responsible for payments to the Company related to service contracts for service power.

SECTION 2 – INTERCONNECTION COSTS

To assist Proposers in assessing the impacts of location on potential projects, the information provided in Section 2 can be used to approximate the cost for Company-Owned Interconnection Facilities (COIF), including substation, telecommunications, security, transmission or distribution lines, and project management. This information is based on typical interconnections as shown in Attachment 1 of this Appendix H. Conceptual design is not intended to cover all interconnection requirements. Final interconnection design will be subject to the results of a technical review. The per-unit cost figures below should not be used to create a detailed project estimate. A detailed project estimate typically requires a certain level of engineering to assess project site conditions and to factor in other parameters specific to the project.

The Proposer should identify the components assumed for their project and the quantity assumed for each. Each table below provides notes on the assumptions for each of the unit cost estimates. If a Proposer's project requirements are different than what is assumed in the notes, the Proposer

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

should identify each difference and provide an estimated additional cost or savings resulting from those different requirements. Please see Attachment 2 for examples of how to apply the per-unit costs provided. All costs provided do not include costs related to Proposer responsibilities including, but not limited to, permitting, land rights, community outreach, biological and/or cultural (archeological) surveys. Proposers should do their own due diligence for these costs.

2.1 – DISTRIBUTION (12KV AND BELOW) INTERCONNECTION

Please refer to Attachment 1 (Miki Basin Interconnection) of this Appendix H for single line diagrams depicting the required interconnection to the Company’s system. Please see Attachment 2 for examples of how to apply the per-unit costs provided. All costs provided in Section 2.1 assume the COIF will be built by the Company.

A. TYPICAL DISTRIBUTION PRIMARY INTERCONNECTION AT MIKI BASIN
 (ATTACHMENT 1)

INTERCONNECTION AT MIKI BASIN (<u>ATTACHMENT 1</u>)		
Item	Description	Cost
Substation & Meter Baseline Costs		
21	Components at the Project Site on the Company side of the demarcation as shown in <u>Attachment 1</u> <ul style="list-style-type: none"> • Includes costs for engineering, materials, construction, and testing. • Assumes civil infrastructure and space for COIF is provided by Proposer. • Distribution line extension – See Items 24 and 26 and Section 2.1D. • Telecommunications requirements – See Section 2.1E. • Security requirements – See Section 2.1F. 	\$486,000 / interconnection line
22	Company work for components at Miki Basin PP as shown in <u>Attachment 1</u> <ul style="list-style-type: none"> • Includes engineering, materials, construction, and testing. • Local SCADA equipment is included. • Does not include excavation and fill 	\$600,000 / interconnection line
<u>Notes:</u> a) Assumes construction in 2022. b) Substation relay protection requirements have not been identified so costs are based upon typical line protection relaying requirements. c) Does not include costs for permitting, land rights, or a Relay Coordination Study.		
T&D Baseline Costs		

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

INTERCONNECTION AT MIKI BASIN (<u>ATTACHMENT 1</u>)		
Item	Description	Cost
24	UG Termination to OH Extension <ul style="list-style-type: none"> • Includes costs for engineering, materials, construction for UG termination at Proposer site, 100ft UG line extension (1 feeder), 3ph riser with disconnects, and 1 wood pole • Add OH line extension – See Item 30 or 32. Line extension costs are for one line. Costs for two separate OH lines (one for each feeder) should be accounted for. • Add UG line extension (if > 100ft) – See Item 33. • Add an additional UG feeder and riser for the 2nd feed – See Items 34 and 37. UG feeders can be in the same conduit and MH system. • Risers and UG line extension costs should also be added for the termination at Miki Basin PP. 	\$110,000 each
26	UG Termination to UG Extension <ul style="list-style-type: none"> • Includes costs for engineering, materials, construction for UG termination at Proposer site and 100ft UG line extension (1 feeder) • Add UG line extension (if > 100ft) – See Item 33. • Add an additional feeder for the entire UG length – See Item 34. UG feeders can be run in the same conduit and MH system. 	\$80,000 each
<u>Notes:</u> <ol style="list-style-type: none"> a) Assumes construction in 2022. b) Interconnection will typically require either Item 24 or 26 for work at the Proposer’s site in addition to any line extension above 100ft of UG. c) Includes 100ft UG line extension of one feeder. d) OH/UG route and civil infrastructure drawings provided by Proposer. e) Civil infrastructure (pads, MH/HHs, conduits, etc.) designed, procured, and installed by Proposer. f) Includes review of Proposer civil infrastructure designs and materials and inspection of Proposer civil infrastructure construction. g) Does not include vegetation clearing, grading, dewatering, permitting or land rights. 		

B. DISTRIBUTION LINE EXTENSION COSTS

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

DISTRIBUTION LINE EXTENSION COSTS		
Item	Description	Cost
30	12kV OH accessible (200ft spans, #1/0 336.4 KCM AAC)	\$ 796 <u>821</u> ,000 / mile
32	12kV OH inaccessible (250ft spans, #1/0 AAC)	\$1,692,000 / mile
33	12kV UG (200ft spans, #4/0 1000 KCM AL PEICN)	\$ 835 <u>1,212</u> ,000 / mile
34	12kV UG add'l feeder (200ft spans, #4/0 1000 KCM AL PEICN)	\$ 502 <u>858</u> ,000 / mile
37	12kV 3ph riser w/ disconnects (including pole/anchor)	\$46,000 each
Notes: a) Assumes construction in 2022. b) OH assumes wood poles and 3ph overhead conductor with neutral underbuild. c) Accessible assumes vehicles can be used during construction. d) Inaccessible assumes helicopters are needed during construction. e) Includes engineering, materials, construction labor for electrical work, inspection for UG civil infrastructure, and contractor costs for pole/anchor digging. f) OH/UG route and civil infrastructure drawings provided by Proposer. g) Civil infrastructure (pads, MH/HHs, conduits, etc.) designed, procured, and installed by Proposer. h) Does not include vegetation clearing, grading, dewatering, permitting or land rights.		

C. TYPICAL TELECOMMUNICATIONS REQUIREMENTS FOR DISTRIBUTION INTERCONNECTIONS

1. Interconnection Projects at Miki Basin – See Section 2.4 for costs
 - a. Assumes Proposer’s Facility is physically located next to Miki Basin Power Plant (i.e., shares a fence line)
 - b. Primary communications links can consist of lease line or fiber.
 - c. Back-up communications links are required (can consist of lease line or fiber).
 - d. Back-up communications links must be transport diverse until the “last mile”.
 - e. Additional analog leased telephone lines are required to support revenue meters (Proposer shall do their own due diligence for costs on this).
2. Requirements are subject to change based on project specific evaluations, technical reviews, or IRS.

D. SECURITY REQUIREMENTS FOR DISTRIBUTION INTERCONNECTIONS

1. For Company-owned equipment within Proposer’s Facility, Company requires:
 - a. Standard 8ft high security fence with 3-strand barbed wire V-top.
 - b. Interior mounted 4’ high cattle fencing.
 - c. All gates will be secured using a proprietary padlock system.

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

- d. Proposer-owned cabinets/enclosures housing Company equipment shall be secured with a lock provided by Company.
 - e. Company requires 24/7 access to Company facilities within the Proposer facility.
2. Given the size of the Proposer’s project requested through this RFP and its criticality to the Company’s system, the Company recommends the Proposer consider implementing Tier One security requirements at the Proposer’s facility in accordance with Section 2.5B.
 3. See Section 2.5 for more information on Security Requirements.

2.2 – [NOT USED]

2.3 – [NOT USED]

2.4 – TELECOMMUNICATIONS

Please refer to Attachment 1 (Miki Basin Interconnection) of this Appendix H for single line diagrams depicting the required interconnection to the Company’s system. Please see Attachment 2 for examples of how to apply the per-unit costs provided.

The communications equipment will require a communications channel(s). Some of the communications channel options include lease line or fiber.

A. TELECOMMUNICATIONS BASELINE COSTS

The costs below are high level per unit costs for communications requirements in support of the Project. Sections 2.1E and 2.2B above provide typical scenarios of when these options may be utilized.

TELECOMMUNICATIONS BASELINE COSTS		
Item	Description	Cost
Communications Cabinet or Enclosure		
72	Communications Cabinet* with circuits to support SCADA <ul style="list-style-type: none"> • Projects with SCADA and diverse communication circuits 	\$230,000 / site
Notes: <ol style="list-style-type: none"> a) Assumes construction in 2022. b) All projects that require communications will require facilities to store the communications equipment. The example above is provided but other alternatives may be available upon request. c) Cabinet is used to support Company equipment and capable of providing communications circuit for SCADA. d) Communications cabinet cost does not include fiber or lease circuits. 		

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

TELECOMMUNICATIONS BASELINE COSTS		
Item	Description	Cost
e) Proposer will provide all conduits, foundations, HHs, AC power, grounding as required per Company standards.		
Lease Line Option		
73	Lease Line one-time and recurring costs	Will vary based on 3 rd party provider
<u>Notes:</u> a) Add cost of Communications Cabinet – See Item 72. b) Check with Company to understand the current lease line requirements. c) Communication circuit requirements will be based on applications needed for the project. d) Company can provide communication circuit interconnection requirements and assist with review of circuit order from the 3 rd party provider as needed. e) Proposer to work directly with 3 rd party provider if a lease line circuit is needed. f) Cost will be the responsibility of the Proposer and is to be negotiated with the 3 rd party provider.		
Fiber-Optic Cable Option		
75	New Fiber-only pole line (200’ avg spans, 60-strand ADSS) <ul style="list-style-type: none"> • Includes new wood poles 	\$472,000 / mile
76	Fiber underbuild on new or existing pole line (200’ avg spans, 60-strand ADSS) <ul style="list-style-type: none"> • Assumes no replacements of existing poles are needed 	\$218,000 / mile
<u>Notes:</u> a) Assumes construction in 2022. b) Add cost of Communications Cabinet – See Item 72. c) Assumes no splices are needed along the route.		

2.5 – SECURITY OF COMPANY-OWNED FACILITIES

A. PROPOSER RESPONSIBILITIES AT PROPOSER FACILITY

The Proposer shall be responsible to incorporate security components and systems for **their facilities** that consider the Security Guidelines for the Electricity Sector (CIP-014-2): Physical Security, as published by the North American Electric Reliability Corporation (NERC) and that at a minimum, meet the requirements in Sections 2.1F.

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

SECTION 3 – [NOT USED]

SECTION 4 – TYPICAL COMPANY DURATIONS FOR INTERCONNECTION PROJECTS

The tables below in Section 4 are to be used as a reference when developing a schedule (required in Appendix B – Proposer’s Response, Section 2.14) to assist Proposers in setting realistic durations and deadlines for critical milestones. These tables represent typical durations for the Company to complete the listed critical milestones that assist in moving the interconnection project through the IRS, Engineering, Procurement, and Construction phases. The durations below do not include time for Proposer to complete items they are responsible for. These high-level typical durations are for planning purposes only and is not intended to cover all project specific requirements. Specific project details can increase or decrease these durations. The detailed project schedule will be determined after the IRS is completed.

4.1 – DISTRIBUTION PROJECTS (COMPANY-BUILD)

Hawaiian Electric Durations to be Considered in Schedules (12kV and Below) General Guidelines for Planning Purposes Only Hawaiian Electric Build ≥ 1 MW		
Milestone	Duration	Notes
IRS Phase		
Model Validation	2-3 months	May increase depending on # of iterations
System Impact Study (SIS)	150 calendar days	Following Model Acceptance
Facility Study (FS)	40 business days	Following completion of SIS, SLD Acceptance, and Receipt of Developer Drawings and Schedules
Engineering Phase		
30% Design & Review	40 business days	Designs & Reviews for Company-Owned Interconnection Facilities (COIF) & review of Proposer-Owned Interconnection Facilities (SOIF) supporting/impacting COIF
60% Design & Review	50 business days	Designs & Reviews for COIF & review of SOIF supporting/impacting COIF. Following 30% Design acceptance.
90% Design & Review	50 business days	Designs & Reviews for COIF & review of SOIF supporting/impacting COIF. Following 60% Design acceptance
Issued for Construction (IFC) Design & Review	30 business days	Designs & Reviews for COIF & review of SOIF supporting/impacting COIF. Following 90% Design acceptance.

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

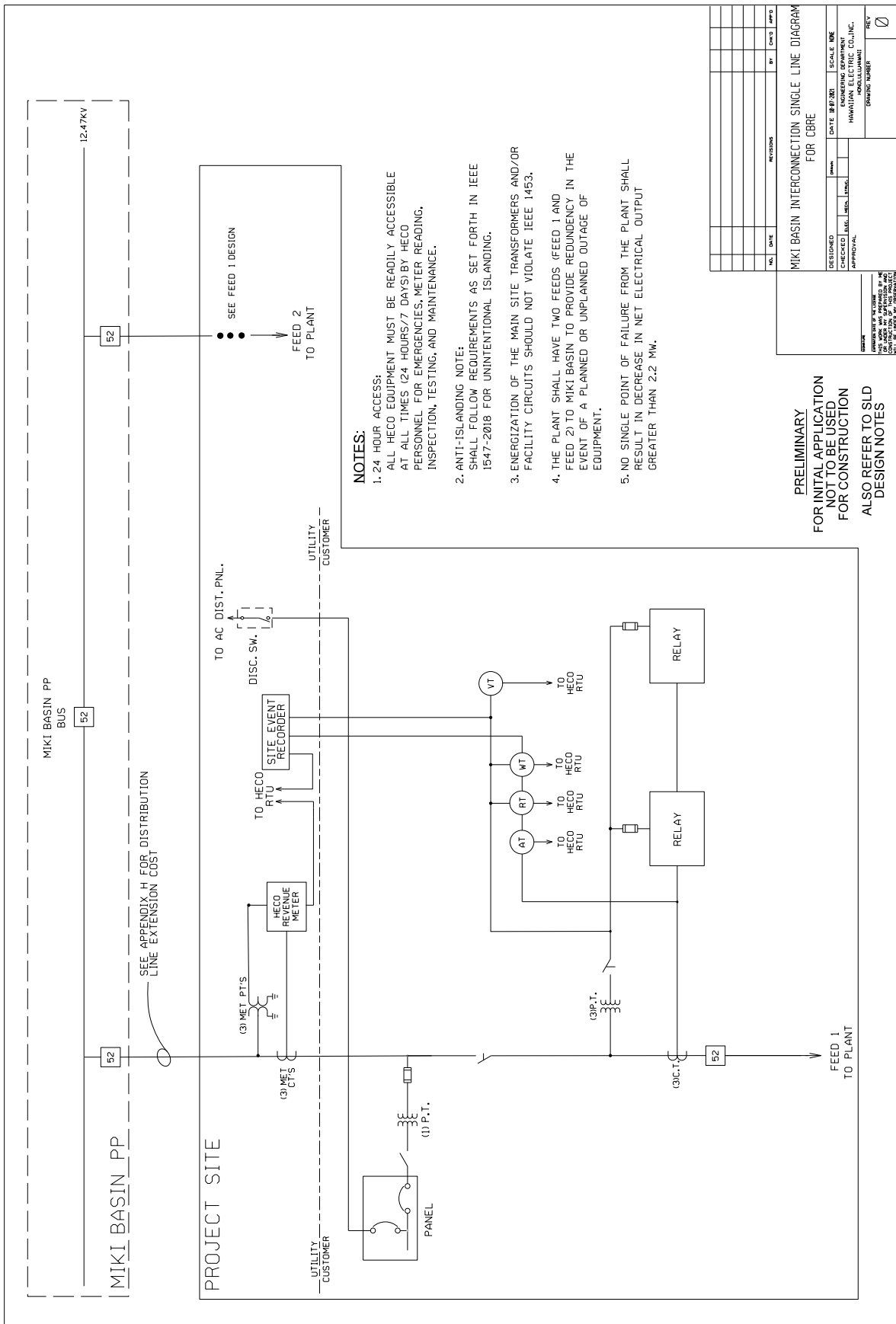
Hawaiian Electric Durations to be Considered in Schedules (12kV and Below) General Guidelines for Planning Purposes Only Hawaiian Electric Build \geq 1 MW		
Milestone	Duration	Notes
Procurement Phase		
Procurement	9 months	Procurement of materials typically happens at 60% design completion
Construction Phase		
Construction	7-8 months	Based on scope/complexity of work
Acceptance Testing	10 business days	Approximately 2 weeks after construction completion
CSAT	30 business days	To occur after commissioning of Proposer's Facility. Duration depends on Proposer's ability to meet the Performance Standards. Required for project \geq 1 MW

4.2 – [NOT USED]

4.3 – [NOT USED]

4.4 – [NOT USED]

Updated from 8/25/21 Filing. Redline not included.



NOTES:
 1. 24 HOUR ACCESS:
 ALL HECO EQUIPMENT MUST BE READILY ACCESSIBLE AT ALL TIMES (24 HOURS/7 DAYS) BY HECO PERSONNEL FOR EMERGENCIES, METER READING, INSPECTION, TESTING, AND MAINTENANCE.
 2. ANTI-ISLANDING NOTE:
 SHALL FOLLOW REQUIREMENTS AS SET FORTH IN IEEE 1547-2018 FOR UNINTENTIONAL ISLANDING.
 3. ENERGIZATION OF THE MAIN SITE TRANSFORMERS AND/OR FACILITY CIRCUITS SHOULD NOT VIOLATE IEEE 1453.
 4. THE PLANT SHALL HAVE TWO FEEDS (FEED 1 AND FEED 2) TO MIKI BASIN TO PROVIDE REDUNDENCY IN THE EVENT OF A PLANNED OR UNPLANNED OUTAGE OF EQUIPMENT.
 5. NO SINGLE POINT OF FAILURE FROM THE PLANT SHALL RESULT IN DECREASE IN NET ELECTRICAL OUTPUT GREATER THAN 2.2 MW.

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

NO.	DATE	REVISIONS	BY	DATE

MIKI BASIN INTERCONNECTION SINGLE LINE DIAGRAM
 FOR CBRE

DESIGNED	CHECKED	DATE	SCALE

APPROVAL	DATE	SCALE

DESIGNED BY: HAWAIIAN ELECTRIC CO., INC.
 CHECKED BY: HAWAIIAN ELECTRIC CO., INC.
 APPROVAL: HAWAIIAN ELECTRIC CO., INC.
 DRAWING NUMBER:

PROJECT EXAMPLES (LANA'I) - APPENDIX H UNIT COST TABLE

Examples provided for illustrative purposes only and is not binding for actual facility costs.
Estimated costs represent Company costs charged to the Proposer.

Miki Basin Interconnection**Example 1**

17.5MW project interconnecting to Miki Basin substation. Project interconnects with two (2) outgoing feeders to Miki Basin. Each 12kV UG feeder between the Proposer's switchgear and the riser poles is 200ft. Each feeder risers to a separate OH line extension each 0.25 miles long. At Miki Basin, each OH line will transition back to UG and run 100ft to terminate to the breaker. All lines are accessible. Proposer to install 12kV civil infrastructure. Proposer site built per Attachment 1 of this Appendix H. Proposer to provide leased line telecommunications with another provider; back-up communications is required. Company to install Company-owned equipment in Proposer-provided communications cabinet at Proposer site.

Appx H Item	Description	Quantity	Unit	Unit Price (\$)	Total Cost (\$)
21	Company work at Proposer site	2	EA	\$486,000	\$972,000
22	Company work at Miki Basin PP	2	EA	\$600,000	\$1,200,000
24	UG Termination to OH Extension	1	EA	\$114,000	\$114,000
30	12kV OH accessible	0.5	MI	\$821,000	\$410,500
33	12kV UG	0.04	MI	\$1,212,000	\$45,909
34	12kV UG add'l feeder	0.06	MI	\$858,000	\$48,750
37	12kV 3ph riser	3	EA	\$46,000	\$138,000
72	Comm Cabinet	1	EA	\$230,000	\$230,000
73	Primary Leased line (by Proposer)	1	LS	\$0	\$0
73	Backup Leased line (by Proposer)	1	LS	\$0	\$0
				ESTIMATED TOTAL =	\$3,159,159