

DRAFT REQUEST FOR PROPOSALS

FOR

VARIABLE RENEWABLE DISPATCHABLE GENERATION

ISLAND OF HAWAI'I

FEBRUARY 2, 2018

Docket No. 2017-0352

This Request for Proposals ("RFP") is a DRAFT only. Hawaii Electric Light Company, Inc. ("Hawaii Electric Light") will employ a competitive bidding process to select renewable energy projects consistent with the State of Hawai'i Public Utilities Commission's ("PUC") Competitive Bidding Framework. Under the Competitive Bidding Framework, Hawaii Electric Light has filed the initial draft RFP with the PUC. Hawaii Electric Light then sought input from prospective Proposers and other stakeholders through the RFP process and the PUC as well as from the Independent Observer as described in the draft RFP and has modified the draft RFP to the extent feasible to address input received in order to foster a robust competitive process. This proposed final RFP is being submitted to the PUC for approval and is subject to further revision based upon direction received from the PUC. After approval by the PUC, Hawaii Electric Light will issue the final RFP. The proposed schedule for the foregoing process is set forth in this draft RFP in Table 1.

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Chapter 1: Introduction and General Information

Hawaii Electric Light Company, Inc. ("Hawaii Electric Light" or the "Company") seeks proposals for the supply of qualified variable renewable dispatchable generation to be delivered to the Hawaii Electric Light System in accordance with this Request for Proposals ("RFP"). The total amount of variable renewable dispatchable generation being solicited for the Island of Hawaii is the capability to provide 95,000 megawatt hours ("MWh") annually, over a preferred term of twenty (20) years. The resources acquired through this RFP must have Guaranteed Commercial Operations Dates that are no later than December 31, 2022 with the intent being that successful Proposers will be able to take advantage of the 2019 investment tax credit. Guaranteed Commercial Operations Date is a Threshold Requirement for this RFP. See Section 4.3 of this RFP.

The Company intends to solicit renewable dispatchable generation in stages. In the event the Company does not procure all of the variable renewable dispatchable generation needed to meet the Company's requirements set forth in the PSIP in this first "Stage 1" of the procurement process, or if additional generation is needed as otherwise determined by the Company, then the Company intends to issue "Stage 2" of this RFP to procure such additional generation. For Stage 1 of this solicitation the Company will not be submitting a self-build and the Company will not be accepting any affiliate bids, however, the Company reserves the right to allow such options in Stage 2.

The Company intends to contract for variable renewable dispatchable generation projects under this RFP using its new Renewable Dispatchable Generation Power Purchase Agreement ("RDG PPA"), which treats variable resources as fully dispatchable. The Company has created two versions of its model RDG PPA. The photovoltaic ("PV") version is attached as <u>Appendix C1</u> to this RFP, and the wind version is attached as <u>Appendix C2</u> to this RFP.³

Each successful Proposer will provide variable renewable dispatchable generation to the Company pursuant to the terms of an RDG PPA to be negotiated between the Company and Proposer, which will also be subject to PUC review and approval. If the proposed Project is for a

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¹ The resource need for the Island of Hawaii identified in the Companies' Power Supply Improvement Plans Update Report: December 2016 ("PSIP") identified 20 MW of grid-scale wind in 2020, and an additional 50 MW of grid-scale wind in 2022. As the RFP only contains an annual energy target, these megawatts were converted to MWh for this RFP. For simplicity, Hawaii Electric Light has described the energy target as the capability to provide 95,000 MWh per year.

² The Company's preferred term of 20 years reflects the assumptions and planning horizon used in the PSIP Update Report: December 2016 for the variable renewable dispatchable generation. Also, one goal of the RFP is to obtain renewable dispatchable generation at a price that will lower bills for customers. In the Company's experience, PPAs in the 20-year range have typically provided the overall best pricing for customers while also providing adequate revenue security for renewable energy developers, which in turn should lower a developer's cost of capital and lead to lower PPA pricing. Further, the term of a PPA may also impact accounting treatment. On this point, issues relating to accounting treatment have traditionally increased when the term of a PPA extends beyond 20 years.

³ Note that the RDG PPAs are not provided in <u>Appendices C1</u> and <u>C2</u> of this RFP. The body of the Companies' RDG PPAs for both PV and wind are the same for all three Companies and are therefore not reproduced as part of this exhibit. Some of the attachments to the RDG PPA for both PV and wind are island specific and such island specific attachments for Hawaii are provided in Exhibit 8 of this transmittal filing. Where references are made in this RFP to Appendix C1 and C2, please refer to the Oahu RDG PPA provided in Exhibit 2 and to Attachment B, Attachment N and Attachment O provided in Exhibit 8 of this transmittal filing.

technology other than wind or PV and/or contains an energy storage component, then the terms of the RDG PPA will be modified to address the specific technology and/or to incorporate the storage component. Revisions to the RDG PPA will be necessary to incorporate storage and would be negotiated between the Companies and the Final Award Group for a Project that includes storage. Such revisions shall include, but shall not be limited to the RDG PPA sections listed in <u>Appendix M</u> attached to this RFP.

The Company will evaluate Proposals using the evaluation and selection process described in Chapter 4 of this RFP. 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 amount of generation that the Company may acquire from this RFP depends on, among other things, the quality of bids received in response to this RFP; economic comparison to other RFP responses; updates to the Company's forecasts; transmission availability; and changes to regulatory or legal requirements.

A detailed description of the technical requirements for Proposers is included in <u>Chapter 2</u> of this RFP, in the Proposer's Response Package attached as <u>Appendix B</u> to this RFP, in the RDG PPAs attached as <u>Appendices C1</u> and <u>C2</u> to this RFP, and in the Electronic Procurement Platform described in Section 3.2 of this RFP.

All requirements necessary to submit Proposal(s) are provided in this RFP. All capitalized terms used in this RFP shall have the meaning set forth in the Glossary of defined terms attached as <u>Appendix A</u> to this RFP. Capitalized terms that are not included in <u>Appendix A</u> 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. 34856 issued on October 6, 2017 in Docket No. 2017-0352 as part of a procurement process established by the State of Hawai'i Public Utility Commission ("PUC").
- 1.1.2 This RFP is subject to Decision and Order ("D&O") No. 23121 in Docket No. 03-0372 (To Investigate Competitive Bidding for New Generating Capacity in Hawai'i), which sets forth the PUC's Framework for Competitive Bidding ("Framework" or "Competitive Bidding Framework").
- 1.1.3 All Proposals submitted in response to this RFP must utilize qualified Renewable Energy resource(s) as defined under the Hawai'i Renewable Portfolio Standards ("RPS"). By statute, "Renewable Energy" means energy generated or produced using the following sources: (1) wind; (2) the sun; (3) falling water; (4) biogas, including landfill and sewage-based digester gas; (5) geothermal; (6) ocean water, currents, and waves, including ocean thermal energy conversion; (7) biomass, including biomass crops, agricultural and animal residues and wastes, and municipal solid waste and other solid waste; (8) biofuels; and (9) hydrogen produced from renewable energy sources. HRS § 269-91.

⁴ RPS requirements in Hawai'i are codified in Hawai'i Revised Statutes ("HRS") §§ 269-91 through 269-95.

- 1.1.4 Proposers should thoroughly review the Hawaiian Electric Companies' Power Supply Improvement Plans ("PSIPs"), filed in Docket No. 2014-0183 on December 23, 2016 ("PSIP Update Report: December 2016").
- 1.1.5 Consistent with the PSIP Update Report: December 2016, the primary purpose of this RFP is to obtain Renewable Energy so that the Company can continue to transform Hawaii Island's power supply portfolio from fossil fuel-based generation to renewable-based generation and lower costs for customers. The Company does not have a predetermined preference for a particular renewable energy source or technology and acknowledges that the requirements of this RFP may be satisfied by a portfolio of generation resource options. The Company believes that this approach allows for flexibility and encourages Proposers to develop and submit a broad range of innovative Proposals.
- 1.1.6 This RFP is intended to elicit Proposals that will enable Hawaii Electric Light to obtain variable renewable dispatchable generation at a competitive, reasonable cost with reliability, viability and operational characteristics consistent with the Company's long-term planning and energy policy requirements.

1.2 Scope of the RFP

- 1.2.1 Consistent with the resource needs for the Island of Hawaii in the Company's PSIP Update Report: December 2016, the Company is seeking Proposals for the capability to provide the supply of approximately 95,000 MWh per year ("MWh/year") of variable renewable dispatchable generation to be delivered to the Hawaii Electric Light System on the Island of Hawaii in the State of Hawai'i, under contract terms to be negotiated between the Company and the Proposer in an RDG PPA.
- 1.2.2 This RFP targets Projects that can satisfy the resource needs identified in the PSIP Update Report: December 2016. In the event the Company does not procure all the variable renewable dispatchable generation needed to meet the Company's requirements set forth in the PSIP in this first "Stage 1" of the procurement process, or if additional generation is needed as otherwise determined by the Company, then the Company intends to issue "Stage 2" of this RFP to procure such additional generation. System needs, including available hosting capacities, will be updated prior to the issuance of Stage 2 or any subsequent RFPs. The Company would consider Projects that cannot reach a Commercial Operations Date of December 31, 2022 in Stage 2 or in subsequent RFPs.
- 1.2.3 The Company is focused on helping Projects meet the 2019 investment tax credit, and is aiming to sign one PPA on Hawaii Island in Stage 1 of the procurement process. The Company believes that limiting the number of Projects during Stage 1 of the procurement process will help Projects selected to the Final Award Group move through contracting and PUC approval in a more timely manner and improve the prospects of meeting the aggressive timeline required to optimize benefits to customers. The targeted number of Proposals sought in Stage 1 was determined based on the Companies' desire to meet the ITC deadlines and the Company's required Commercial Operations Date of December

- 31, 2022. Several factors influence the speed of the selection, contracting, and development of Projects. Projects that require extensive system upgrades to integrate into the system will take longer to complete studies for and to interconnect onto the system. Therefore, the Company considered factors such as, the size of the largest contingency unit and available hosting capacity⁵ on transmission-level circuits in its determination of how many projects to select in Stage 1. The Company also evaluated the time it is estimated to take to expedite Projects through the contracting and Interconnection Requirements Study phases. As noted in Section 1.2.2 of this RFP, if the Company is unable to procure all the variable renewable dispatchable generation needed to meet the Company's requirements in Stage 1, the remaining variable renewable dispatchable generation need will be sought in Stage 2 of this RFP. In Stage 2, the Companies will also use lessons learned in Stage 1 and reevaluate the storage options and requirements being sought to take advantage of advancements in technology and declining storage costs.
- 1.2.4 To avoid increasing the size of contingency events and to ensure system reliability requirements, no single point of failure from the Facility shall result in a decrease in net electrical output greater than 30 MW. The current largest single contingency on the Company's system is the size of the largest generating unit on the System at any given time. The proposed renewable generation limit of not greater than 30 MW is an Eligibility Requirement for this RFP. See Section 4.2 of this RFP. The minimum size of a Facility will be the threshold for a waiver from the Competitive Bidding Framework applicable to Hawaii Island. See Part II.A.3.f of the Framework.
- 1.2.5 Proposals that will require system upgrades, where the construction of which, in the judgment of the Company (in consultation with the IO), creates a significant risk that the Guaranteed Commercial Operations Date will not be met or the Project will not be able to capture the ITC) will not be considered in this RFP. Guaranteed Commercial Operations Date is a Threshold Requirement for this RFP. See Section 4.3 of this RFP.
- 1.2.6 Proposers will determine their Project Site. Proposers have the option of engaging with landowners and submitting a Proposal for any potential Site that may be offered as described in Section 3.10 of this RFP.
- 1.2.7 For purposes of this RFP, the Company will only consider Proposals for Projects located on the Island of Hawaii. This is an Eligibility Requirement for this RFP. See Section 4.2 of this RFP.
- 1.2.8 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 submitted in response to this RFP or any other RFP.

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⁵ For context, each transmission-level circuit has a certain amount of "hosting capacity." This is the amount of power a conductor can safely carry within engineering limits. For the purposes of this RFP, the hosting capacity is expressed in megawatts ("MW"). The available hosting capacity on a given transmission-level circuit is the difference between the total hosting capacity and the amount of peak power already carried on a transmission circuit.

- 1.2.9 Successful Proposers will own and be responsible for the operation of the Facility during the term of the PPA and will be responsible for all costs, including Project development, completion of an Interconnection Requirement Study ("IRS"), land acquisition, permitting, financing, construction of the facility and all Interconnection Facilities, and operations and maintenance.
- 1.2.10 PPAs for projects selected through this RFP will be based on the RDG PPA, as described in <u>Section 3.8</u> of this RFP. Under the RDG PPA, the Company will maintain exclusive rights to fully direct the dispatch of the Facility.
- 1.2.11 The preferred Term of the PPA is twenty (20) years.
- 1.2.12 Proposals may be submitted in either of the following configurations:
 - Not coupled with energy storage: Where a proposed Facility is not coupled with energy storage, the maximum output of the Facility must not exceed the transmission-level available hosting capacity of the transmission-level circuit to which the Facility will be interconnected. Available Transmission Circuit Capacity is a Threshold Requirement for this RFP. See Section 4.3 of this RFP.
 - **Coupled with energy storage:** Proposals may contain storage which may be charged during periods when full potential export is not being taken by the Company, and used to provide energy to the Company during periods when source energy is not available. While the Company maintains complete charging rights (limited to the periods during which the generator is generating) and dispatch rights over the entire Facility and may charge and dispatch the Facility at any time, the energy storage should be sized at a minimum to provide sufficient storage capacity equal to the greatest amount of projected energy produced from the Facility during the Facility's projected most productive continuous four hours at any period during the year and designed to provide one full discharge for every 24 hours. The Company will reserve the right to dispatch net energy available from the Facility, reflecting the combined available renewable and storage available capacity, at times that are beneficial to the system and for customers under the terms of the PPA. Flexibility in charging/discharging periods is necessary due to uncertainty in future demand profiles over the life of the contract. The proposed storage must be charged solely by the Facility and grid charging will not be allowed.

Proposers are encouraged to confer with the Company as described in <u>Section 2.2.1</u> of this RFP should they have any questions about transmission-level or system-level available hosting capacity or excess energy concerns.

1.2.13 Consistent with the assumptions in the PSIP Update Report: December 2016, Proposers shall pursue all available applicable federal and state tax credits, and Proposal pricing

⁶ See Section 3.10 regarding results of the Land RFI.

⁷ Proposers are advised that transmission circuit loadings may change in the future. This will reduce the available transmission-level hosting capacity.

- must be set to incorporate the benefit of such tax credits or to pass the benefit of the tax credits to the Company's customers. <u>See Attachment J, Section 5</u> of the RDG PPA, attached as <u>Appendix C1</u> and <u>Appendix C2</u> to this RFP.
- 1.2.14 Payments under the RDG PPA will be made by the Company to the Seller as described in the RDG PPA, attached as Appendix C1 and Appendix C2 to this RFP.
- 1.2.15 The Project will interconnect to the Company's grid at the 69 kV level. Interconnection Requirements and the IRS process are described in <u>Section 2.3</u> and <u>Section 5.1</u> of this RFP.
- 1.2.16 A Proposer's proposed Interconnection Facilities shall be compatible with the Company System and must meet the requirements set forth in the IRS and the PPA, as may be revised to reflect the results of the IRS. Proposer shall take responsibility for all costs related to the design and installation of all Interconnection Facilities. The communications and control requirements will be determined during the Interconnection Requirements review and will define telemetry, control, and communications facilities provided by the Proposer to the Point of Interconnection. Alternate control will be required.
- 1.2.17 Storage systems that are coupled with a Facility must be charged only by Renewable Energy generated by the Facility (and not delivered from the grid). This is an Eligibility Requirement for this RFP. See Section 4.2 of this RFP.
- 1.2.18 Supplemental equipment to generating resources such as power electronics and storage systems may be utilized by the Seller, at the Seller's discretion, to meet the Performance Standards for energy delivery specified in the RDG PPA, in addition to consideration of storage to supply Dispatchable energy during periods where the source Renewable Energy from the Facility is not available as described in Section 1.2.12. Where supplemental equipment and/or storage are utilized, the functionality and characteristics of the storage must be maintained throughout the term of the PPA.
- 1.2.19 If selected, Proposers shall take responsibility for the decommissioning of the Project and the restoration of the Site upon the expiration of the PPA, as described in <u>Attachment G</u>, Section 7 of the RDG PPA.

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 PUC has retained an Independent Observer both to advise and monitor the process for this RFP. All phases of

the RFP process will be subject to the Independent Observer's oversight, and the Independent Observer will coordinate with PUC staff throughout the RFP process to ensure that it is undertaken in a fair and unbiased manner. In particular, the Company will review and discuss with the Independent Observer all decisions regarding the evaluation, disqualification, non-selection, and selection of Proposals prior to notifying Proposers of such decisions.

- 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 utility's Proposal evaluation methodology, models, criteria, and assumptions
 - Review the utility's evaluation of Proposals
 - Advise the utility on its decision-making
 - Participate in dispute resolution as set forth in Section 1.10 of this RFP
 - Monitor contract negotiations with Proposers
 - Report to the PUC on monitoring results during each stage of the competitive bidding process
 - Provide an overall assessment of whether the goals of the RFP were achieved
- 1.4.3 The Independent Observer for this RFP is **Bates White, LLC.**

1.5 Communications Between the Company and Proposers – Procedures Manual

- 1.5.1 Communications and other procedures under this RFP are governed by the "Procedures Manual," developed by the Company as required by the Framework, which describes: (1) the protocols for communicating with prospective Proposers and others; (2) the evaluation process in detail and the methodologies for undertaking the evaluation process; (3) the documentation forms, including logs for any communications with bidders; and (4) other information consistent with the requirements of the RFP process. The Company's Code of Conduct Procedures Manual is attached as Appendix D to this RFP.
- 1.5.2 Pursuant to the Procedures Manual, all pre-Proposal communication with prospective Proposers will be conducted via the Company's website, Electronic Procurement Platform and/or electronic mail ("Email") as specified in the Procedures Manual. Any Email to the Company must be sent to the address specified in Section 1.6 of this RFP (the "RFP Email Address"). Any correspondence sent to any other Email address will not receive a response. Frequently asked questions submitted by prospective Proposers and the answers to those questions may be posted on the Company website or sent through the Electronic Procurement Platform to registered individuals. The Company

- reserves the right to respond only to comments and questions it deems are appropriate and relevant to the RFP.
- 1.5.3 After submission of Proposals, all contacts between the Company and Proposers will be coordinated by the Energy Contract Manager identified in <u>Section 1.6</u> of this RFP. During this post-Proposal submission period, the Company may have communications and meetings with individual Proposers for purposes of clarifying Proposals.
- 1.5.4 Each Proposer must execute a Mutual Confidentiality and Non-Disclosure Agreement ("NDA") attached as <u>Appendix F</u> to this RFP. The full execution of agreements or other documents required is an Eligibility Requirement for this RFP. <u>See Section 4.2</u> of this RFP. All confidential information will be transmitted to the requesting party via the RFP email address and/or the Electronic Procurement Platform only after receipt of such fully executed NDA. Notwithstanding the execution of a NDA by a requesting party, the Company reserves the right, in its sole discretion, not to disclose certain confidential information.
- 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 Energy Contract Manager and primary contact for this RFP is:

Reese Yorimoto Energy Contract Manager Hawaiian Electric Company, Inc. Central Pacific Plaza Building, Suite 2100 220 South King Street Honolulu, Hawai'i 96813

RFP Email Address: hawaiivariablerfp@hawaiianelectric.com

1.7 Proposal Submittal Requirements

- 1.7.1 Detailed requirements regarding the form and organization of the Proposal are set forth in Chapter 3 of this RFP. Proposals must be submitted in the format specified in the Electronic Procurement Platform and must include all of the information in the Proposer's Response Package attached as Appendix B to this RFP.
- 1.7.2 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 person or entity. The Proposer shall complete and submit with each Proposal, a Certificate of Non-Collusion in the form provided on the Electronic Procurement Platform. Signature and certification are Eligibility Requirements for this RFP. See Section 4.2 of this RFP.

1.7.3 Proposals must be submitted via the Electronic Procurement Platform by 2:00 pm Hawai'i Standard Time (HST) on the date shown in the RFP Schedule in Section 3.1, Item 10 of this RFP. Incomplete Proposals will not be accepted. No hard copies of the Proposals will be accepted.

1.8 Proposal Fee

- 1.8.1 Proposers are required to tender a non-refundable Proposal Fee of \$10,000 for each Proposal submitted. The Proposal Fee submission deadline is an Eligibility Requirement for this RFP. See Section 4.2 of this RFP.
- 1.8.2 Proposers may submit multiple Proposals for projects. If such Proposals are on different Sites or for different generation technologies, a separate Proposal Fee must be paid for each Proposal, except that a Proposer may submit a Proposal for a Project with and without a storage option for a Project on the same Site for a single Proposal Fee, as described in Section 1.2.12 of this RFP. Proposers may submit up to three (3) Proposals with minor variations (i.e., pricing terms, size) (for with and without storage) on the same Site using the same generation technology without having to pay a separate Proposal Fee for these three (3) variations. The method of submitting multiple Proposals within this RFP is described in Section 3.2 and Appendix E. Whether or not a separate Proposal Fee is required each variation of a Proposal, no matter how minor such variation is, should be submitted separately through PowerAdvocate, including separate entries for a proposal with storage and without.
- 1.8.3 The Proposal Fee must be in the form of a cashier's check made payable to Hawaii Electric Light Company, Inc. and must be delivered and received by the Company's Energy Contract Manager by 2:00 pm (HST) on the date shown in the RFP Schedule in Section 3.1, Item 10 of this RFP. 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 to be delivered by U.S. Postal Service (with registered, certified, receipt verification), the Proposer shall use:

Reese Yorimoto Energy Contract Manager Hawaiian Electric Company, Inc. Mail Code CP21-IU PO Box 2750 Honolulu, HI 96840

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

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⁸ To the extent that Proposers submit Proposals with and without storage, a total of up to (6) six variations may be submitted for a single Proposal Fee, 3 for the with storage Proposal and 3 for the without storage Proposal.

1.9 No Self-Build or Affiliate Options

The Competitive Bidding Framework allows the Company the option to offer a Proposal in response to this RFP ("Self-Build Option"). However, the Company will NOT be providing a Self-Build Option in response to this Stage 1 of the RFP but reserves the right to do so in Stage 2 or in future solicitations. Therefore, the Company will follow certain procedures designed to safeguard against and address concerns associated with preferential treatment or preferential access to information to agents of the Company who may participate in the development of a future Self-Build Option (the "Self-Build Team"). The procedures of the Company's Code of Conduct and the Procedures Manual submitted to the PUC in Docket No. 2017-0352 on October 23, 2017 are in place to safeguard against and address concerns associated with preferential treatment or preferential access to information. A copy of the Procedures Manual is attached as Appendix D to this RFP.

The Competitive Bidding Framework also allows affiliates of the Company to submit Proposals to RFPs issued by the Company. However, for this Stage 1 of the RFP, the Company will not accept any Proposals from affiliates but reserves the right to do so in Stage 2 or in future solicitations.

1.10 Dispute Resolution Process

- 1.10.1 If disputes arise under the RFP, the provisions of <u>Section 1.10</u> of this RFP and the dispute resolution process established in the Framework will control. <u>See Part V</u> 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 coming before 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 seek a determination of the issue by the PUC.

- 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 issue within thirty (30) days, as described in Parts III.B.8 and V of the Framework. 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. arbitration or court proceeding), then such Proposer shall be responsible for any and all attorney's 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 <u>Section 1.10</u> of this RFP, no Proposer or other person will have the right to protest or appeal any award of a Project made by the Company.

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 award, 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 and the Performance Standards identified in 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. Attributes and Performance Standards are Threshold Requirements for this RFP. See

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⁹ The informal expedited dispute resolution process does not apply to PUC review of contracts that result from the RFP. <u>See</u> 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.

<u>Section 4.3</u> of this RFP. Additional Performance Standards may be required based on the results of the IRS.

2.2 Transmission System

- 2.2.1 Company information regarding an initial assessment of potential MW capacity of 69 kV transmission circuits providing possible points of interconnection has been developed for Sites included in the Land RFI as described in Section 3.10 of this RFP and will be made available to Proposers only after execution of a Non-Disclosure Agreement. Non-confidential information has been published in the Companies' December 23, 2016 PSIP Update Report beginning on page N-56 of Appendix N. Proposers should perform their own evaluation of project locations, and the Company does not guarantee any project output or ability to connect based on such information. Proposers are strongly encouraged to meet with the Company prior to submitting a Proposal to discuss specific questions regarding a particular Proposal. Please direct inquiries to Interconnection Services at Interconnection.services@hawaiianelectric.com.
- 2.2.1.1 The objective of the analysis was to determine the available capacity of the transmission lines that are in close proximity to the Land RFI parcels. Load flow analyses were performed by adding a generating unit at select locations and increasing its MW output until the thermal limit of the transmission line was met. For each line analysis, existing generators were dispatched to maximize load flow for the line under investigation. Normal and single line outage (N-1 contingency) conditions were analyzed assuming existing transmission system infrastructure and distributed generation resources. Individual load flow simulations did not take into account potential impacts of additional generating projects added to the transmission system.
- 2.2.2 Developers may inquire as to viability of proposed real Project locations. Hypothetical Projects and location strategies will be addressed only in general terms.
- 2.2.3 Additional site-specific information will be provided in the IRS process.

2.3 Interconnection to the Company System

2.3.1 The means of interconnection between a proposed Facility and the Company System is a critical consideration for all Proposers. All Proposals should include a description of the respondent's plan to transmit power from the Facility to the Company System. The Proposers' proposed Interconnection Facilities must be compatible with the Company System. In the design, Projects must adequately consider Company requirements to address impacts on the performance and reliability of the Company System. In addition to the Performance Standards and findings of the Interconnection Study, 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 and be designed such that, with the addition of the Facility, the Company system can meet all

- relevant Transmission Planning Criteria¹⁰ and any amendments thereto. The Company will provide its construction standards and procedures to the Proposer if requested via email upon the execution of an NDA as specified in <u>Section 1.6</u>.
- 2.3.2 The Interconnection Facilities includes both: (1) Seller-Owned Interconnection Facilities; and (2) Company-Owned Interconnection Facilities.
- 2.3.3 Tariff Rule No. 19, a copy of which is attached as <u>Appendix J</u> to this RFP, establishes provisions for Interconnection and Transmission Upgrades. The tariff provisions are intended to simplify the rules regarding who pays for, installs, owns, and operates interconnection facilities in the context of competitive bidding. Proposers may propose to build the Company-Owned Interconnection Facilities except for any work to be done in the Company's existing facilities. Construction of Company-Owned Interconnection Facilities by the Proposer must comply with industry standards, laws, and license information, as well as the Company's specific construction standards and procedures that the Company will provide upon request. (<u>See Section 2.3.1</u>.) The Company uses the breaker-and-a-half scheme for its transmission switching station as shown in <u>Attachment A</u> of Tariff Rule No. 19. Proposers should follow this scheme for purposes of their estimates.
- 2.3.4 The Proposer shall be responsible for all costs required to interconnect a Project to the Company System, including all Seller-Owned Interconnection Facilities and Company-Owned Interconnection Facilities.
- 2.3.5 Proposers are required to include in their pricing proposal all costs for interconnection and transmission upgrades or distribution upgrades expected to be required between their Facility and their proposed Point of Interconnection. See Appendix I to this RFP. Selected Proposers will be responsible for the actual final costs of all Seller-Owned Interconnection Facilities and Company-Owned Interconnection Facilities, whether or not such costs exceed the costs set forth in a Proposer's Proposal. No adjustments will be allowed to the offered price in a Proposal if actual costs for Interconnection Facilities exceed the amounts Proposed.
- 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 further study in the form of an Interconnection Requirements Study. The IRS process is further described in Section 5.1 of this RFP. The IRS will provide information on including, but not limited to, a power systems analysis and identification of equipment, costs, and schedule to evaluate the upgrades necessary to interconnect the proposed Project into the Company System, individually or on a portfolio basis. 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 PPA. The Proposer must provide all Proposal information required to complete the IRS with the Proposal, as described in Appendix B to this RFP.

Transmission Planning Criteria are further described in the Companies' December 23, 2016 PSIP Update Report beginning on page O-11 of <u>Appendix O</u>.

Any additional information required must be provided no later than fifteen (15) days after request by the Company.

Chapter 3: Instructions to Proposers

3.1 Schedule for the Proposal Process

<u>Table 1</u> sets forth the schedule for the proposal process (the "RFP Schedule"). This schedule is designed to provide Proposers the opportunity to safe harbor tax credits. The Company reserves the right to revise the RFP Schedule as necessary. Changes to the RFP Schedule will be posted to the RFP website.

Table 1 RFP Schedule

| Milestone | Schedule Dates |
|---|---|
| (1) PUC Opens RFP Docket | October 6, 2017 |
| (2) Draft RFP is filed | October 23, 2017 |
| (3) Technical Conference Webinar | November 3, 2017 |
| (4) Stakeholder Comments submitted to PUC | November 13, 2017 |
| (5) Companies' Response to Stakeholder | December 20, 2017 |
| Comments filed | |
| (6) PUC Order Providing Guidance | January 12, 2018 |
| (7) Proposed Final RFPs filed | February 2, 2018 |
| (8) Completion of Commission review period of | No later than February 19, 2018 |
| Proposed Final RFPs | |
| (9) Final RFP is issued | 5 business days after (8) ¹¹ |
| (10) Proposals due | 60 days after (9) at 2:00 pm HST |
| (11) Selection of Short List | 30 days after (10) |
| (12) BAFOs due | 5 business days after (11) |
| (13) Selection of Final Award Group ¹² | 105 days after (12) |
| (14) Contract Negotiations Start | 2 business days after (13) |

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 website is located at the following link:

www.hawaiielectriclight.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

¹¹ Subsequent dates are dependent on the procedural schedule set by the PUC.

¹² If the quantity and complexities of the Proposals allow for a quicker evaluation period, the Final Award Group will be announced sooner to allow more time for subsequent steps.

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. The Company will send updates posted on the website through the Electronic Procurement Platform.

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

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

See <u>Appendix E</u> to this RFP for registration, user information and instructions on PowerAdvocate's Sourcing Intelligence procurement platform.

- 3.2.3 Proposals will be accepted only through the PowerAdvocate Platform.
- 3.2.4 Proposals must be submitted through Sourcing Intelligence by 2:00 pm Hawai'i Standard Time (HST) on the date shown in the RFP Schedule in Section 3.1, Item 10 of this RFP. Sourcing Intelligence will not accept the submittal of late information for this RFx event. The Proposal submission deadline via the PowerAdvocate Platform is an Eligibility Requirement for this RFP. See Section 4.2 of this RFP.
- 3.2.5 All Proposals must be prepared in accordance with the procedures and format specified in the RFP and the RFx event. Proposers also are required to respond to all questions and provide all information requested in the RFP and the RFx event, as applicable. This process is intended to provide an orderly, consistent and fair evaluation of the Proposals.

3.3 Technical Conference

The Company held a webinar ("Technical Conference Webinar") in accordance with the Competitive Bidding Framework for prospective Proposers and other stakeholders to discuss the provisions and requirements of this and other RFPs being offered in parallel. The Technical Conference Webinar allowed stakeholders to submit questions and was intended to help them better understand the Companies' proposed competitive bidding process and draft documents.

This Technical Conference Webinar was held on November 3, 2017. An electronic version of the Technical Conference Webinar is available on demand via the RFP website listed in Section 3.2.1. Prospective Proposers may 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. Once the PowerAdvocate RFx event has been opened and the RFP is open for bid submissions, Proposer questions should be directed through PowerAdvocate's messaging feature.

The Company also prepared a webinar to introduce the concepts and provisions of the new RDG PPA ("RDG PPA Webinar"). The Company encourages any party interested in submitting a Proposal to view the RDG PPA Webinar as well. This RDG PPA Webinar is available on-demand on the Company website listed in <u>Section 3.2.1</u> of this RFP. Parties interested in submitting questions regarding the RDG PPA Webinar may send them to the email address set forth in Section 1.6 of this RFP.

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 Proposer's anticipated performance under the PPA.
- 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 from Proposers solicited by the Company to evaluate the Proposals received.
- 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) meetings with the Company; (3) Site visits; (4) third-party consultant consultation; and (5) investigation and research relating to its Proposal and this RFP. Any such costs associated with the same will not be reimbursed by the Company to any Proposer, including the selected Proposer(s).
- 3.4.4 Each Proposal must contain the full name and business address of the Proposer and must be signed by an authorized officer or agent ¹³ of the Proposer. Signature and certification are Eligibility Requirements for this RFP. See Section 4.2 of this RFP.

3.5 Organization of the Proposal

<u>Appendix E</u> to this RFP provides information for submitting Proposal information through the PowerAdvocate Platform.

Each Proposer shall agree to the use of electronic signature within the PowerAdvocate Platform or on other appropriate certification forms for the Proposal.

3.6 Proposal Limitations

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

¹³ 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 due date for submission of Proposals.
- 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.
- The Proposal does not meet one or more of the Eligibility Requirements specified in <u>Section 4.2</u>.
- 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 <u>Section 4.4.2</u>.
- The Proposer does not respond to the Company's request for additional information to clarify the contents of its Proposal.

3.8 Power Purchase Agreement

- 3.8.1 The Power Purchase Agreement for Proposers selected under this RFP will be in the form of the Company's RDG PPA¹⁴, attached as Appendix C1 and Appendix C2 to this RFP.
- 3.8.2 In general, under the RDG PPA, payment to the Seller contains two parts: a Lump Sum Payment component to cover the fixed costs of the Project and an Energy Payment (\$/MWh component) to cover variable operations and maintenance costs (if applicable, depending on the resource). In return, the Seller shall guarantee minimum availability metrics to ensure that the Facility is maintained and available for production, as well as provide an indication of the available energy available in near real-time for the Company's dispatch.
- 3.8.3 Proposers may propose modifications to the RDG PPA but are encouraged to accept the model provisions set forth in the RDG PPA in order to expedite the overall RFP process and potential PPA negotiations. As a component of their Proposals, Proposers who elect to propose modifications shall provide a red-line version of the RDG PPA identifying their requested modifications as well as a detailed explanation and supporting rationale for each modification. Such modifications will be evaluated as a non-price evaluation criteria as further described in Section 4.4 and Appendix L. In order to facilitate this process, the Company will make available electronic versions of the RDG PPA. Any proposed modifications to the RDG PPA will be subject to negotiation between the Company and the Final Award Group. Certain provisions of the RDG PPA, such as the calculation of availability and payment terms, may be administratively burdensome to endeavor if they differ between selected Projects. Therefore, the Company will endeavor to negotiate similar provisions across the Final Award Group for such provisions.

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¹⁴ As directed by the PUC in the Kuia Solar (2015-0224) and South Maui Renewable Resources (2015-0225) dockets, the Company has been exploring alternative contract structures that better address the growing issue of curtailment of excess energy as the Company progresses towards 100% renewable energy. Additionally, as generation resources continue to shift from primarily centralized, utility-owned facilities to more distributed facilities owned by independent power producers, greater operational flexibility is required to ensure the safe, reliable, and cost effective operation of the grid. As described in the whitepaper prepared for the Companies in December 2016 by the Smart Electric Power Association Alliance ("SEPA") and ScottMadden Inc. filed in Dockets 2015-0224 and 2015-0225, "as the islands evolve to ever-increasing levels of renewable energy, the ability to treat any type of energy as 'must-take' [as under the RAP or As-Available PPA models] is increasingly limited." Moreover, such "must-take" models "fail to allocate curtailment risk in a way that is equitable to all parties, transparent to all stakeholders, and sustainable in the future with increasing need to control energy production to match demand." Consistent with meeting the future needs of the grid, the expectation is that all generation resources, whether utility, IPP or customer owned, will contribute to maintaining system stability. As a result, the Company is looking to move away from the traditional, intermittent renewable energy model of payments for energy and is seeking to select Projects based on the RDG PPA where payments are instead based on a Facility's availability and performance for a measured level of available solar or wind resource. This eliminates the revenue uncertainty associated with curtailment for IPPs while also providing the Company's system operators with the ability to dispatch resources as required to meet load and to address reliability needs through their use as ancillary services. The proposal evaluation methods and contract provisions for this approach are further described in Appendices L and C1 and C2, respectively, to this RFP.

3.8.4 Proposals that do not include proposed revisions to the attached RDG PPA will be deemed to have accepted the RDG PPA terms.

3.9 Pricing Formula Requirements

- 3.9.1 Proposers may submit pricing for one or both options, as described in <u>Section 1.2.12</u> of this RFP. Please also refer to Section 1.8:
 - Proposal without a storage component
 - Proposal with a storage component
- 3.9.2 Proposer's Response Package must include the following prices for each option:
 - **Lump Sum Payment** (\$/year): Payment amount for full availability. Payment will be made in monthly increments. No escalation of the Lump Sum Payment over time will be allowed. A Proposal's Lump Sum Payment will be compared to other Proposals on a \$/MWh basis based on the NEP RFP Projection, which is the annual estimated Net Energy Production (MWh) of the Facility for the term of the PPA as described further in <u>Section 3.11.2</u> of this RFP.
 - Estimated Total Interconnection Costs (See Appendix I to this RFP): Proposers are required to include in their pricing proposal all costs for interconnection and transmission upgrades or distribution upgrades expected to be required between their Facility and their proposed Point of Interconnection. (See Attachment A to Tariff Rule No. 19.)
 - Energy Payment Price (\$/MWh): Payment for delivery of Net Energy.
 - **Interconnection Costs Savings Rate** (\$/year): Amount per \$100,000 (lower than the estimate) of actual interconnection costs.
 - The intent of the Interconnection Costs Savings Rate is to include a shared savings mechanism between Projects selected in the Final Award Group and the Company's customers. Proposers should include a downward adjustment to their Lump Sum Payment for every \$100,000 in savings Proposers achieve based on their actual interconnection costs as compared to the proposed interconnection costs set forth in their Proposal. The Lump Sum Payment will automatically be reduced by the Interconnection Cost Savings Rate in increments if a Proposer in the Final Award Group achieves at least \$100,000 in savings between its proposed Estimated Total Interconnection Costs and its actual total interconnection costs. Savings will be rounded to the nearest \$100,000. The Final Award Group will be required to submit evidence of their actual total Interconnection Costs (i.e. invoices, purchase orders) to the Company upon the Commercial Operations Date. For Example: Assume a selected Proposal includes a Lump Sum payment of \$5,000,000/year and an Interconnection Costs Savings Rate of \$2,000/year per \$100,000 and the Total Estimated Interconnection Costs

set forth in the Proposal are \$1,000,000. Further assume that the evidence submitted by the selected Proposer reflected actual total interconnection costs of \$725,000. The actual interconnection costs would be rounded to \$700,000 and there would be a savings to the developer of \$275,000 in Interconnection Costs. Rouding the savings to nearest \$100,000 brings us to \$300,000, so the Interconnection Costs Savings rate would be multiplied by 3. In such case the Lump Sum Payment due the selected Proposer would be reduced by \$6,000 (3 x \$2,000) to \$4,994,000/year. The savings realized by the Company's customers and the selected Proposer would be as follows:

- Customers = $$120,000 ($6,000 \times 20 \text{ years}) \text{ in savings}$
- Selected Proposer = \$155,000 (\$275,000-\$120,000) in savings
- 3.9.3 All Proposal information must be independent of changes to state or federal investment tax credit policies. The requirement that Proposals must not be contingent upon changes to laws or regulations is an Eligibility Requirement for this RFP. See Section 4.2 of this RFP.

3.10 Sites Identified by the Company

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 Request for Information ("Land RFI"). Proposers will be responsible for working directly with the land owner and must secure site control with such land owner prior to submitting a Proposal. Site Control is a Threshold Requirement for this RFP. See Section 4.3 of this RFP. Additional information about the Sites identified in the Land RFI was provided to interested parties who signed Land RFI NDAs. Land RFI information remains available to other interested parties who sign the Land RFI NDA. The Land RFI is further described in Appendix G to this RFP. Proposers are not required to select a site identified in the Land RFI and as noted above may propose any site. A Proposer may meet with the Company as set forth in Section 2.2.1 if it would like to obtain similar hosting capacity information for its site as identified for the Land RFI parcels.

3.11 Project Description

- 3.11.1 Proposers must agree to provide all information pertaining to the design, development and construction of the Interconnection Facilities as specified in <u>Appendix B</u> to this RFP, including, but not limited to, the following:
 - Facility size (MW_{AC} and MW_{DC}), available capacity factor;
 - Proposed interconnection point;
 - Site Plan, including any line extension;
 - Permitting Plan;

- Single line and three line diagrams with a wet stamp by a registered Professional Engineer in Hawai'i;
- Details of major equipment, including, but not limited to, name of manufacturer, models, key metrics, characteristics of the equipment, and performance specifications;
- Projected hourly annual energy production profile¹⁵ of the Facility (8760 hours/year);
- High-level cost information including costs for equipment, construction, engineering, Seller-Owned Interconnection Facilities, Company-Owned Interconnection Facilities, Land, and Annual O&M; and
- Weather profile (e.g., solar resource information, wind resource information, etc.) used in arriving at Net Energy Potential information.

Each Proposer must also agree to provide Project financial information, including a proposed Project finance structure in the form in <u>Appendix B</u>, attached to this RFP. Such information will be used to evaluate the non-price criteria, Financial Strength and Financing Plan, set forth in Attachment L of this RFP and the Financial Viability of Proposer which is a Threshold Requirement for this RFP. <u>See Section 4.3</u> of this RFP. 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 and Consumer Advocate pursuant to a protective order in the docket.

3.11.2 Proposers must also provide the following information in their Proposer's Response Package template:

NEP RFP Projection: Estimated annual Net Energy Production (MWh) of the Facility for the term of the PPA, including relevant supporting information and assumptions used, such as resource measurements, energy production studies, warranted levels of annual degradation, and related information. If a Proposal is selected to the Final Award Group and a PPA is executed between the Company and the Proposer, the NEP RFP Projection will be further evaluated at several steps throughout the process as set forth in the RDG PPA, and adjustments to the Lump Sum Payment will be made accordingly. After the Facility has achieved commercial operations, baseline performance metrics will be established. The performance of the Facility will be assessed on a continuing basis.

3.11.3 The Proposer agrees that no material changes or additions to Facility from what is submitted with this Proposal will be made without the Proposer first having obtained prior written consent from the Company. Material omissions are not allowed and are an Eligibility Requirement for this RFP. See Section 4.2 of this RFP.

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 facility, if one will be provided.

3.12 Confidentiality

- 3.12.1 Each prospective Proposer must submit an executed NDA in the form attached as Appendix F to this RFP by the due date for Proposals specified in the RFP Schedule in Section 3.1. 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. The full execution of agreements or other documents required is an Eligibility Requirement for this RFP. See Section 4.2 of this RFP.
- 3.12.2 Proposers must clearly identify all confidential information in their Proposals. However, Proposers should take care to designate as confidential only those portions of their Proposals that genuinely warrant confidential treatment. The Company discourages the practice of marking confidential each and every page of a Proposal. The Company will make reasonable efforts to protect any such confidential information that is clearly marked confidential. 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, as set forth in the NDA.
- 3.12.3 The Company will request that the PUC issue a Protective Order to protect confidential information provided by Proposers to the Company. 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 Division of Consumer Advocacy, State of Hawai'i Department of Commerce and Consumer Affairs, 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 Proposers with whom the Company concludes PPA contract negotiations are required to post Development Period Security and Operating Period Security as set forth in the RDG PPA. Credit/Collateral Requirements are Threshold Requirements for this RFP. See Section 4.3 of this RFP.
- 3.13.2 The Development Period Security and Operating Period Security identified in the RDG PPA are minimum requirements.
- 3.13.3 Each Proposer shall be required to provide a satisfactory irrevocable standby letter of credit in favor of the Company to secure Proposer's payment of all Company-Owned Interconnection Facilities costs that are payable to Company as described in Appendix G to the RDG PPA.
- 3.13.4 Proposers may be required to fund a monetary escrow account in lieu of the required Source Code Escrow required under <u>Attachment B</u> 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. 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. Further details of the steps in the process are provided in <u>Appendix L</u> to this RFP. Figure 1 sets forth the flowchart for the proposal evaluation and selection process.

Upon receipt of the Proposals, the Company will ensure that the Proposals meet the Eligibility Requirements, and if so, will review the Proposals to ensure that the Threshold Requirements have been met. Proposals that have successfully met the initial eligibility and threshold criteria will then enter a two-phase process for Proposal evaluation, which includes the development of a Short List and then an evaluation of the selected Short List Proposals based on Best and Final Offers.

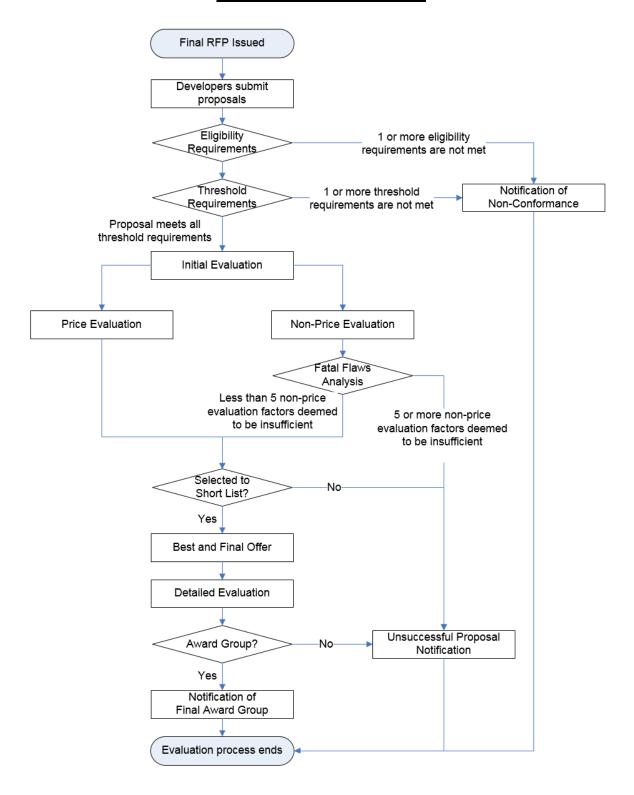


Figure 1 – Evaluation Workflow

4.2 Eligibility Requirements

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

- The Proposal must be received on time via the PowerAdvocate Platform.
- The non-refundable Proposal Fee must be received on time.
- The Proposal must not contain material omissions.
- The Proposal must be signed and certified by an officer or other authorized person of the Proposer.
- There must not have been, in the Company's sole determination, illegal or undue attempts by or on behalf of the Proposer or others to influence the Proposal review process.
- The Proposal must not contain misrepresentations.
- The Proposers must fully execute the agreements or other documents required pursuant to this RFP.
- The Proposer must provide a certificate of good standing from the State of Hawai'i Department of Commerce and Consumer Affairs.
- The Proposer must provide Federal and State tax clearance certificates for the Proposer.
- 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 Hawaii.
- No single point of failure from the Facility shall result in a decrease in net electrical output greater than 30 MW.
- Storage systems that are coupled with a Facility must only be charged by the renewable energy generated by the Facility and not delivered from the grid.

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 Eligibility Requirements. 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.

4.3 Threshold Requirements

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. This section describes the minimum requirements that all Proposals must satisfy to be eligible for further consideration in Stage 1 of the RFP Process. Proposers should provide explanations and supporting information as to how and why they believe the Project they are proposing meets each of the Threshold Requirements. Proposals that fail to meet a Threshold Requirement will be eliminated from further consideration upon

concurrence with the Independent Observer. The Threshold Requirements for this RFP are the following:

- **Site Control:** The Proposal must demonstrate that the Proposer has Site Control for all real property required for the successful implementation of a specific Proposal at a Site not controlled by the Company, including any Interconnection Facilities for which the Proposer is responsible. The need for a firm commitment is necessary to ensure that Proposals are indeed realistic and can be relied upon as the Company moves through the remainder of the RFP process. To meet this Site Control requirement, Proposers must have either: (1) an existing legally enforceable right to use and control the Site that will be required for the construction, operation and maintenance of the project; or (2) an executed letter of intent or memorandum of understanding with the Site owner which sets forth the general terms of a transaction that would grant the Proposer the required legally enforceable right to use and control the Site that will be required for the construction, operation and maintenance of the project. For example::
 - Provide documentation confirming that the Proposer owns 100% of the fee interest in the Site on which the Project will be situated;
 - Provide documentation confirming that the Proposer holds a leasehold interest
 in the Site for a term at least equal to the term of the PPA as specified in the
 Proposer's Proposal (taking into account the timelines set forth in this RFP for
 selection, negotiation, and execution of a PPA and PUC approval of a PPA);
 or
 - Provide documentation confirming that the Proposer has an executed option agreement to purchase the Site or to lease the Site for a term at least equal to the term of the PPA as specified in the Proposer's Proposal. This option agreement does not need to be exclusive to the Proposer at the time the Proposal is submitted, but may be contingent upon selection of the Proposal to the Final Award Group.

Where government or publicly-owned lands are part of the Site or are required for the successful implementation of the Proposal, 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 securing necessary and appropriate permits, approvals, rights-of-way, access, and other appurtenances necessary for the project, 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).

If the Threshold Requirement for Site Control is met, Site Control will be further evaluated as a part of the Non-Price evaluation. <u>See Section 4.4</u> of this RFP.

• **Performance Standards:** The proposed Facility must be able to meet the attributes identified in this RFP and the Performance Standards identified in the RDG PPA. The Company will review the Proposal information received, including the design documents and operating procured materials provided in the Proposal,

and will make a determination on whether the Project as designed is able to meet the Performance Standards identified in the RDG PPA and in this RFP. Proposals should provide the information required to make such a determination in an organized manner to ensure this evaluation can be completed on a timely basis.

• **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 multiple commercial applications (i.e., a PPA) at the scale being proposed. Technologies proposed in this RFP should be considered mature energy technologies at the scale proposed.

Proposals should include any supporting information for the Company to assess the commercial and financial maturity of the technology being proposed.

- Experience of the Proposer: The Proposer, its affiliated companies, partners, and/or contractors and consultants on the Proposer's Project team must have experience in the development and operation of at least one (1) electricity generation project 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 to demonstrate that the member of the project team whose experience is being identified to meet this threshold criterion has a firm commitment to provide services to the Proposer.
- **Credit/Collateral Requirements:** Proposers shall agree to post Development Period Security and Operating Period Security as described in <u>Section 3.13</u> of this RFP.
- Available Transmission Circuit Capacity: The output capacity of the Proposed
 project must not exceed the available capacity of the transmission-level circuit to
 which it will interconnect. Transmission circuit available capacity information
 should be confirmed with the Company during project-specific discussions
 regarding interconnection feasibility prior to Proposal submittal.
- **Financial Viability of Proposer:** Proposers must provide a basic financial plan for the project with details on the sources of debt and equity, capital structure, etc. Evidence is provided of general support for the project financing (i.e. interest in financing the project). Participants are reasonably strong financially. Proposer has adequate financial strength. The proposer, its affiliate or credit support provider has a moderate net worth based on its financial statements and an investment grade credit rating (BBB- and above) and has financed projects of similar magnitude.

• Guaranteed Commercial Operations Date: The project's Guaranteed Commercial Operations Date must be no later than December 31, 2022. This date will be a Guaranteed Milestone in Attachment K to the RDG PPA.

4.4 Initial Evaluation – Price and Non-Price Analysis

Proposals that meet the Threshold Requirements will then be subject to a price and non-price assessment. 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. This 60% price-related criteria/40% non-price-related criteria weighting is consistent with previous RFPs. The criteria and methodology for applying the criteria are explained in Appendix L, attached to this RFP.

<u>Appendix L</u> provides the components of the price and non-price evaluation criteria that will be included in the initial evaluation.

The Company will employ a closed-bidding process for this solicitation in accordance with Part IV.H.3 of the Framework where some of 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 in order to ensure a fair process. The evaluation models will be finalized prior to the receipt of Proposals. The detailed modeling assumptions used by the Company in their models can be found in Appendix J (Modeling Assumptions Data) to the PSIP.¹⁷ The Company will review and discuss with the Independent Observer all decisions regarding the evaluation, disqualification, non-selection, and selection of Proposals, as further discussed in Section 1.4 of this RFP.

4.4.1 Initial Evaluation of the Price Related Criteria

For the price analysis, a levelized cost of energy (\$/MWh) will be calculated for each Proposal, which represents the cost of energy that is produced by the proposed Facility, that if applied over the term of the Proposal, is equal to the net present value of the anticipated payments to the Proposer when discounted back to the base year.

In order to fairly evaluate Proposals of different technologies using levelized price, at this stage in the evaluation, the Company will group Proposals into technology buckets, where the inclusion of storage results in a separate bucket (e.g., PV, PV + storage, wind, wind + storage, etc.). The Company will then award evaluation points within each

¹⁶ Including the evaluation weighting in the Company's Docket No. 2013-0156, Waivers from the Framework for Competitive Bidding.

¹⁷ <u>Appendix J</u> to the PSIP can be found at https://www.hawaiianelectric.com/Documents/clean_energy_hawaii/grid_modernization/dkt_2014_0183_20161223_companies_PSIP_update_report_3_of_4.pdf.

technology bucket in accordance with the relative ranking of levelized price per MWh. The Proposal with the lowest levelized price in each technology bucket will receive 600 points. All other Proposals in that technology bucket will be awarded 600 points as reduced by the "Applicable Percentage," defined below. The Applicable Percentage is the percentage by which the Proposal's levelized price exceeds the lowest levelized price in that technology bucket. For example, if a Proposal's levelized price is ten percent (10%) higher than the lowest levelized price in that technology bucket, the Proposal will be awarded 540 points (that is, 600 points less 10%). The result of this assessment will be a ranking and scoring of each Proposal within each technology bucket.

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 described in <u>Appendix L</u>. Each non-price criterion will be weighted equally and will be scored on a one (1, poor) to five (5, highly preferable) scale. The minimum standard level for each non-price criterion is defined in <u>Appendix L</u>. The Company will then sum up the scores received for each non-price criterion and award evaluation points in accordance with the relative ranking of scores. The Proposal with the best combined 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 five (5) or more of the eleven (11) non-price criteria will be disqualified given that the Proposal has failed to meet nearly half of the non-price factors that are indicative as to the general feasibility and operational viability of a proposed project.

4.5 Selection of the Short 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 within each technology bucket.

The Company will select a Short List from the highest-scoring remaining Proposals from across the different technology buckets. The Company's objective for the Short List selection process is to identify and select Proposals that are low cost and viable Projects, as defined by the price and non-price weights at this stage in the process. The Company reserves the right to determine the number of Projects selected to the Short List. Proposals that are not included on the Short List will be released when the Short List is established. All other Proposals are eligible for selection to the Final Award Group, and if included in the Final Award Group, are eligible for signing of a PPA for the Project and approval of the PPA by the PUC.

4.6 Best and Final Offer (BAFO)

- 4.6.1 The Company will solicit a Best and Final Offer from Proposers selected to the Short List. Proposers will have the opportunity to update (downward only) the pricing elements of their Proposal, including the:
 - Lump Sum Payment (\$/year) amount
 - Energy Payment price (\$/MWh) amount
- 4.6.2 If a Proposer does not modify its Proposal, the original Proposal will be deemed its Best and Final Offer.
- 4.6.3 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.

4.7 Detailed Evaluation

The Best and Final Offers of the Short Listed Proposals will be further analyzed, as described in <u>Appendix L</u>, to determine the final group of Proposals selected in support of the Company system's needs as identified for the Island of Hawaii in the Company's PSIP Update Report: December 2016. Every Proposal on the Short List will not necessarily be included in the Final Award Group.

If required, during the evaluation and before the Proposals advance to the Final Award Group, the Company will perform load flow analyses to determine if certain Project combinations introduce transmission 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, large Projects on separate transmission circuits that are in close proximity with each other could introduce additional transmission 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 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. In addition, the Company will ensure Projects selected as the Final Award Group are not on the same transmission circuit.

In addition, a sensitivity analysis may be performed that considers the Interconnection Costs Savings Rate included in Proposals selected to the Short List in the event that there are Proposals with approximately the same Total Net Cost to the Company in the detailed evaluations. The Company may run additional scenario analyses if requested by the IO and the time and capability exist to run such analyses.

4.8 Selection of the Final Award Group

Based on the results of the Detailed Evaluation, including the Load Flow Analysis and review of circuits, and review with the Independent Observer, the Company will select a

Final Award Group from which to begin contract negotiations. The Company intends to select one (1) Project in Stage 1. All Proposers will be notified at this stage of the evaluation process whether their Proposal is included in the Final Award Group. However, Proposal evaluation results and rankings will not be disclosed to the Proposers in the Final Award Group. Selection to the Final Award Group and/or entering into contract negotiations does not guarantee execution of a PPA. Any Project not selected to the Final Award Group may be resubmitted in Stage 2 of this RFP or in a subsequent RFP.

Unless time permits and in consultation with the Independent Observer, after the selection of the Final Award Group, if at any time a Project no longer continues, the Company will not seek a replacement Project in Stage 1 but will seek the supply of variable renewable dispatchable generation from the Stage 2 solicitation process.

Chapter 5: Post Evaluation Process

5.1 Interconnection Requirements Study

The Company will complete Interconnection Requirements Studies for the Proposals selected to the Final Award Group to assess the costs of system upgrades necessary to integrate the Projects into the Company System. Submission of Facility models and documentation required to perform the IRS is required on the Proposal due date. Proposers must be prepared to provide any additional data necessary for the IRS within fifteen (15) days of request. Failure to provide all requested material within the time specified, or changes to the data provided after the deadline, is grounds for elimination from the Final Award Group. Proposers must pay for the cost of the IRS, which will take into consideration other Proposals selected to the Final Award Group. The IRS provides information including, but not limited to, an estimated cost for required Interconnection Facilities for a particular Project and mitigation measures. Proposers will be responsible for the actual final costs of all Seller-Owned Interconnection Facilities and Company-Owned Interconnection Facilities. No upward adjustments to pricing will be permitted as a result of the actual final costs. However, there may be downward adjustments to the pricing as a result of a lower estimated cost for required Interconnection Facilities previously provided for a particular Project. Proposers will have the opportunity to terminate the PPA in the event that the actual final costs are higher than the estimate provided by the Company. See Section 12.4 of the RDG PPA.

All Proposals selected to the Final Award Group will require a new IRS, including any Proposal at a Site where an IRS might have been previously performed in connection with other RFPs or proposed PPAs.

5.2 Contract Negotiation Process

Within two(2) business days of being notified by the Company of its intent to enter into contract negotiations, Proposers selected for the Final Award Group will be required to indicate, in writing to the Company's primary contact for this RFP, whether they intend to proceed with their Proposals. Proposers who elect to remain in the Final Award Group

will be required to keep their Proposal valid through the award period. Contract negotiations will take place in parallel with the IRS process.

The Company's goal is to complete contract negotiations and submit PPAs for approval to the PUC by December 31, 2018. The IRS will not be completed at such time. The Company intends to execute and file the PPA with the PUC for approval and later amend the PPA to include the results of the IRS.

5.3 Community Outreach and Engagement

No later than in parallel with the PPA contract negotiation process, Proposers shall at minimum conduct a public meeting in the community where the proposed Project is located, provide adequate public notice of the meeting of two weeks or more, and inform the Company of the meeting. This public meeting must include an opportunity for stakeholders and other interested parties to learn about the proposed Project, and to engage in dialogue about concerns, mitigation measures and potential community benefits, and must inform the community of the process and/or intent for input and engagements. Following the public meeting, the public will be allowed thirty (30) days to submit comments to the Company. If a PPA is executed by the Proposer and the Company, the Company's application for PUC approval of that PPA will contain an attachment including those comments. Proposers must also comply with any other requirement set forth in the RDG PPA relating to Community Outreach.

Following submission of the PUC approval application, the Company will provide another opportunity for the public to comment on the proposed Project. The Company's statement of position filed in the docket associated with the Project will contain an attachment including those comments.

5.4 PUC Approval of PPA

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

DRAFT REQUEST FOR PROPOSALS

FOR

VARIABLE RENEWABLE DISPATCHABLE GENERATION

ISLAND OF HAWAI'I

FEBRUARY 2, 2018

Docket No. 2017-0352

Appendix A – Definitions



Hawai'i Electric Light "Best and Final Offer" or "BAFO" means the final offer from a Proposer, as further described in Section 4.6 and elsewhere in this RFP.

"Code of Conduct" means the code of conduct approved by the PUC in Docket No. 03-0372 (Decision and Order No. 23614, August 28, 2007) with respect to a Self-Build Option. An updated code of conduct was submitted to the PUC in Docket No. 2017-0352 on October 23, 2017.

"Commercial Operations" has the meaning set forth in the RDG PPA.

"Commercial Operations Date" means the date on which a Facility first achieves Commercial Operations.

"Company" means Hawaii Electric Light Company, Inc., a Hawai'i corporation.

"Company Offered Sites" means potential sites identified by the Company where landowners have expressed a willingness to negotiate a lease or purchase of the land to support a renewable energy project, as described in Section 3.10 of this RFP.

"Company-Owned Interconnection Facilities" has the meaning set forth in the RDG PPA.

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

"Consumer Advocate" means the Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs of the State of Hawai'i.

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

"<u>Dispatchable</u>" means the ability to turn on or turn off a generating resource at the request of the utility's system operators, or the ability to increase or decrease the output of a generating resource from moment to moment in response to signals from a utility's Automatic Generation Control System, Energy Management System or similar control system, or at the request of the utility's system operators.

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

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

"Energy Payment Price" is the amount that the Company will pay the Seller for electric energy delivered to the Company in accordance with the terms and conditions of the RDG PPA on a

monthly basis as described in <u>Attachment J</u> to the RDG PPA. This payment will be calculated in terms of dollars per MWh.

"Facility" has the meaning set forth in the RDG PPA.

"<u>Final Award Group</u>" means the group of Proposers selected by the Company from the Short List, with which the Company will begin contract negotiations, based on the results of the Company's detailed evaluation.

"<u>Hawaiian Electric Companies</u>" or "<u>Companies</u>" means Hawaiian Electric Company, Inc. and its subsidiaries, Hawaii Electric Light Company, Inc. and Maui Electric Company, Limited.

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

"Hawaii Electric Light" means Hawaii Electric Light Company, Inc., a Hawai'i corporation.

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

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

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

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

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

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

"kV" means kilovolt.

- "Lump Sum Payment" has the meaning set forth in the RDG PPA. It may also be referred to as a monthly Lump Sum Payment to reflect the portion of the payment made each month.
- "<u>Mediation</u>" means the confidential mediation conducted in Honolulu, Hawai'i, pursuant to and in accordance with the Mediation Rules, Procedures, and Protocols of Dispute Prevention Resolution, Inc. (or its successor) or, in its absence, the American Arbitration Association then in effect.
- "RDG PPA" means the PV and/or Wind Renewable Dispatchable Generation Power Purchase Agreement attached as Appendix C1 and Appendix C2 to this RFP.
- "MW" means megawatt.
- "MWh" means megawatt hour.
- "NDA" means the Mutual Confidentiality and Non-Disclosure Agreement attached to this RFP as Appendix F.
- "O&M" means operation and maintenance.
- "Operating Period Security" has the meaning set forth in Section 14.4 of the RDG PPA.
- "<u>Performance Standards</u>" means the various performance standards for the operation of the Facility to the Company as set forth in <u>Section 3</u> of <u>Appendix B</u>, as such standards may be revised from time to time pursuant to <u>Article 23</u> of the RDG PPA, and as described in <u>Chapter 2</u> of this RFP.
- "Point of Interconnection" has the meaning set forth in the RDG PPA.
- "<u>Power Purchase Agreement</u>" or "<u>PPA</u>" means an agreement between an electric utility company and the developer of a renewable energy generation facility to sell the power generated by the facility to the electric utility company.
- "Power Supply Improvement Plan" or "PSIP" means the Company's Power Supply Improvement Plan.
- "PSIP Update Report: December 2016" means the Company's PSIP update filed on December 23, 2016 in Docket No. 2014-0183.
- "Procedures Manual" means the manual approved by the PUC, which was put in place to address and to safeguard against preferential treatment or preferential access to information in a Hawaii Electric Light RFP process. The Procedures Manual is attached as <u>Appendix D</u> to this RFP.
- "Project" means a Facility proposed to Hawaii Electric Light by a Proposer pursuant to this RFP.
- "Proposal" means a proposal submitted to Hawaii Electric Light by a Proposer pursuant to this RFP.

"Proposal Fee" means the non-refundable fee of \$10,000 for each proposal submitted as set forth in Section 1.8 of this RFP.

"Proposer" means a person or entity that submits a Proposal to Hawaii Electric Light pursuant to this RFP.

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

"PUC" means the State of Hawai'i Public Utilities Commission.

"Renewable Portfolio Standards" or "RPS" means the Hawai'i law that mandates that the Company and its subsidiaries generate or purchase certain amounts of their net electricity sales over time from qualified renewable resources. The RPS requirements in Hawai'i are currently codified in HRS §§ 269-91 through 269-95.

"Request for Proposals" or "RFP" means a request for Proposals issued pursuant to a competitive bidding process authorized, reviewed, and approved by the PUC.

"RFP Schedule" means the schedule set forth in Table 1, Section 3.1 of this RFP.

"Self-Build Option" means a Proposal submitted by the Company that is responsive to the resource need identified in the RFP, as required by Section VI of the Framework. Note that a Self-Build Option will not be submitted in Phase 1 of this RFP.

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

"Seller" means the entity that the Company is contracting with, as set forth in the RDG PPA.

"Seller-Owned Interconnection Facilities" has the meaning set forth in the RDG PPA.

"Short List" means the group of Proposals selected by Hawaii Electric Light as described in Section 4.5 of this RFP.

"Site" means the parcel of real property on which the Facility, or any portion thereof, will be constructed and located, together with any Land Rights reasonably necessary for the construction, ownership, operation and maintenance of the Facility.

"Site Control" has the meaning set forth in Section 4.3 of this RFP.

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

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

DRAFT REQUEST FOR PROPOSALS

FOR

VARIABLE RENEWABLE DISPATCHABLE GENERATION

ISLAND OF HAWAI'I

FEBRUARY 2, 2018

Docket No. 2017-0352

Appendix B – Proposer's Response Package / IRS Data Sheet



Hawai'i Electric Light

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1.0 General Instructions to Proposers:

The Company has elected to use the services of PowerAdvocate, a third-party electronic platform as facilitator of the RFP process. All Proposals and all relevant information must be submitted via the Power Advocate platform, as is described in the Final RFP. Proposers are requested to observe response structure, file naming convention, RFP documents and submittals, as identified on the Power Advocate platform. The platform will be configured to mirror the requirements identified in Appendix B, but formatting on the platform may vary from Appendix B. If there are any discrepancies between this Appendix B and what appears on the Power Advocate platform, the Power Advocate platform will control.

Input/submission items in the RFP that are not applicable to a specific Proposer, Proposal or Proposal variation must be clearly marked as "N/A" (Not Applicable) and a brief explanation must accompany each item so marked.

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

2.0 <u>Commercial Information Requirements</u>

2.1 **Required Forms**

Proposer must upload a copy of a completed:

• Mutual Confidentiality and Non-Disclosure Agreement (Appendix F to the RFP)

2.2 **Proposal Summary / Contact Information**

2.2.1 Project Summary

Proposer must provide the following summary information about their Proposal:

- Project Name
- Proposed Commercial Operations Date
- Proposer Entity Name
- Proposer's parent company, owner, sponsor, business affiliation
- Project City or Town
- Proposed interconnection point

2.2.2 Project Contact Information

Proposer must provide the contact information below for Proposer's primary point of contact:

- Name
- Title
- Address

- Phone Number
- Mobile Phone Number (if different)
- Email Address

2.2.3 Project Characteristics

Proposer must provide the following summary information about their Proposal's characteristics:

- Generation Technology
- Gross and Net (MW) AC Capability of the generation facility. The net capacity (amount able to be
 exported to the grid) must not exceed the available capacity of the circuit to which it will interconnect.
 Proposers are strongly encouraged to contact the Company as described in Section 2.2.1 of this RFP to
 ensure the project's net capacity does not exceed the circuit's hosting capacity.
- Net Energy Potential of the Facility (MWh)
- Facility overview, including at a minimum:
 - o PV
- Number of inverters
- Rated output of inverters (kW AC)
- Number of PV modules
- Rated output of PV modules (kW DC)
- PV array design characteristics (i.e. fixed tilt, single or multi-axis tracking)
- Wind
 - Number of turbines
 - Rated output of turbines (MW AC)
- Storage
 - Capacity (MWh)
 - Cycling
 - Round trip efficiency
- o Other technologies
 - Comparable information on the generating unit(s)
- Manufacturers and model numbers for all major equipment
- Estimated Life of generation facility and interconnection facilities

2.3 Executive Summary of the Proposal

• The Proposer is required to provide an executive summary of the Proposal. The executive summary must include an approach and description of the important elements of the Proposal and, if it is a variation of another Proposal, describe what the minor variations to the Proposal are. Refer to Section 1.8.2 of this RFP for an explanation of minor variations allowed.

2.4 Financial

Proposers are required to provide the following information to demonstrate FINANCIAL VIABILITY, FINANCIAL STRENGTH AND PLAN, AND FINANCIAL COMPLIANCE as they pertain to their proposal:

- 2.4.1 Identification of Equity Participants
 - Who are the equity participants in the project (or the equity partners' other partners)?
 - Proposer company profile information
 - o DUNS Number
 - o Dun & Bradstreet Rating
 - o Tax ID Number
 - o If applicable, in which state was the Proposer incorporated/formed?
 - o If applicable, in what year was the Proposer incorporated/formed?
 - o Does the Proposer have any government ownership?
 - Certificate of Good Standing from the State of Hawai'i Department of Commerce and Consumer Affairs
 - Proposer's Federal and State tax clearance
 - If the Proposer has a parent entity, answer the questions below about the parent entity.
 - o Parent entity profile information
 - DUNS Number
 - Dun & Bradstreet Rating
 - Tax ID Number
 - If applicable, in which state was parent entity incorporated/formed?
 - If applicable, in what year was parent entity incorporated/formed?
 - Does the parent entity have any government ownership?
- 2.4.2 Evidence that the Project will be Financed, including assumptions
 - How will the project be financed?
 - Is there a written commitment from the equity participants? If so, please provide a copy with confidential information redacted if necessary.

- Discuss and/or provide supporting information on any project financing guarantees.
- Does the Proposer envision any conditions precedent to project financing 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?
 - If yes, please describe such conditions precedent to project financing and Proposer's plan to address them.
- Describe the implication of the Federal Production Tax Credits or Investment Tax Credits (or similar incentives) on the viability of the project.

2.4.3 Proposer's Organizational Structure

Provide a description of the Proposer's organizational structure and associated responsibilities on the
project from a financial and legal perspective, including any general and limited partners, providers of
capital, and percentage interest of each party.

2.4.4 Approach and Plan for Project Financing

- Provide a financing plan for the project, including construction and term financing. The financing plan must address at a minimum:
 - o The project's projected financial structure
 - Expected sources of debt and equity financing
 - Estimated development and capital costs
 - Evidence the project is financeable
- Proposer is required to state to the best of its knowledge that its Proposal will not (1) trigger a capital lease accounting treatment under FASB ASC 840 or (2) result in a Developer being a Variable Interest Entity (as defined in FASB ASC 810) that would trigger consolidation of such party's finances onto the Company's financial statements under FASB ASC 810, and provide supporting information to allow the Company to verify such conclusion.

2.4.5 Project Financing Experience of the Proposer

- Provide documentation illustrating the experience of the Proposer in securing financing for projects of similar size and technology. For each project provide the following information:
 - Project name and location
 - Project type and size
 - o Date of construction and permanent financing
 - Commercial Operations Date
 - o Proposer's role(s) in financing of project
 - Off-taker, term of interconnection agreement, financing structure, and major pricing terms

2.4.6 Evidence of the Proposer's Financial Strength

The Company reserves the right to request additional financial documents and bank references, as needed.

- Provide evidence that the Proposer has the financial resources and financial strength to complete and operate the project as planned.
- Submit Proposer's audited annual reports (from legal entity and parent company) containing the balance sheets, income statement, and statement of cash flows for the three (3) most recent fiscal years and quarterly report for the most recent quarter ended.
- List the current credit rating from Standard & Poor's, Moody's, and Fitch for the Proposer, affiliates, partners, and credit support provider.

2.4.7 Evidence that the Proposer can Provide the Required Securities

- The Proposer must demonstrate its ability (and/or the ability of its credit support provider) to provide the required securities, including its plan for doing so (including type of security, sources of security and a description of its credit support provider).
- Provide a description of any current credit issues regarding the Proposer or affiliate entities raised by rating agencies, banks, or accounting firms.
- Proposers must agree to provide Development Period Security and an Operating Period Security as set forth in the Model PPA.

2.4.8 Disclosure of Litigation and Disputes

• Proposers must disclose any litigation, disputes, and status of any lawsuits or dispute resolution related to projects owned or managed by them or any of their affiliates.

2.4.9 High-level cost information

• Provide high-level cost information including costs for equipment, construction, engineering, Seller-Owned Interconnection Facilities, Company-Owned Interconnection Facilities, Land, and Annual O&M.

2.5 Model PPA Contract Exceptions

Proposers may propose modifications to the Model PPA, including modifications that are intended to address a project's specific technology and operating characteristics. However, in general, Proposers are encouraged to accept the contract terms identified in the Model PPA where possible in order to expedite the overall RFP process and potential PPA negotiations. At a minimum, Proposers who elect to propose modifications to the Model PPA shall provide a red-line version of the Model PPA with their requested modifications as a component of their Proposals andshall also provide a detailed explanation and supporting rationale for each of the proposed modifications to the Model PPA in order to enable the Company and Independent Observer to evaluate the impact that the proposed modifications will have on the overall risk assessment associated with the evaluation of each Proposal.

In the event the Proposer does not upload redlines of the applicable form agreements, the Company will assume the terms in such form agreements are agreeable to the Proposer.

2.6 **Site Control**

The Proposal must demonstrate that the Proposer has Site Control for all real property required for the successful implementation of a specific Proposal at a Site not controlled by the Company, including any

Interconnection Facilities for which the Proposer is responsible. The need for a firm commitment is necessary to ensure that Proposals are indeed realistic and can be relied upon as the Company moves through the remainder of the RFP process.

- Demonstrate how the Proposer has met the Threshold Site Control, identified in RFP Section 4.3 Threshold Requirements by complying with one (1) of the following:
 - o Provide documentation confirming that the Proposer owns 100% of the fee interest in the Site on which the Project will be situated;
 - O Provide documentation confirming that the Proposer holds a leasehold interest in the Site for a term at least equal to the term of the PPA as specified in the Proposer's Proposal (taking into account the timelines set forth in this RFP for selection, negotiation, and execution of a PPA and PUC approval of a PPA); or
 - O Provide documentation confirming that the Proposer has an executed option agreement to purchase the Site or to lease the Site for a term at least equal to the term of the PPA as specified in the Proposer's Proposal. This option agreement does not need to be exclusive to the Proposer at the time the Proposal is submitted, but may be contingent upon selection of the Proposal to the Final Award Group.
- Where government or publicly-owned lands are part of the Site or are required for the successful implementation of the Proposal, 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 securing necessary and appropriate permits, approvals, rights-of-way, access, and other appurtenances necessary for the project, including but not limited to evidence of sufficient progress toward approval by the government agency or other body vested with authority to grant such approval (as demonstrated by records of the agency). Describe the Proposer's Site Control plan or overall strategy for all real property required for the successful implementation of the proposed project.
- Provide a map of the Generator site that clearly identifies the location of the parcel on which the site is located, the tax map key number, the site boundaries (if the site does not cover the entire parcel), the total acreage of the site, the Point of Interconnection, and the relationship of the site to other local infrastructure. In addition to providing the required map, provide a site layout plan which illustrates the proposed location of all equipment and facilities on the site.
- Provide a detailed description including site sketches of how the facility will be interconnected to the Company's System (above-ground or underground) and a description of the rationale for the interconnection route.
- Identify whether the site and interconnection route are near cultural resources and implications for project completion and mitigation strategies.
- Provide evidence that the site and interconnection route are properly zoned. If they are not currently zoned properly, identify present and required zoning and/or land use designations and provide a permitting plan and timeline to secure the necessary approvals.
- 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 and easement acquisition, and describe the plan for securing the necessary rights-of-way, including the proposed timeline.

2.7 Environmental Review, Permitting Plan, Environmental Compliance/Impacts

This section addresses environmental, social, and land use issues associated with project(s) siting and operations. The purpose of this section is to identify environmental, social, and land use planning, permitting, and approval requirements, long and short term impacts, and measures that may be required to mitigate these impacts.

- 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. The plan
 should explain the conceptual plans for siting, studies/assessments, permits and approvals, including a
 schedule which identifies the sequencing of activities and critical path.
- 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 Federal, State or Local agencies and authorities having jurisdiction over the issuance, and the anticipated timeline for seeking and receiving the required permit and/or license. Include an explanation of your basis for the assumed timeline, and describe 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.
- Describe the current or previous use of the proposed site and identify and explain any State Land Use Reclassifications necessary for Proposal siting and operations, and the associated processing/approval timeframes.
- Provide a decommissioning plan, including:
 - Developing and implementing program for recycling to the fullest extent possible, or otherwise properly disposing of, of installed infrastructure, if any, and
 - Demonstration of 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.
- 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 Proposal including direct, indirect, and cumulative impacts associated with development, construction, operation and maintenance of the proposed project in each of the areas identified below. If alternatives have been or will be considered, those should be discussed. The assessment shall also include Proposer's short and long term plans to mitigate such impacts an explanation of the mitigation strategies for, but not limited to, each of the major environmental areas as presented below:
 - o Natural Environment:
 - Air quality
 - Biology (Natural habitats and ecosystems, flora/fauna/vegetation)
 - Climate
 - Soils
 - Topography and geology
 - Land Regulation

- o Land Uses
- Flood and tsunami hazards
- Noise
- o 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

2.8 Cultural Resource Impacts¹

Describe the Proposer's plan to address the below requirements as it pertains to the project site and interconnection route including a status of any consultants that have been identified and/or contracted with and any assessments that have been planned or performed to date. For impacts identified for the areas listed below, provide a mitigation strategy and the expected impact on the project schedule.

- o Archaeological Resources
- Cultural Practices and Resources

Provide documentation of work already done, including contracting with a consultant with expertise in this field to begin a cultural impact assessment for the project.

2.9 Community Outreach and Engagement

- Provide a detailed plan for community outreach and communications to gain support for or acceptance of
 the proposed project, including the Proposer's plans to reach out and engage with the community during
 project development and construction to provide project information and address local or community
 issues. The plan should address, but not be limited to, the following items:
 - o Identify communities and other stakeholders that may be affected by the proposed project. How will they be affected? What mitigation strategies will the Proposer implement?
 - When and how will affected communities and the general public be informed about the proposed project? Describe, at a minimum, the frequency of communication, source of information, and outlets utilized.

¹ Detail the potential impacts of the Proposal on cultural resources in the short and long term and the Proposer's plan to mitigate such impacts. Parties should, at a minimum, 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. Proposers must provide as much information as possible to allow the Company to understand the considerations.

- Will the affected communities and the general public be given an opportunity to provide the developer with feedback and comments on the proposed project? What will the developer do with the feedback and comments received?
- Provide any documentation of local community support or opposition including any letters from local organizations, newspaper articles, or communications from local officials.
- Provide a description of community outreach efforts already taken or currently underway, including the names of organizations and stakeholders contacted about the proposed project.
- 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).

2.10 **O&M Plan**

Operations and maintenance is as an important element of successful project operations. The Company is interested in projects that can demonstrate that their maintenance plan will ensure reliable operations during the term of the contract.

- Provide an operation and maintenance plan for the project that demonstrates the long term operational viability of the proposed project. The plan must include a discussion of the staffing levels proposed for the project and location of such staff, the expected role of the Proposer (Owner) or outside contractor, scheduling of major maintenance activity, maintenance funding levels, and the plan for testing equipment. Also state whether the Proposer would consider 24-hour staffing, explain how this would be done, and identify any cost impacts that are not included in the Proposal.
- 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.
- Indicate whether or not the project sponsor is willing to coordinate the maintenance schedule for the project with the annual maintenance schedule of the Company.
- Describe the status of the Proposer in securing any operation and maintenance agreements or contracts. Include a discussion of the Proposer's plan for securing a long-term operation and maintenance contract.
- Provide examples of the Proposer's experience with operation and maintenance services for other similar projects.

3.0 <u>Technical Information Requirements</u>

3.1 **Performance Standards**

Proposers must provide the following information regarding the project operational parameters for proposed renewable generation. If not applicable to the specific technology, the Proposer must respond with an N/A.

3.1.1 Design and Operating Information

• Provide a project design description, including configurations and maps

- RFP NEP Projection (MWh): The estimated annual net energy 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%
- Hourly 8760 (24 hours x 365 days) generation profile for the provided RFP NEP Projection
- Resource data and a description of the resource data used in developing the RFP NEP Projection (i.e. data source(s) including any resource assessment studies prepared by independent consultants, location(s) that were analysed as they relate to the proposed project site, the resolution of the data, the accuracy of any measurement instrumentation, and the duration of the data collection).
- Sample rate of critical telemetry (i.e. frequency and voltage) based on industry experience
- Frequency response characteristic, including time of response, means of implementing
- Reactive power control when resource is at zero
- Maximum controlled ramp rate
- Startup ramp rate
- Ability to cycle on/off and provide any limitations
- Distrurbance ride-through:
 - Momentary cessation (Y/N)
 - Provision of fault current- describe, provide graph

Ability to withstand subsequent events

Experience dealing with active power control, dispatch, frequency response, and ride through

3.1.2 Auxiliary Power Information

- Proposer must list the maximum auxiliary power requirements for:
 - Start-up
 - Normal Operations (from generator)
 - Normal Operating Shutdown
 - o Forced Emergency Shutdown
 - Maintenance Outage

3.1.3 *Capability of Meeting Performance Standards*

The Companies will review the Proposal information, design documents and operating procedure materials received and will make a determination on whether the facility as designed is able to meet the Performance Standards identified in Section 3 of Appendix B to the Model PPA (Appendix C to the Final RFP).

• To the extent the Performance Standards cannot be achieved, the Proposer must specify and provide an explanation of why they cannot be met. Alternately, provide the Proposer's ability to exceed the Performance Standards and explain with detail and basis.

3.1.4 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.
 - Provide a description of the equipment and technology used to facilitate dispatch by the Company and communicate with the Company.
- Include a description of the control and protection requirements of the generator and the Company's System.

3.2 Available Transmission Circuit Capacity

- Provide the Output Capacity of the Facility (MW). Please note that the output capacity of the proposed project must not exceed the available capacity of the transmission circuit to which it will interconnect.
- Provide the appropriate completed Interconnection Requirement Study Data Request worksheet.

3.3 **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 multiple commercial applications (i.e., a PPA) at the scale being proposed. Technologies proposed in this RFP should be considered mature energy technologies at the scale proposed.

• Proposals should include any 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: 1) use the technology at the scale being proposed; 2) have successfully reached commercial operations (for example, by submitting a PPA).

3.4 **Experience and Qualifications**

Proposers are required to demonstrate project experience and management capability to successfully develop and operate the project proposed. The Company is interested in a project team that has demonstrated success in the development and operation of electricity generation projects through the commercial operations stage where such projects were of a similar size (i.e., no less than half of the size of the project being proposed in response to this RFP), scope, technology and structure to the Project being proposed by the Proposer.

- Provide an organizational chart for the project that lists the project participants and identifies the management structure and responsibilities. For each of the project participants (including the Proposer, partners, and proposed contractors), provide statements that list the specific experience of the firm in: developing, financing, designing, constructing, owning, operating, and maintaining renewable energy generating facilities, or other projects of similar type, size and technology, and any evidence that the project participants have worked jointly on other projects.
- Identify those member(s) of the team the Proposer is submitting to meet the experience Threshold Requirements and demonstrate the member(s) firm commitment to provide services to the Proposer.

- Identify those members of the team with experience and qualifications including affiliates, and their
 principal personnel who will be involved in the project contracting to sell and deliver energy. If the
 Proposer consists of multiple parties, such as joint ventures or partnerships, provide this information for
 each party, clearly indicating the proposed role of each party, including an ownership chart indicating
 direct and indirect ownership, and percentage interests in the partnership or joint venture
- Provide a management chart which lists the key personnel dedicated to this project and provide biographies / resumes of the key personnel, including position, years of relevant experience, and similar project experience. Provide specifics as they relate to financing of renewable energy projects. Identify architects and engineers or provision to provide same that are licensed to practice in the State of Hawai'i.
- Provide a listing of all photovoltaic, wind or other renewable energy 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:
 - Name of the project
 - Location of the project
 - Project type, size and technology
 - Commercial operation date
 - o Offtaker (if applicable)
 - Current ownership
 - References with contact information(name, address, phone number, and relationship with the Proposer and with the related project

3.5 State of Project Development and Schedule

- Proposers are required to 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 for contract negotiation to the start of Commercial Operations. The schedule must include Interconnection Requirement Study (IRS), anticipated contract negotiation period, regulatory, permitting (including but not limited to environmental and archaeological compliance), land acquisition, community outreach, interconnection (including engineering, procurement and construction), and all other important elements outside of the direct construction of the project. For each project element, list the start and end date, and include predecessors to clearly illustrate schedule dependencies. 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.
 - o Proposers must ensure that the schedule provided in this section is consistent with the milestone events contained in the PPA and/or other agreements.
 - O Identify the elements on the critical path. The schedule must include, at a minimum, facility contracts, construction, siting, environmental permitting (anticipated submittal and approval), cultural resource implications and mitigation plans, community outreach plan, energy resource assessment, financing, engineering, procurement, local permits and any other requirements that could influence the project schedule, and the Commercial Operations Date. The project schedule must include dates for submittal of engineering and design for review and approval, all

construction management events and construction and applicable reporting milestone events specified in the Model PPA and/or other agreements.

- Proposer must provide the construction execution strategy. This must include identification of contracting/subcontracting plans, modular construction, safety plans², quality control and assurance plan, labor availability, likely manufacturing sites and procurement plans, and similar projects where these construction methods have been used by the Proposer.
- Proposers should provide a description of any project activities that have been performed to date

4.0 **Pricing Information**

- Lump Sum Payment (\$/month) the payment to be made by Company to Seller in exchange for Seller making the Net Energy Potential of the Facility available for dispatch by the Company
- Interconnection Costs Savings Rate Amount per \$100,000 (lower than the estimate) of actual interconnection costs Variable Price (\$/MWh) payment for electric energy delivered to the Company

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² 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 1/17/2018 Interconnection Requirement Study - Data Request FOR PV GENERATION PROJECT: DATE: (Nonexclusive Preliminary List) ***ALL ITEMS ARE REQUIRED AND ALL RESPONSES MUST BE FILLED UNLESS NOT APPLICABLE.*** Response Please provide a plan map of the Non-Utility Generation (NUG) facility. Please indicate the 1) interconnection point to the HECO system. Please provide the following generation and load information for the NUG facility: 2) 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. Expected minimum and maximum MW and MVAR "import from" AND "export to" HECO. Please provide Single-Line Diagram(s), Three-Line Diagram(s), and Protective Relay List & Trip Schedule for the generation and interconnection facilitie 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, 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 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 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. 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. Single-line diagrams should be provided for both the generation plant and the interconnection substation

Updated 1/17/2018 Interconnection Requirement Study - Data Request FOR PV GENERATION PROJECT: DATE: (Nonexclusive Preliminary List) ***ALL ITEMS ARE REQUIRED AND ALL RESPONSES MUST BE FILLED UNLESS NOT APPLICABLE.*** Response For the PV Inverter Based Generating Facility, please provide the following data: a. Inverter manufacturer, Type, Size, Impedances. Attach copy of inverter data sheet. b. Power Factor Range Capability c. Inverter Reactive Power Capability Curve d. Auxillary loads (P, Q, Power Factor) e. Ramp rates (up, down) Typical and Measured Proxy Data 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. Switching and service restoration practice 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. Details of filters etc. at Point of Interconnection Description of harmonic spectrum of inverter injection (order, magnitude) Description of PV inverter with respect to varying levels of solar irradiance 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 Energy storage system data sheet For the PV plant's collector system, please provide the following, as applicable: Conductor data such as size, insulation, etc. Continuous and emergency current ratings. Voltage rating (nominal and maximum kV). d. BIL rating. e. Positive, negative, and zero-sequence impedances (resistance, reactance, and susceptance). Capacitance or charging current.

Short-circuit current capability.

Updated 1/17/2018 Interconnection Requirement Study - Data Request FOR PV GENERATION PROJECT: DATE: (Nonexclusive Preliminary List) ***ALL ITEMS ARE REQUIRED AND ALL RESPONSES MUST BE FILLED UNLESS NOT APPLICABLE.*** Response Please provide the following software models that accurately represent the Facility: 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 respresentation of the collection system, generator step-up transformers, and inverter systems is acceptable. Documentation on the model shall be provided. 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. Generic models shall parameterize models available within the PSS/E standard model library 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 compatability 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. Validated PSCAD model of the inverter; and other components including energy storage system DVAR, auxiliary plant controllers, etc. if applicable. Documentation on the model(s) shall be provided. Refer to PSCAD Technical Memo for model requirements. Overlayed 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. 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) For the main transformer and generator step-up transformers, please provide: Transformer voltage and MVA ratings, and available taps. Attach copy of transformer test report or data sheet The tap settings used The LTC Control Scheme Transformer winding connections and grounding used. If the transformer is not solidly grounded, provide the impedance value for the grounding method. Positive, negative, and zero sequence impedance values.

9)

olease provide:

The trip speed (time to open).

For the circuit breakers and fault-clearing switching devices, including the generator breakers

The voltage, continuous current and interrupting capability ratings

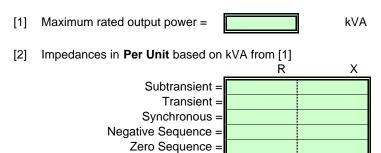
| PRODAT | erconnection Requirement Study - Data Request R PV GENERATION DJECT: TE: Text | Updated 1/17/2018 DT APPLICABLE.*** |
|--------|---|--|
| | | Response |
| 10) | For the power fuses, please provide: | |
| | a. The manufacturer, type, size, and interrupting capability. | |
| | b. The minimum melt and total clearing curves. | |
| | | |
| 11) | For the protective relaying, please provide: | |
| | Data for the CTs used with the relaying including the manufacturer, type of CT, accuracy class, and thermal rating factor. | |
| | Data for the PTs used with the relaying including the manufacturer, type of PT, voltage ratings, and quantity. | |
| | | |
| 12) | Please provide protective relay settings for existing and proposed generators, including but not limited to, reverse power, negative sequence, over and underfrequency, over and under voltage, volts per hertz, etc. | |

Updated 6/15/11

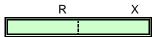
Instructions:

Please fill in the data in the green blanks below

(Note: This does not include the internal isolation transformer, if used)

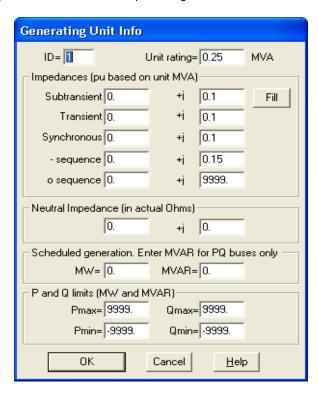


[3] Neutral impedance (if any) in actual Ohms:



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.

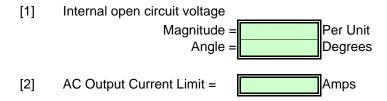
These parameters will be used to model the inverter in the Aspen Oneliner program as shown in the sample dialog box below:



Updated 6/15/11

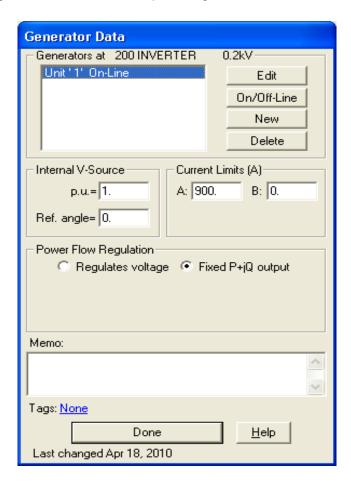
Instructions:

Please fill in the data in the green blanks below



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:



Updated 1/17/2018 Interconnection Requirement Study - Data Request FOR WIND GENERATION PROJECT: DATE: (Nonexclusive Preliminary List) ***ALL ITEMS ARE REQUIRED AND ALL RESPONSES MUST BE FILLED UNLESS NOT APPLICABLE.*** Response Please provide a plan map of the Non-Utility Generation (NUG) facility. Please indicate the 1) interconnection point to the HECO system. Please provide the following generation and load information for the NUG facility: 2) 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. Expected minimum and maximum MW and MVAR "import from" AND "export to" HECO. Please provide Single-Line Diagram(s), Three-Line Diagram(s), and Protective Relay List & Trip Schedule for the generation and interconnection facilitie 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, 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 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 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.

Please provide both a paper and an electronic version (e.g. dgn, dxf, or pdf) of the single-line

Single-line diagrams should be provided for both the generation plant and the interconnection

diagram(s) and the protective relay list & trip schedule.

substation

Updated 1/17/2018

FOR WIND GENERATION PROJECT: DATE: (Nonexclusive Preliminary List) ***ALL ITEMS ARE REQUIRED AND ALL RESPONSES MUST BE FILLED UNLESS NOT APPLICABLE.*** Response For the Wind Generating Faciltiy, please provide the following data: a. Turbine manufacturer, Type, Size, Impedances. Attach copy of turbine data sheet. b. Power Factor Range Capability c. Turbine Reactive Power Capability Curve d. Auxillary loads (P, Q, Power Factor) e. Ramp rates (up, down) Typical and Measured Proxy Data Grounding Method (i.e. effectively grounded, resonant grounded, low inductance grounded, high resistance grounded, low-resistance grounded, ungrounded). If the transformer is not solidly grounded or ungrounded, provide the impedance value for the grounding neutral, if applicable. g. Provide grounding diagram. h. Switching and service restoration practice 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. Description of harmonic spectrum of inverter injection (order, magnitude) 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 For the Wind plant's collector system, please provide the following, as applicable: 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). Capacitance or charging current.

Short-circuit current capability.

Interconnection Requirement Study - Data Request

Updated 1/17/2018

Interconnection Requirement Study - Data Request
FOR WIND GENERATION
PROJECT:
DATE:
(Nonexclusive Preliminary List)
ALL ITEMS ARE REQUIRED AND ALL RESPONSES MUST BE FILLED UNLESS NOT APPLICABLE.

| | Response |
|---|------------------------------|
| Please provide the following software models that accurately represent the Facility: | |
| a. Validated PSS/E load flow model up to the point of interconnection. The PSS/E model shall include the main transformer, collection system, generator step-up transformers, wind turbir and any other components including capacitor banks, energy storage systems, DVAR, etc. equivalent respresentation of the collection system, generator step-up transformers, and tur is acceptable. Documentation on the model shall be provided. | nes, An |
| v. Validated PSS/E dynamic model for the wind turbine; and other components including ener storage system, DVAR, etc. if applicable. The wind turbine model shall include the generator/converter, electrical controls, plant-level controller, protection relays, and mechar systems that impact its electrical performance. Generic and Detailed models shall be provided, including the PSS/E dyre file with model parameters. | nical ided. |
| i. Generic models shall parameterize models available within the PSS/E standard model | library. |
| ii. Detailed models shall be supplied by the vendor/manufacturer as user-written models. uncompiled source code for the user-written model shall be provided to ensure compat with future versions of PSS/E. In lieu of the uncompiled source code, a compiled objec and applicable library files shall be provided in PSS/E versions 33 AND 34 format. Upc of the object file compatible with future PSS/E versions must be provided as requested 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. | tability t file dates If for |
| c. Validated PSCAD model of the wind turbine; and other components including energy storag system, DVAR, etc, if applicable. Documentation on the model(s) shall be provided. Refer PSCAD Technical Memo for model requirements. | |
| d. Overlayed plots validating the performance of the three dynamic models for a three-phase f Plots shall include voltage, real and reactive power, real and reactive current. | fault. |
| e. Validated Aspen Oneliner short circuit model that accurately represents the facility (includin energy storage system if applicable), and is valid for all faults conditions anywhere on the L system. Documentation on the model(s) shall be provided. (OTHERWISE SEE ADDITION TABS FOR REQUIRED INFORMATION TO MODEL INVERTER) | Jtility |
| | |
| For the main transformer and generator step-up transformers, please provide: | |
| Transformer voltage and MVA ratings, and available taps. Attach copy of transformer test r or data sheet | report |
| b. The tap settings used. | |
| c. The LTC Control Scheme. | |
| d. Transformer winding connections and grounding used. If the transformer is not solidly grou provide the impedance value for the grounding method. | unded, |
| e. Positive, negative, and zero sequence impedance values. | |
| | |
| For the circuit breakers and fault-clearing switching devices, including the generator bre please provide: | pakers, |
| a. The voltage, continuous current and interrupting capability ratings. | |
| b. The trip speed (time to open). | |

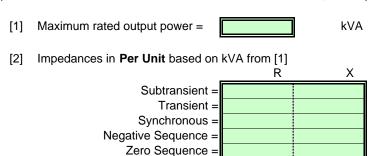
| PRODAT | erconnection Requirement Study - Data Request N WIND GENERATION DJECT: TE: DECT: DECT: | Updated 1/17/2018 DT APPLICABLE.*** |
|--------|--|--|
| | | Response |
| 10) | For the power fuses, please provide: | |
| | a. The manufacturer, type, size, and interrupting capability. | |
| | b. The minimum melt and total clearing curves. | |
| | | |
| 11) | For the protective relaying, please provide: | |
| | Data for the CTs used with the relaying including the manufacturer, type of CT, accuracy class, and thermal rating factor. | |
| | Data for the PTs used with the relaying including the manufacturer, type of PT, voltage ratings, and quantity. | |
| | | |
| 12) | Please provide protective relay settings for existing and proposed generators, including but not limited to, reverse power, negative sequence, over and underfrequency, over and under voltage, volts per hertz, etc. | |

Updated 6/15/11

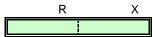
Instructions:

Please fill in the data in the green blanks below

(Note: This does not include the internal isolation transformer, if used)

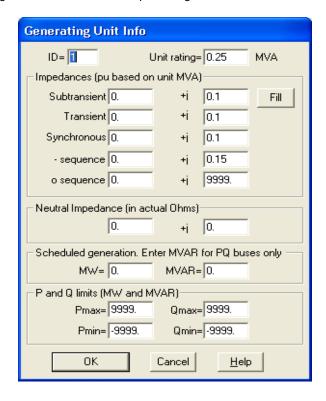


[3] Neutral impedance (if any) in actual Ohms:



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.

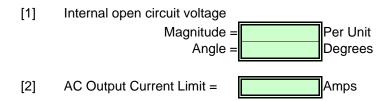
These parameters will be used to model the inverter in the Aspen Oneliner program as shown in the sample dialog box below:



Updated 6/15/11

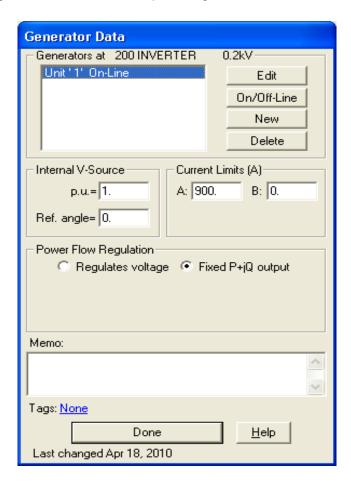
Instructions:

Please fill in the data in the green blanks below



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:



FOR SYNCHRONOUS, ASYNCHRONOUS, INDUCTION GENERATORS PROJECT:

DATE:

Preliminary

Interconnection Requirement Study - Data Request

(Nonexclusive Preliminary List)

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

| Dlaa | ase provide Single-Line Diagram(s), Three-Line Diagram(s), an | d Protective Pelay |
|------|--|----------------------|
| | & Trip Schedule for the generation and interconnection facilit | |
| _ | 10100 | |
| Gen | eral SLD Comments and Questions | |
| | | |
| a. | The Single-line diagram(s) and Three-line diagram (s) should inc | |
| | i. For main and generator step up transformer(s), please sho | DW: |
| | Transformer voltage and MVA ratings. Transformer impedance(s). | |
| | 1 () | autrala ava |
| | Transformer winding connections and grounding. If n grounded through impedance, please show the imped | dance value. |
| | The protective relaying and metering for the generators, trained all other main substation equipment. | ansformers, buses, |
| | For the potential transformers, please indicate the type, quaccuracy rating. | antity, ratio, and |
| | For the current transformers, please indicate the type, qua accuracy rating, and thermal rating factor. | ntity, ratio, and |
| | Auxiliary power devices (e.g. capacitors, reactors, storage their rating(s); additional inquiries may be made to obtain t these devices. | |
| | vi. For the interconnection / tie lines (overhead or undergroun generation system, please provide the following, as application details such as cross-section(s), plan and | able: |
| | Conductor data such as size, insulation, etc. | |
| | Continuous and emergency current ratings. | |
| | Voltage rating (nominal and maximum KV). | |
| | BIL rating. | |
| | Positive, negative, and zero-sequence impedances (reactance, and susceptance) | esistance, |
| | 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 relay description, type, style number, quantity, ANSI Device No., breaker(s)/switching device(s) tripped, for both the generator prointerconnection facilities protection. | , and range; and the |

FOR SYNCHRONOUS, ASYNCHRONOUS, INDUCTION GENERATORS PROJECT:

DATE:

Preliminary

Interconnection Requirement Study - Data Request

| | | Response |
|------|--|----------|
| | | |
| 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. | |
| Dies | ase provide a plan map of the Non Utility Generation (NUG) facilities; please | |
| | cate the interconnection point to the HECO system. | |
| | | |
| | | |
| For | the power transformers including the generator step-up transformers, please | |
| | ride: | |
| a. | Transformer voltage and MVA ratings, and available taps. Attach copy of transformer test report or data sheet | |
| b. | The tap settings used. | |
| c. | The LTC Control Scheme. | |
| | Transformer winding connections and grounding used. If the transformer is not solidly grounded, provide the impedance value for the grounding method. | |
| d. | | |
| e. | Positive, negative, and zero sequence impedance values. | |
| | Positive, negative, and zero sequence impedance values. | |
| | Positive, negative, and zero sequence impedance values. | |
| e. | | |
| e. | Positive, negative, and zero sequence impedance values. the circuit breakers and fault-clearing switching devices, including the erator breakers, please provide: | |
| e. | the circuit breakers and fault-clearing switching devices, including the | |

FOR SYNCHRONOUS, ASYNCHRONOUS, INDUCTION GENERATORS PROJECT:

DATE:

Preliminary

Interconnection Requirement Study - Data Request

(Nonexclusive Preliminary List)

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

| ALL | TILING ARE REQUIRED AND ALE REGIONOGO MOGI DE FIELED OF | Response |
|--------------|---|----------|
| | | |
| 5) Fo | r the power fuses, please provide: | |
| a. | The manufacturer, type, size, and interrupting capability. | |
| b. | The minimum melt and total clearing curves. | |
| | | |
| 6) F | or the protective relaying, please provide: | |
| а | . 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. | |
| ' ii | Please provide protective relay settings for existing and proposed generators, including but not limited to, reverse power, negative sequence, over and under requency, over and under voltage, volts per hertz, etc. | |
| | | |
| | | |
| 8) F | or the new generator(s), please provide: | |
| а | . Manufacturer and model of the generator. | |
| b | Generator type (e.g. synchronous, induction, etc.). If synchronous, indicate round rotor or salient pole. | |
| С | . Generator voltage, MVA, and power-factor ratings. | |
| d | Validated PSSE and Synergi load flow and dynamic model. Documentation on the models should also be provided. | |
| е | . Please provide the following: | |
| | i. The time constants T'do, T'qo, T"do, T"qo. | |

FOR SYNCHRONOUS, ASYNCHRONOUS, INDUCTION GENERATORS PROJECT:

DATE:

Preliminary

Interconnection Requirement Study - Data Request

(Nonexclusive Preliminary List)

| | | Response |
|--|--|----------|
| ii. | The reactance values for the Xd, Xq, X2, X0, X'd, X'q, X"d, X"q, and XL. Please provide both saturated (for short-circuit calculations) and unsaturated (for dynamics modeling) values where appropriate. | |
| iii. | The inertia, H, for the generator/turbine/exciter combination. | |
| iv. | The generator saturation characteristics. | |
| V. | Starting power factor | |
| vi. | Starting current | |
| vii. | Starting torque | |
| viii. | Full load speed/slip | |
| ix. | Full load speed/slip | |
| X. | Full load efficiency | |
| xi. | Pull out torque | |
| | rator V/HZ curve. | |
| | ive Sequence Current Limit curve (I2²t). | |
| | rator auxiliary load curve. | |
| | rator (MW/MVAR) capability curve(s). | |
| | , , , , , | |
| | rpe of grounding used with the generator. If the generator is not solidly ded, provide the grounding method details and equipment ratings. | |
| | tted Aspen Oneliner short circuit model that accurately represents the facility, valid for all faults conditions anywhere on the Utility system. | |
| | | |
| | | |
| For the ge | enerators' excitation system, please provide: | |
| | synchronous generators, please provide the following. | |
| | , | |
| a. For | synchronous generators, please provide the following. | |
| a. For | synchronous generators, please provide the following. Exciter type, manufacturer, model, and voltage/current ratings. | |
| a. For i. ii. | synchronous generators, please provide the following. Exciter type, manufacturer, model, and voltage/current ratings. Excitation system response ratio and ceiling factor. Validated PSSE excitation system model with parameter values representative of the excitation system. Documentation of the model should also be provided. Please indicate whether the excitation system has a maximum excitation (OEL) limiter, a minimum excitation (UEL) limiter, and/or a power system stabilizer (PSS); please provide the device settings if device(s) present. | |
| a. For i. ii. iii. | synchronous generators, please provide the following. Exciter type, manufacturer, model, and voltage/current ratings. Excitation system response ratio and ceiling factor. Validated PSSE excitation system model with parameter values representative of the excitation system. Documentation of the model should also be provided. Please indicate whether the excitation system has a maximum excitation (OEL) limiter, a minimum excitation (UEL) limiter, and/or a power system stabilizer (PSS); please provide the device settings if device(s) present. | |
| a. For i. ii. iii. iv. v. | synchronous generators, please provide the following. Exciter type, manufacturer, model, and voltage/current ratings. Excitation system response ratio and ceiling factor. Validated PSSE excitation system model with parameter values representative of the excitation system. Documentation of the model should also be provided. Please indicate whether the excitation system has a maximum excitation (OEL) limiter, a minimum excitation (UEL) limiter, and/or a power system stabilizer (PSS); please provide the device settings if device(s) present. Description of the control mode of the excitation system, e.g. on voltage | |
| a. For i. ii. iiv. v. b. For continet | synchronous generators, please provide the following. Exciter type, manufacturer, model, and voltage/current ratings. Excitation system response ratio and ceiling factor. Validated PSSE excitation system model with parameter values representative of the excitation system. Documentation of the model should also be provided. Please indicate whether the excitation system has a maximum excitation (OEL) limiter, a minimum excitation (UEL) limiter, and/or a power system stabilizer (PSS); please provide the device settings if device(s) present. Description of the control mode of the excitation system, e.g. on voltage regulation, power factor regulation, etc. asynchronous generators, please describe the method of excitation and its trol. Note additional inquiries may be made to obtain technical data for such hod. | |
| a. For i. ii. iiv. v. b. For continet | synchronous generators, please provide the following. Exciter type, manufacturer, model, and voltage/current ratings. Excitation system response ratio and ceiling factor. Validated PSSE excitation system model with parameter values representative of the excitation system. Documentation of the model should also be provided. Please indicate whether the excitation system has a maximum excitation (OEL) limiter, a minimum excitation (UEL) limiter, and/or a power system stabilizer (PSS); please provide the device settings if device(s) present. Description of the control mode of the excitation system, e.g. on voltage regulation, power factor regulation, etc. asynchronous generators, please describe the method of excitation and its tool. Note additional inquiries may be made to obtain technical data for such | |
| a. For i. ii. iv. v. b. For cont meti | synchronous generators, please provide the following. Exciter type, manufacturer, model, and voltage/current ratings. Excitation system response ratio and ceiling factor. Validated PSSE excitation system model with parameter values representative of the excitation system. Documentation of the model should also be provided. Please indicate whether the excitation system has a maximum excitation (OEL) limiter, a minimum excitation (UEL) limiter, and/or a power system stabilizer (PSS); please provide the device settings if device(s) present. Description of the control mode of the excitation system, e.g. on voltage regulation, power factor regulation, etc. asynchronous generators, please describe the method of excitation and its trol. Note additional inquiries may be made to obtain technical data for such hod. | |

Updated 10/5/11

FOR SYNCHRONOUS, ASYNCHRONOUS, INDUCTION GENERATORS PROJECT:

DATE:

Preliminary

Interconnection Requirement Study - Data Request

(Nonexclusive Preliminary List)

| | Response |
|---|----------|
| | |
| Please provide the following generation and load information for the NUG acilities: | |
| Expected KW and KVAR loads including, but not limited to, generators' auxiliary load curve, process load(s) profile(s), etc. | |
| b. Expected minimum and maximum MW and MVAR "import from" AND "export to" HECO. | |
| c. Gross and net output of the facility | |
| Object files and IPLANS for user written models, and applicable library files. The uncompiled source code for object files shall be provided to ensure compatability with future versions of PSS/E. In lieu of the uncompiled object file source code, compiled object file updates compatible with future PSS/E versions shall be provided as requested for the life of the project. | |
| n addition to PSS/E, other power system analysis tools are required to study | |
| orogram (e.g. sub-cycle behavior). Data compatible with the following tools shall be provided: | |
| i. Time domain tools - PSCAD® or electro-magnetic transient program (EMTP). Documentation on the model shall also be provided. | |
| ASPEN One-Liner (VALIDATED MODEL TO BE PROVIDED) | |

NOTE: **Equivalent models other than PSSE may be required if the PSSE model cannot be converted properly.

FOR

VARIABLE RENEWABLE DISPATCHABLE GENERATION

ISLAND OF HAWAI'I

FEBRUARY 2, 2018

Docket No. 2017-0352

Appendix C1 – Model PV RDG PPA

[Note: The body of the Companies' RDG PPAs for both PV and wind are the same for all three Companies and are therefore not reproduced as part of this exhibit. Some of the attachments to the RDG PPA for both PV and wind are island specific and such island specific attachments for Hawai'i are provided in Exhibit 8 of this Transmittal Letter]



Hawaiʻi Electric Light

FOR

VARIABLE RENEWABLE DISPATCHABLE GENERATION

ISLAND OF HAWAI'I

FEBRUARY 2, 2018

Docket No. 2017-0352

Appendix C2 – Model Wind RDG PPA

[Note: The body of the Companies' RDG PPAs for both PV and wind are the same for all three Companies and are therefore not reproduced as part of this exhibit. Some of the attachments to the RDG PPA for both PV and wind are island specific and such island specific attachments for Hawai'i are provided in Exhibit 8 of this Transmittal Letter]



Hawaiʻi Electric Light

FOR

VARIABLE RENEWABLE DISPATCHABLE GENERATION ISLAND OF HAWAI'I

FEBRUARY 2, 2018

Docket No. 2017-0352

Appendix D – Code of Conduct Procedures Manual



Hawai'i Electric Light

HAWAIIAN ELECTRIC COMPANY, INC. MAUI ELECTRIC COMPANY, LIMITED HAWAII ELECTRIC LIGHT COMPANY, INC.

Code of Conduct Procedures Manual for the Competitive Bidding Program

I. INTRODUCTION

The Framework for Competitive Bidding ("Framework") adopted on December 8, 2006, by the Public Utilities Commission of the State of Hawaii (the "Commission") pursuant to Decision and Order No. 23121 (Docket No. 03-0372, Instituting a Proceeding to Investigate Competitive Bidding for New Generating Capacity in Hawaii), requires that the utility develop and follow a Code of Conduct whenever a utility or its affiliate seeks to advance an energy generation resource proposal in response to a request for proposals (RFP) issued by any of the Hawaiian Electric Companies (Hawaiian Electric Company, Maui Electric Company and Hawaii Electric Light Company) (individually, a "Company" and collectively, the "Companies"). Section III.A.4 of the Framework required the utility to submit to the Commission for review and approval (subject to modification if necessary) a Code of Conduct prior to the commencement of any competitive bid process under the Framework. On June 7, 2007, by letter to the Commission, the Company submitted its form of Code of Conduct for Commission review and approval. By Decision and Order No. 23614 (Docket No. 03-0372), issued August 28, 2007, the Commission approved the Code of Conduct.

This Code of Conduct Procedures Manual has been developed to outline the procedures to be followed and the policies that have been developed surrounding the implementation of the Companies' competitive bidding process for new generating capacity. This Code of Conduct Procedures Manual has been developed in accordance with the requirements of Section IV.H.9.a(iii) of the Framework and outlines requirements (1), (3) and (4) of such section, namely: (1) the protocols for communicating with proposers, the self-build team, and others; (3) the documentation forms, including logs for any communications with proposers; and (4) other information consistent with the requirements of the solicitation process. Requirement (2) of the section, the evaluation process in detail and the methodologies for undertaking the evaluation process for the RFP are described in detail in Chapter 4 (Evaluation Process and Evaluation Criteria) of the RFP. The bid evaluation process and methodology will consider both

price/system impacts and non-price criteria in accordance with Section IV.E of the Framework and Tariff Rule 19 (See <u>Appendix J</u> (Tariff Rule 19) of the RFP).

The procedures and policies set forth herein have been designed to ensure that the procurement process is undertaken in a fair and equitable manner and that each Proposer is afforded an equal opportunity to participate and compete within the RFP framework.

This Code of Conduct Procedures Manual is intended to serve as a set of rules and guidelines for implementing the Companies' solicitation process and to manage communications between Company personnel and consultants participating in the RFP process. Necessary additions, deletions, and/or changes depending on the circumstances surrounding the RFP and directions from the IO may be required but only as ordered directly by the Commission, or indirectly through the IO after consultation with the Commission.

II. DEFINITIONS

Affiliate- An "affiliated interest" of the Company as defined in HRS Section 269-19.5(a), specifically: (1) any person/entity holding 10% of more of the shares of the Company, (2) any person/entity holding 10% or more of the ownership interests of an entity holding 10% or more of the shares of the Company; (3) any corporation, 10% of which is owned by a person/entity holding 10% or more the shares of the Company; (4) any person who is an officer or director of the Company; (5) any corporation operating the Company, or providing engineering, accounting, legal, or similar service to the Company, which has 3 or more officers or 3 or more directors in common with the Company; and (6) any corporation which has directors in common with the Company where the number of common directors is more than one-third of the total number of the Company's directors. For the purposes of any RFP where an Affiliate of the Company is presenting a proposal in response to the RFP, such Affiliate and its proposal will be considered and evaluated in the same manner as any other independent Proposer.

- Affiliate Team Affiliate personnel and outside consultants for the Affiliate responsible for the development of the Affiliate's response to the RFP.
- Code of Conduct A written code developed by Hawaiian Electric Company, Inc., Maui Electric Company, Limited and Hawaii Electric Light Company, Inc. (each, a "Company" and collectively, the "Companies") to ensure the fairness and integrity of the competitive bidding process, in particular where the host utility or its affiliate seeks to advance its own resource proposal in response to an RFP. The Code of Conduct follows the requirements described in Section IV.H.9.c of the Framework and was previously approved by the Commission in Decision & Order No. 23614. Ministerial revisions and clarifications to the Code of Conduct have been proposed by the Companies in the instant Docket.
- Company Executive in Charge A Company's executive responsible for ensuring compliance with this Code of Conduct and serving as the point of contact for the Independent Observer for reporting any violations by the Company of the Code of Conduct. For any RFP of the Companies, the Company Executive in Charge shall be the Senior Vice President of Business Development & Strategic Planning. The Company's Corporate Compliance Officer shall remain responsible for the Companies' independent code of conduct and may support compliance matters and questions arising with employees, agents and other representatives of the Company, e.g., conflicts of interest, with respect to this Code of Conduct.
- Company RFP Team The Company personnel and outside consultants responsible for the development of the Company's RFP and the evaluation of bids submitted in response to the RFP. Within the Company RFP Team, there may be designated certain "core" team members who will be permanent team members of any Company RFP Team. Such "core" members will not have any involvement with the Company Self-Build Team for the subject RFP.
- Company Self-Build Team The Company personnel and outside consultants responsible for the development of the Company's self-build response to the RFP. Within the Company Self-Build Team, there may be designated certain

- "core" team members who will be permanent team members of any Company Self-Build Team. Such "core" team members will not have any involvement with the Company RFP Team for the subject RFP.
- Confidential Information Any non-public information developed and provided by the Company (i.e. proprietary system information, etc.) or Proposers during the RFP process (such non-public information may include, for example, the identity of competing Proposers, and their technical, trade or financial information). This term includes any material non-public information regarding the RFP process developed for and used during the competitive bidding solicitation process, such as the evaluation process or criteria. Confidential Information does not include public information, such as information on resources in the Company's Power Supply Improvement Plan (PSIP) included in its filings with the Commission.
- Director of Energy Procurement The director of the Division within the Renewable Acquisition Department responsible for directing the resources responsible for the implementation of the competitive bidding process pursuant to the Framework. The Director of Energy Procurement shall be a member of the Company RFP Team. The Director of Energy Procurement will report to the Manager of Renewable Acquisition on the status of the competitive bidding process.
- Eligible Proposer A Proposer who has met the minimum requirements and threshold requirements in the RFP necessary to remain eligible to compete in the process.
- Energy Contract Manager The staff position(s) within the Company's Renewable Acquisition Department responsible for managing the RFP.
- Framework The Framework for Competitive Bidding contained in Decision & Order No. 23121 issued by Commission on December 8, 2006, to establish rules for competitive bidding in response to a request for proposals when a utility seeks to acquire new generation resources.
- Independent Observer (IO) The neutral person or entity appointed by the
 Commission to monitor the utility's competitive bidding process, and to

- advise the utility and Commission on matters arising out of the competitive bidding process, as described in Part III.C of the Framework.
- Manager of Renewable Acquisition The manager of the Department that will oversee the Company's competitive bidding process. The Manager of Renewable Acquisition shall be a member of the Company RFP Team.
- Proposer Entity who submits or plans to submit a proposal in response to a Company-issued RFP. An Affiliate of the Company participating in the RFP and submitting a proposal shall be considered a Proposer.
- RFP A written request for proposals issued by one of the Companies to publicly solicit bids to supply future generating capacity to the Company pursuant to the competitive bidding process established in the Framework.
- Shared Resource An employee of a Company or consultant to a Company who, because of the scarcity of his/her expertise within the Company, is authorized to communicate and provide information or input to both the Company RFP Team and the Company Self-Build Team and is not a resource dedicated to either team. Shared Resources will not be available as a resource to any Affiliate Team.
- Unassigned Company Resource -- Company employees unassigned to an essential team that may be called upon by the Company RFP Team and/or the Company Self Build Team to assist in meeting limited, ad hoc tasks for the RFP or the Self-Build proposal. For example, the RFP team may be unable to evaluate an unforeseen technical specialty included in a bid. In that event, the RFP team would need to request assistance from an employee in the company or a consultant that isn't already assigned to an essential team and possesses the specific expertise. Such personnel are intended to assist the requesting team only in an ad hoc manner, limited in scope and purpose to the particular task required. Unassigned Company Resources, once identified, may become Shared Resources, or if necessary because of the abundance of work performed for a team, may be placed on such team.

III. STATEMENT OF OBJECTIVES

From time to time, the Companies will be proposing to seek power supply proposals for electric generation resources that best meet the needs of the respective Company's system. The timing for issuance of RFPs for each of the systems will be dependent upon the Company's needs identified in the applicable PSIP, the necessary competitive bidding procedures identified in the Framework and upon the timing of the need for capacity for each island. Each of the Companies will undertake a detailed multi-stage review and evaluation process whereby eligible proposals will be selected based upon their ability to most costeffectively and reliably satisfy the requesting Company's resource requirements. While cost minimization is a major criterion, the Companies will select those resources which, in its opinion, represent the best value to the Companies and its customers regarding economic and technical attributes, limited risk and flexibility for meeting its projected requirements. Consistent with this objective is the Companies' goal of ensuring the competitive benefits of the procurement process while continuing to provide equitable and fair consideration for all proposals. The Companies also intend that the evaluation process will be welldocumented so that the results of the evaluation can be fully reviewed by an IO to confirm that all proposals were treated in a fair and consistent manner.

The Code of Conduct and this Manual addresses: (1) communication requirements and procedures associated with the relationship between utility employees (Company RFP Team, Company Self-Build Team, Shared Resources and Unassigned Company Resources); (2) communication requirements and procedures associated with the relationship between the Company RFP Team, the Company Self-Build Team, and Affiliate Team and Proposers; and (3) communication requirements associated with the relationship between Company management and the Company RFP Team. Communications between the Company and any Affiliate Team shall be treated as a communication with an independent third party Proposer. An Affiliate Team shall have no access to any

Shared Resources or Unassigned Company Resources other than such access provided to any other independent third party Proposer.

The Code of Conduct and this Manual also include procedures for the sharing of resources, where necessary and appropriate, by the Company RFP Team and the Company Self-Build Team for the purposes of completing their efforts to effectively administer the RFP or to submit a bid in response to the RFP. The small size of the Companies and limitation of resources will require specialized services, information exchange and sharing of resources in certain limited circumstances. Company personnel and consultants identified as "Shared Resources" or "Unassigned Company Resources" shall be designated by the Companies for this specific purpose. Specific rules shall apply to "Shared Resources" and "Unassigned Company Resources" as described herein and all such communications shall be governed by these rules. It is important to note here that Shared Resources may serve as a resource for either the Company RFP Team or the Company Self-build Team but shall not be a resource to facilitate the communication or the exchange of information between the Company RFP Team and the Company Self-build Team.

IV. ORGANIZATION AND COMMUNICATION RESPONSIBILITIES

This section outlines the RFP organizational structure for the development of the RFP and the Company self-build option and the organization's responsibilities to ensure that communications between Company personnel and consultants working on their respective RFP or self-build projects are conducted in a fair, consistent, and equitable basis so that the Company Self-Build Team does not enjoy any unfair advantage over other Proposers responding to the RFP.

A. Organization

The Company shall identify two separate teams to facilitate the independence and objectivity of the Company resources working on the RFP and ensure an arms-length relationship with the resources working on the Company's self-build project to avoid any real or perceived inequity in the RFP process. The two essential teams shall be the "Company RFP Team" and the "Company Self-Build Team."

Other limited Company resources, such as select staff from various functional areas of the Company that are in short supply and thus cannot be dedicated solely to either team, may be designated as "Shared Resources" to perform services for the Company RFP Team and Self-Build Team. Shared Resource employees are allowed to carry on with both their RFP (for either the RFP Team and/or the Self-Build Team) and regular functions throughout the resource planning process (including the development of any Company parallel or contingency plan as defined in the Framework), which may require communications with or services performed for the Self-Build Team. Shared Resource employees, however, will not participate in the evaluation and selection process of proposals submitted in response to the RFP. Rules for communications between Shared Resources and the essential teams shall be outlined below.

Company employees unassigned to the RFP may be called upon by the RFP Team, Self-Build Team, or both for help to meet unforeseen tasks. After completing the Code of Conduct training, these "Unassigned Company Resources" are eligible to assist on an ad hoc basis with the requirement that all communications as an Unassigned Company Resource must be memorialized logged in the same manner as communications with Shared Resources. If an Unassigned Company Resource is called upon repeatedly and asked for a substantial amount of assistance by a particular team, the employee should be assigned to such team or evaluated for designation as a Shared Resource.

1. Essential Teams

<u>Company RFP Team</u>. The Company RFP Team, tasked with preparing the RFP and evaluating the responses and bids in response to the RFP, will consist

primarily of Director/Manager-level and other experienced employees together with possible outside consultants, with backgrounds in a number of disciplines necessary to conduct a thorough evaluation of each proposal. The members of the team will be prepared to evaluate proposals on the basis of their price and non-price aspects pertaining to their level of expertise. Members of the Company RFP Team will include professionals with experience in the following areas of expertise: engineering, siting/land use, environmental, transmission planning, fuel procurement, legal, financial planning, system operations, integrated resource planning, generation planning, production cost analysis, and others as needed.

Price and Non-price sub-teams will conduct their sections of the bid evaluation process separately and will not share the results of their evaluation with members of the other sub-team. Each team will submit their evaluation results to an oversight team, which will be responsible for compiling the results of the evaluations and selecting the short-list.

The Energy Contract Manager will be responsible for directing the efforts of the Company RFP Team and for distributing the appropriate sections of the proposal to the appropriate Company RFP Team members when the proposals are received. The Energy Contract Manager will be responsible for maintaining the documentation underlying the evaluation of each proposal as well as all communications with proposers.

The Self-Build Team. The Self-Build Team, tasked with preparing any Company proposal to be submitted by the Company in response to a Company RFP, will consist primarily of Company employees, along with possible outside consultants with backgrounds in a number of disciplines necessary to complete a competitive proposal in response to the Company RFP. The members of the team will include professionals with experience in the following areas of expertise: engineering, siting/land use, environmental, transmission planning, fuel

procurement, legal, financial planning, system operations, integrated resource planning, generation planning, production cost analysis, and others as needed.

Affiliate Team. Any Affiliate Team will be comprised solely of employees and consultants of the Affiliate and no Company employee or consultant shall serve as a member of an Affiliate Team, provided, however, that a consultant may perform services for an Affiliate and the Company so long as appropriate "walls" are established satisfactory to the Company, that ensures that employees of the consultant working for the Affiliate Team do not also perform work for the Company nor communicate with employees of the consultant performing work for the Company, and vice versa. Any consultant of an Affiliate Team assisting with the Affiliate Team's RFP proposal shall agree to abide by the Code of Conduct and complete the Competitive Bidding Code of Conduct Acknowledgement of Receipt.

2. Other Resources.

Shared Resources. Other limited Company resources, such as select staff from various functional areas of the Company that are in short supply and thus cannot be dedicated solely to either team, may be designated as "Shared Resources" to perform services for the Company RFP Team and Self-Build Team. Shared Resource employees are allowed to carry on with both their RFP (for either the Company RFP Team and/or the Company Self-Build Team but not as a member of such teams) assignments and their regular functions throughout the resource planning process (including the development of any Company parallel or contingency plan as defined in the Framework), which may require communications with or services performed for the Self-Build Team. Shared Resource employees, however, will not participate in the evaluation and selection process of proposals submitted in response to the RFP. Rules for communications between Shared Resources and the essential teams shall be outlined below.

<u>Unassigned Company Resources</u>. Company employees unassigned to either of the essential teams may be called upon by the Company RFP Team, or the Company Self-Build Team for assistance to meet unforeseen tasks. After completing the Code of Conduct training and executing the Competitive Bidding Code of Conduct Acknowledgement of Receipt, these "Unassigned Company Resources" are eligible to assist on an ad hoc basis with the requirement that all communications as an Unassigned Company Resource must be memorialized and logged in the same manner as communications by Shared Resources. If an Unassigned Company Resource is called upon repeatedly and asked for a substantial amount of assistance by a particular team, the employee should be assigned to such team or evaluated for designation as a Shared Resource.

B. Communications Protocols

The Companies have developed policies and procedures governing communication between the Company RFP Team, the Company Self-Build Team, Shared Resources, Unassiged Company Resources, Proposers, the IO and with the Commission regarding RFP design and bid evaluation. Bid information and evaluation data and information shall not be communicated between members of the Company RFP Team, outside parties and other employees within the Companies except to those with a business need to know.

To ensure that the competitive bidding process is fair and unbiased, that all Proposers have access to the same information so that no Proposer has an unfair advantage, and that any Company Self-build and/or Affiliate proposals do not have any unfair competitive advantage or undue preference over third-party bids, the Companies shall follow the Code of Conduct whenever the utility or its Affiliate is seeking to advance a resource proposal as provided in Section IV.H.9.b of the Framework.

Each employee or consultant on the Company RFP Team, Company Self-Build Team and Shared Resources shall read, acknowledge and sign a Competitive Bidding Code of Conduct Acknowledgement of Receipt. Unassigned Company Resources who may be called upon by the Company RFP Team or Self-Build Team for help to meet unforeseen tasks shall also read, acknowledge and sign a Competitive Bidding Code of Conduct Acknowledgement of Receipt if called upon. Finally, each employee or consultant of an Affiliate intending to submit a proposal in response to a Company-issued RFP shall read, acknowledge and sign a Competitive Bidding Code of Conduct Acknowledgement of Receipt.

The Company issuing the RFP will establish a shared drive on its corporate computer network designed to maintain the bid evaluation documentation and other information associated with the bidding process. Only Company RFP Team members will have access to all the files on the shared drive for the particular RFP.

In cases where staffing and resources are limited or constrained, the Company may identify Shared Resources or those employees eligible to provide information or serve as a resource to both the Company RFP Team and the Company Self-Build Team. Specific rules to log communications with the Company RFP Team or the Company Self-Build Team are described below.

Shared Resources will not have access to the Company's shared drive established for the RFP process which will include the documentation of the bid evaluation results.

1. Communications Between the Company RFP Team and Proposers, including the Company Self-Build Team.

During the RFP process, the Energy Contract Manager shall serve as the primary contact person for all RFP communications with Proposers. This is important from the standpoint of maintaining consistency and confidentiality of information between Proposers and the Company. For documentation and oversight purposes, all communications from Proposers must be submitted to an established website link provided by

the Company (the "Company RFP website"). The IO will monitor all communications through the Company RFP website. To ensure fair and equal access to information, any Company Self-Build Team and/or Affiliate Team shall be considered a Proposer for communication purposes and any request for information from the Company Self-Build Team or Affiliate Team to the Company RFP Team shall be through the Company RFP website.

A single exception to the communication process outlined above shall be instituted for the purpose of facilitating the preliminary exchange of confidential interconnection requirements for any Proposer's bid. For this limited scope, Proposers may communicate with the Company's Interconnection Services Division to discuss preliminary interconnection requirements associated with a Proposer's potential bid. The Director of Interconnection Services for the Company will serve as the primary contact person for all such interconnection communications with a Proposer, provided that all necessary confidentiality and non-disclosure agreements are in place. Employees of the Interconnection Services Division including the Director of Interconnection Services shall be considered "Shared Resources" for purposes of the Code of Conduct and this Procedures Manual and shall be required to adhere to all of its rules and requirements. Under no circumstances shall communicated information from any Proposer be directly or indirectly communicated to the Company RFP Team, the Company Self-Build Team or any Affiliate Team. Interconnection communications will be limited to a Proposer's bid and no more information other than as necessary to facilitate such communications will be permitted. Locations of projects shall be limited to that necessary only to determine the interconnection requirements of such Proposer's project. The IO shall have the right to monitor all such communications in his/her discretion. Company, with input from the IO, reserves the right to share any information that may be generally applicable to all Proposers via the Company RFP website.

Subject to confidentiality obligations, it is the objective of the Code of Conduct that all Proposers, including the Company Self-Build Team and any Affiliate Team, receive access to information released by the Company RFP Team, whether in response to a question from a Proposer or not, at the same time.

The communications process for addressing questions and requests for information from Proposers, and for the Company RFP Team to provide information to Proposers, is provided below:

- a. Other than during Company sponsored conferences, Proposers must submit all questions to the Company RFP website or the designated RFP email address (if the Company RFP website has not been opened yet for the RFP).
- b. Questions will be reviewed and responses will be coordinated with the appropriate functional area within the Company for a response. Every reasonable effort will be made to provide responses in a timely manner.
- c. All responses, including the classification of such response, i.e., whether non-confidential or confidential as described below, will be made available to the IO for monitoring purposes. The IO may choose to comment on any response at its discretion.
- d. Depending on the questions received, responses may involve Confidential Information of the Company and/or Proposers. Release of any Company Confidential Information must be approved in advance by the Company Executive authorized to release the Confidential Information. Any release of Company Confidential Information shall be accompanied by appropriate

confidentiality and non-disclosure agreements, protective orders or other means required to maintain the confidentiality of the Company Confidential Information while still permitting its disclosure under circumstances deemed appropriate by the responsible Company Executive. Other non-Company Confidential Information will not be shared without the prior written consent of the owner of such Confidential Information and the execution of appropriate confidentiality and non-disclosure agreements by all recipients of such Confidential Information. Responses will be categorized as follows:

<u>Non-Confidential Responses</u>: Questions and responses will either be posted directly on the Company RFP website (process-related questions or simple non-substantive information) or a description of the information that can be made available will be posted and Proposers will be instructed to submit a request to the Company via the Company RFP website to receive a copy.

Confidential Responses: Questions and a description or notice of a Confidential Information response will be posted on the Company RFP website and Proposers will be instructed to submit a request to the Company via the Company RFP website to receive instructions on how to access the Confidential Information. The Confidential Information will only be provided to the requestor after receipt of an executed Confidentiality and Non-Disclosure Agreement. Only those who have qualified to submit a bid (i.e. Eligible Proposers) and have executed a Confidentiality and Non-Disclosure Agreement will be considered for receipt of Confidential Information.

Process for Distribution of Confidential Information

Confidential Information provided in response to questions from proposers may be made available only to parties as indicated above via the following:

Confidential Information that is approved for exchanging on a secured access site: (1) Confidential Information may be made available on a secured website with an individual password provided to each approved Proposer. (2) Confidential Information in documents may be transmitted to approved recipients through the Company's secure email system.

Confidential Information that can be made available for inspection only, but cannot be copied: There may be some types of Confidential Information that the Company may consider making available for inspection only with no copies allowed. This type of Confidential Information will be made available on Company premises for inspection only. Proposers will be advised via the Company RFP website to make arrangements with Company staff to view the Confidential Information.

<u>Confidential Information that may not be released</u>. In the event that Proposers submit questions that require responses that the Company feels are not appropriate to provide for reasons which may include, but not be limited to, safety, security, protection of trade secrets or intellectual property rights, Proposers will be advised as such via the Company RFP website.

e. Prior to and during the RFP, and outside of the Company RFP website protocol, developers may inquire with the Company Interconnection Services Division directly as to the interconnection viability of a proposed project. Contact information will be as follows:

Hawaiian Electric Company, Inc. Interconnection Services Division Attention: Director

Email: interconnection.services@hawaiianelectric.com

Telephone: _____

If determined necessary, face-to-face meetings may be scheduled. The IO may, in its discretion, attend and/or monitor such communications and/or meetings.

f. Once bids are received, the Company may submit information requests to Proposers to clarify their proposals or request additional information. All contacts with Proposers will be through the Company RFP website. If determined necessary, face-to-face meetings may be scheduled. All contacts and information exchanged will be under the oversight of the IO.

2. Communications Between the Companies and the Commission.

The Company's Regulatory Affairs staff will be responsible for initiating communication with the Commission regarding the RFP or the Companies' evaluation process. Regular updates may be provided to the Commission regarding the RFP process if requested.

3. Communications Between the Company RFP Team and the IO.

Communications between the Company RFP Team and the IO will be required for many aspects of the evaluation process. The IO is also required to maintain confidentiality of any Company or Proposer Confidential Information. The IO will coordinate all activities through the Energy Contract Manager and/or the Director of Energy Procurement and/or the Manager of Renewable Acquisition. The IO will be invited to

participate in any meetings or discussions between the Company RFP Team and the Proposers and other communications as noted above. Sufficient notice will be provided whenever possible and teleconference and/or web conference alternatives may be utilized.

In order to provide full access to the IO during the evaluation process, substantive evaluation communications between Company RFP Team members shall be copied to the IO in a contemporaneous manner. Non-substantive and/or administrative communications are not required to be copied to the IO, provided, however, that such communications shall be maintained and reviewable by the IO in his/her discretion.

4. Communications between the Company RFP Team and the Company Self-Build Team

Any communication between the Company RFP Team and the Company Self-Build Team or between the Company RFP Team and any Affiliate Team with respect to the RFP shall be handled no differently than with Proposers and other outside parties. Accordingly, the Self-Build Team and any Affiliate Team will be required to submit any questions or information requests to the Company RFP Team via the Company RFP website and all responses will be provided in the same manner as to other Proposers. Members of the Company RFP Team are prohibited from providing any input into the development of the Self-build or Affiliate resource option by the Company or such Affiliate. Company RFP Team members are prohibited from sharing, either directly or indirectly through others, any Confidential Information (i.e. detailed evaluation criteria, other proposals, etc.) with any Self-Build or Affiliate Teams except in accordance with the procedures in the Code of Conduct, this Manual or the RFP.

Company RFP Team members and Company Self-Build Team members may continue to work with each other on projects not related to the RFP.

Further, members of each respective team do not have to be physically separated from each other but members of each team must take all reasonable measures to keep all Confidential Information (including electronic data) secure and inaccessible to the other team.

5. Communications among the Company RFP Team, the Company Self-Build Team and Shared Resources

Shared Resources may provide services to the Company RFP Team and the Company Self-Build Team. Shared Resources shall be limited as much as possible to instances where Company resources cannot provide a dedicated member to the Company RFP Team and the Company Self-Build Team at the same time and still provide the necessary functions of its area to the Company as a whole. Shared Resources are expressly prohibited from providing any Confidential Information developed on behalf of the Company RFP Team to the Company Self-Build Team, either directly or indirectly through others, or any Confidential Information developed on behalf of the Company Self-Build Team with the Company RFP Team, either directly or indirectly though others, except through the formal communication process outlined above, i.e., through the Company RFP website.

Additionally, Shared Resources are required to maintain a written record of the time, date and substance of all conversations, data and written material directly or indirectly exchanged with the Company RFP Team, the Company Self-Build Team and any affiliates that pertain to the RFP. A SharePoint-based interface will be set up and managed by the Energy Contract Manager to provide an easy to use and understand mechanism to log and memorialize these conversations.

Shared Resources will not have direct access to the Company's shared drive developed for the RFP process which will include documentation of the bid evaluation results. As noted above, Shared Resources shall have

no input into and shall not participate in the evaluation process for any particular RFP.

6. Communications between the Company RFP Team, the Company Self-Build Team and any Unassigned Company Resource or consultant that is not a Shared Resource.

There may be times, in which a Company RFP or Company Self-Build team member may need ancillary or other ministerial or administrative assistance that requires communication and/or assistance from Company personnel who are not on any team nor considered a Shared Resource. In such events, such personnel may assist the requesting team member on an *ad hoc* basis upon the following conditions:

- a. The essential team member making the request must inform the Company personnel that sharing of the requested information or assistance with the other team, be it the Company RFP or Company Self-Build Team, is expressly prohibited under the Code of Conduct.
- b. The assisting Company personnel shall complete the Code of Conduct training and sign the Competitive Bidding Code of Conduct Acknowledgement of Receipt form.
- c. The assisting Company personnel shall be directed to the Company RFP and Company Self-Build Team rosters provided by such requesting team member to determine and/or confirm the restrictions on communication with the other team members. The essential team member making the request will ensure the roster of Unassigned Company Resources is updated by the Energy Contract Manager to include the assisting Company personnel.
- d. Unassigned Company Resources will be required to maintain a written record of the time, date and substance of all conversations, data

and written material directly or indirectly exchanged with the Company RFP Team, the Company Self-Build Team and any affiliates that pertain to the RFP. A SharePoint-based interface will be set up and managed by the Energy Contract Manager to provide an easy to use and understand mechanism to log and memorialize these conversations. Unassigned Company Resources are expressly prohibited from providing any Confidential Information developed on behalf of the Company RFP Team to the Company Self-Build Team, either directly or indirectly through others, or any Confidential Information developed on behalf of the Company Self-Build Team with the Company RFP Team, either directly or indirectly though others, except through the formal communication process outlined above, i.e., through the Company RFP website.

e. If assistance from Unassigned Company Resource becomes more than occasional or more substantive than ancillary, ministerial or administrative services, the Unassigned Company Resource should be considered for inclusion on the team that he/she has been assisting on such basis. Additionally, the Unassigned Company Resource may also be considered for inclusion as a Shared Resource. Members of the Company RFP Team shall consult with the Energy Contract Manager for the RFP for resolution. Members of the Company Self-Build Team shall consult with the Director of Energy Procurement through the Company RFP website for resolution.

7. Communications between Company RFP Team, Company Self-Build Team and Company Management.

The Company RFP Team and the Company Self-Build Team will necessarily require management approval of the RFP and the Self-Build Proposal. Because of the size of the Company, it may be possible that a a single employee (at whatever level) (the "Approver") may have approval responsibility for matters affecting the RFP and the Self-Build proposal. Approvers in this situation must use their best judgment in

making decisions reviewing and approving matters for the respective teams. The Code of Conduct must be adhered to in these situations and the Approver must not communicate, either directly or indirectly through others, Confidential Information learned from the Company RFP Team with the Company Self-Build Team.

If an Approver feels that he/she cannot manage this potential conflict, the Approver is recommended to consult with his/her immediate supervisor to determine whether such higher authority could be appointed with the task of reviewing and approving matters for a designated team, either the Company RFP Team or the Company Self-Build Team. In matters where a team of employees (including one or more Approvers) is responsible for reviewing and approving matters for the respective teams, approving employees (from whatever level, including executives) with information from reporting personnel beneath them from both the Company RFP Team and the Company Self-Build Team may consider recusing himself/herself from the decision making if such employee cannot objectively make a decision on the matter.

Finally, an Approver may be a member of either the Company RFP Team and have a subordinate reporting to him/her that is a member of the Company Self-Build Team (and vice versa). In such situations, because the Code of Conduct prohibits communication between the teams, the manager must recuse himself/herself from the decision making and request his/her manager to review and approve the matter in his/her place.

In all instances, it is possible that any particular situation above may be addressed and/or resolved by the terms and conditions of the Company's internal code of conduct implemented for all employees and consultants of the Company. As appropriate, an Approver or any other team member, Energy Contract Manager, Director of Energy Procurement,

Manager of Renewable Acquisitions or Company Executive in Charge may involve the Company's Corporate Compliance Officer for input and possible resolution under the Company's internal code of conduct.

V. WHEN THE CODE OF CONDUCT BECOMES EFFECTIVE

A. No later than 30 days after the Commission opens the docket to issue an RFP the Code of Conduct for that RFP will be activated. However, if the Company Self-Build Team determines at any time that it will not pursue a Self-Build Option for a particular RFP, the Code of Conduct may be de-activated in consultation with and approval from the IO.

B. Upon the signal to activate Step 1 above, the Code of Conduct shall be activated and members of the Company RFP Team and the Company Self-Build Team must then conduct activities on the RFP or Self-build process in compliance with the Code of Conduct. Once identified and having commenced work, no information may be shared outside the respective team members with respect to the RFP or the Self-Build Option except through the formal communication processes outlined above.

C. Immediately upon assignment to a Company team (RFP or Self-Build), designated as a Shared Resource, or requested to assist as an Unassigned Company Resource, each such employee or consultant must review this Manual, and sign the Competitive Bidding Code of Conduct Acknowledgement of Receipt form.

D. Within the RFP process, after a member has been assigned to a particular team, he or she will not be able to transfer to a different team at a later date for any reason. It is the responsibility of each team to fill vacant team positions with employees that have not been previously assigned as a team member for a team.

- E. Each employee and consultant working on the RFP shall review the Code of Conduct and sign an acknowledgement attesting to his/her compliance with the Code of Conduct for each subsequent year until the Code of Conduct is terminated.
- F. The Energy Contract Manager will be responsible for maintaining the Code of Conduct organizational chart and the signed "Competitive Bidding Code of Conduct Acknowledgement of Receipt" forms. The Company Executive in Charge shall be responsible for ensuring compliance with the Code of Conduct and shall have the written authority and obligation to enforce the Code of Conduct.

VI. IMMEDIATE ACTIONS UPON ACTIVATION OF THE CODE OF CONDUCT

The following items are required to be completed as soon as possible after activation of the Code of Conduct but no later than the designated events specified for each item below.

- A. No later than 30 days after the opening of the docket commencing an RFP, an organizational chart listing each employee (with their title) and consultants in their designated role; Company RFP Team, Company Self-Build Team, Affiliate Team, Shared Resource or Unassigned Company Resource. When the IO is appointed, this organizational chart shall be provided to him/her. The organizational chart shall be placed in an accessible database (such as the Company's SharePoint database) so that any Company personnel can access the database to determine the identity of the respective teams and Shared Resources and any Unassigned Company Resources.
- B. Upon the finalization of the organizational chart for the RFP and upon each addition to any team, the Energy Contract Manager shall obtain signed copies of the Competitive Bidding Code of Conduct Acknowledgement of Receipt form by Affiliate Team members, and all employees (whether full-time, part-time, temporary, or contract) and consultants involved in the competitive bidding

process, such as members of the Company RFP Team, the Company Self-Build Team, Shared Resources or Unassigned Company Resources.

- C. No later than 30 days after the opening of the docket commencing an RFP, establishment of the Company email address to accept requests for information from Proposers, including the Company Self-Build Team or any Affiliate Team.
- D. No later than 30 days after the opening of the docket commencing an RFP, establishment of the Company secured site that houses the accessible database (such as SharePoint).

VII. WHEN THE CODE OF CONDUCT TERMINATES

The Code of Conduct for a specific RFP will terminate after the following two conditions are met:

- A. When the final contract(s) with the successful proposer(s) is executed or when written notice of the RFP's termination is provided by the Director of Energy Procurement or his/her designee to the IO and the Commission.
- B. A certification of Code of Conduct compliance by all employees participating in the specific RFP process is submitted by affidavit by the Company Executive in Charge.

VIII. DOCUMENATION FORMS

The following documentation forms may be utilized by those Company personnel involved in the RFP. These forms may be amended from time to time as necessary. Additional forms may also be developed as determined necessary.

- Competitive Bidding Code of Conduct Acknowledgement of Receipt form
- Code of Conduct Attestation Form (annual/final)
- Communications Log for Shared Resources

• Organizational Chart for essential teams, Shared Resources and Unassigned Company Resources

FOR

VARIABLE RENEWABLE DISPATCHABLE GENERATION

ISLAND OF HAWAI'I

FEBRUARY 2, 2018

Docket No. 2017-0352

Appendix E – PowerAdvocate User Information



Hawai'i Electric Light

Electronic Procurement Platform

- 1. "Sourcing IntelligenceTM," developed by PowerAdvocate, is the Electronic Procurement Platform that the Company has licensed and will utilize for this RFP.
- 2. There are no license fees, costs, or usage fees to Proposers for use of the PowerAdvocate Platform.
- 3. To access the RFP, the Proposer must register as a "Supplier" on the PowerAdvocate platform. A Proposer must submit a separate registration on the PowerAdvocate platform for each separate Proposal and each separate Proposal variation submitted.

The number of Proposal variations a Proposer is allowed under one Proposal Fee is defined in Section 1.8.2 of this RFP. The number of registrations on the PowerAdvocate platform does not correspond with the number of Proposal Fees that must be submitted.

- 4. If a Proposer is already registered on the PowerAdvocate platform, the Proposer may use their current login information as one registration.
- 5. Each registration will require a unique username, unique email address, and unique company name. Proposers that require multiple registrations to submit multiple Proposals or Proposal variations should use the Company Name field to represent the Company Name, Proposal Number, and Variation Number (ex: CompanyNameP1V1). Proposers may use shorthand or clear abbreviations. Proposers are asked to refer to their chosen unique company name throughout when referring to it in text responses.
- 6. Proposers can register for an account on the PowerAdvocate Electronic Procurement Platform 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

7. Proposers may contact PowerAdvocate technical support for technical questions on the use of the Electronic Procurement Platform, including help with registration or modification of registration if desired. Support is available from 8 AM to 8 PM Eastern Daylight Time (2 AM to 2 PM Hawaii Standard Time when daylight savings is in effect) Monday to Friday, with the exception of Holidays posted on the PowerAdvocate website, both by phone (857-453-5800) and by email (info@poweradvocate.com).

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

www.poweradvocate.com

8. In order to complete the registration, the Proposer will need to review and accept PowerAdvocate's Terms of Use. The Terms of Use are available online and a copy is also attached for convenience in this Appendix E.

- 9. 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 (ex: CompanyNameP1V1), as applicable, under which the Proposer has registered with PowerAdvocate.
- 10. Once the RFP event is opened, Proposers will have online access to general notices, RFP-related documents, and other communications via Sourcing Intelligence™, and may begin to submit their Proposal. Proposals will be accepted only through the PowerAdvocate Platform.

Instructions to Proposers – Electronic Procurement Platform

- 11. Prior to the opening of the RFP in Sourcing IntelligenceTM, Proposers are encouraged to familiarize themselves with Sourcing IntelligenceTM.
- 12. Proposers should note that they will not be able to access any Bid documents until the event officially opens in Sourcing IntelligenceTM.
- 13. An e-mail notification will be sent to all prospective Proposers via the messaging feature in Sourcing IntelligenceTM when the event has been opened to receive Proposals.
- 14. Proposals must be submitted through Sourcing IntelligenceTM before 2:00 p.m. Hawai'i Standard Time (HST) on the date shown in the RFP Schedule in Section 3.1 of this RFP. Sourcing IntelligenceTM will not accept the submittal of late information for this RFP event. It is the Proposer's sole responsibility to ensure that its complete information has been submitted on time. Any proposal information that is merely SAVED, but not SUBMITTED will not be considered. The Proposal submission deadline via the PowerAdvocate platform is an Eligibility Requirement for this RFP. See Section 4.2 of this RFP.
- 15. All Proposals must be prepared in accordance with the procedures and format specified in this RFP document and in the event hosted on PowerAdvocate's Sourcing IntelligenceTM Electronic Procurement Platform. Proposers are also required to respond to all questions and provide all information requested in the RFP and the bid event, as applicable. This process is intended to provide an orderly, consistent and fair evaluation of the Proposals.
- 16. Uploaded files must follow consistent naming conventions described herein. Names of electronic files uploaded to the Electronic Bidding Platform must include, in order, consistent company names, proposal number, variation number, technology, variation descriptor, and question number, for example:
 - "SupplierNameP1V1_Solar_wstorage_Q1.PDF".

 Proposers may use shorthand if it is clear and easy to follow.
- 17. Input/submission items in the RFP that are not applicable to a specific Proposer, Proposal or Proposal variationmust be clearly marked as "N/A" (Not Applicable) and provide a brief explanation for each item as marked.

- 18. It is the Proposer's sole responsibility to advise the Energy Contract Manager of conflicting requirements, ambiguities, omission of information, or the need for clarification prior to submitting a Proposal. The Company cautions proposers to allow sufficient time to receive a response and submit Proposals before the Proposal due date.
- 19. It is the Proposer's sole responsibility to ensure the timely submission of the completed Proposal. The Company will not be responsible for technical problems that interfere with the upload or download of Proposal information. PowerAdvocate provides live customer support Monday through Friday, from 8 AM to 8 PM, Eastern Standard Time (3 AM to 3 PM Hawai'i Standard Time when daylight savings is not in effect), and is closed on Holidays specified on the PowerAdvocate website..
- 20. Proposers are encouraged to start early, SAVE data frequently and avoid waiting until the last minute to SUBMIT the required information. Proposers are allowed to revise information that has been previously submitted, as well as add, modify and/or delete documents any time before the event closes. There is no limit to the size of a file that can be uploaded, but larger files will take longer. Multiple files can also be compressed into a .zip archive for upload.

PowerAdvocate Platform Submittal Procedures

- 21. After logging onto the PowerAdvocate Platform, the RFP will be visible on the Proposer's dashboard with several Tabulations (Tabs) each used for the following:
 - "Download Documents:" Documents stored under this tab are provided for the Suppliers use and information. All documents can be downloaded and/or printed, as required. If available, the Company's responses to Proposer questions will be posted in this tab.
 - "Upload Documents:" In addition to specific data that is requested through the datasheets stored under the Commercial, Technical and Pricing Data Tabs, files such as (spreadsheets, pdfs, word documents, signature statements, etc.) may be requested. Such files being submitted by the Supplier may be uploaded here.
 - "Commercial Data:" Proposers are required to fill in the Commercial datasheets.
 - "Technical Data:" Proposers are required to fill in the Technical datasheets.
 - "Pricing Data:" Proposers are required to fill in the Pricing datasheets.
- 22. All responses to this RFP shall be submitted in the English language.
- 23. All questions or concerns regarding the RFP shall be submitted to the Energy Contract Manger via the PowerAdvocate Messaging tab.
- 24. Questions regarding the PowerAdvocate platform ONLY should be directed to:

PowerAdvocate Support

E-mail: support@poweradvocate.com

Tel: 857-453-5800

PowerAdvocate Support will only answer questions related to the operation and functionality of the PowerAdvocate platform. Questions related to the RFP cannot be answered by PowerAdvocate Support. All RFP related questions should be directed to the Company Contact email address identified in Section 1.6 of this RFP.



PowerAdvocate Terms of Use (Version: January 1, 010)

READ THESE TERMS OF USE CAREFULLY BEFORE USING THE SITE. BY USING OR ACCESSING THE SITE, YOU ACKNOWLEDGE THAT YOU HAVE READ, ACCEPT, AND AGREE TO BE BOUND BY THESE TERMS OF USE.

1. Bac groun

Your use o www.poweradvocate.com (t e Site) is overned by t ese PowerAdvocate Terms o Use (Terms o Use or A reement). T e password protected areas o t e Site allows individuals or entities wit re istered Users (as de ined below) to access and use t e PowerAdvocate Ener y Intelli ence Plat orm. Your use o t e Ener y Intelli ence Plat orm (or any o t e individual products t at comprise t e Ener y Intelli ence Plat orm – Spend Intelli ence, Cost Intelli ence, Market Intelli ence and Sourcin Intelli ence as o t e date ereo) is overned by t ese Terms o Use and by any license, subscription or ot er applicable written contract entered into by you or by t e Participatin Company (as de ined below) or w ic you are a User. A Participatin Company is an individual or a le al entity t at as Users t at ave re istered to participate on t e Ener y Intelli ence Plat orm. T e employees or aut orized a ents o a Participatin Company are re erred to as Users. A Participatin Company submittin in ormation on, or bids or ot er o ers to sell, oods or services (includin any entity actin as a representative or a ent or anot er) on Sourcin Intelli ence is re erred to as a Supplier Company. A Participatin Company postin a request on t e Sourcin Intelli ence, or ot erwise requestin or collectin in ormation on, or receivin bids or o ers or t e purc ase o, oods or services rom Supplier Companies is re erred to as a Buyer Company. Except as expressly stated ot erwise, all terms apply equally to Supplier Companies and to Buyer Companies.

2. Registration

Eac User must re ister on t e Site be ore Users are aut orized to participate on t e Ener y Intelli ence Plat orm.

3. User Names an Pass or s

Eac User will be issued a unique user name and password upon re istration. Eac Participatin Company a rees to take all reasonable precautions to maintain as con idential t e user names and passwords o its Users. Eac Participatin Company a rees not to provide access to t e Ener y Intelli ence Plat orm to any persons ot er t an aut orized Users t rou use o t eir user names or passwords and to noti y PowerAdvocate upon becomin aware o any loss or t e t o a user name or password or an unaut orized use o t e Ener y Intelli ence Plat orm or a user name or password. A Participatin Company will be responsible or all use o its user names and passwords by any person or entity. At is sole discretion and at any time, PowerAdvocate may disable one or more user names or passwords or ot erwise deny a User access to t e Ener y Intelli ence Plat orm.

4. Po erA vocate s Role

PowerAdvocate may be involved on t e Site in many ways, includin by assistin a Buyer Company wit t e preparation and postin o a request or proposals on Sourcin Intelli ence, by promotin Supplier Company participation, and by acilitatin Participatin Company use o t e Ener y Intelli ence Plat orm t rou elpdesk services. PowerAdvocate will not take title to, or ot erwise ave any liability or, any products or services sold or o ered or sale on t e Site, and eac Participatin Company ereby releases PowerAdvocate rom any suc liability. PowerAdvocate is not responsible or any material posted on t e Site by a Participatin Company. PowerAdvocate as no obli ation to monitor t e content on t e Site. PowerAdvocate as t e ri t, but not t e obli ation, to remove any material posted on t e Site, includin any material t at is alle ed to violate an intellectual property ri t (w et er or not t e alle ation proves accurate) or t at may violate t ese Terms o Use or applicable laws.

. Participating ompany s Role

Eac Participatin Company is responsible or all activities carried out on t e Ener y Intelli ence Plat orm by its Users, and ensurin t at eac o its Users abides by t e Terms o Use, as t ey are amended rom

time to time and appear on the Site. All Users must be employees or authorized agents of a Participating Company and authorized by that Participating Company to conduct business on the Energy Intelligence Platform. A Participating Company shall inform PowerAdvocate immediately of any change in a User's status that affects that User's right to use the Energy Intelligence Platform. Should a Participating Company fail to do so, that Participating Company will continue to be responsible for all the User's activities on the Energy Intelligence Platform. he applicable Buyer Companies and Supplier Companies are responsible for determining the final terms and conditions between them with respect to a purchase and sale of goods or services arising out of their use of Sourcing Intelligence, including pricing, warranties, logistics, transportation, and inspection as required. If a Buyer Company elects to purchase any goods or services, that Buyer Company and the successful Supplier Company(s) will enter into any contracts they deem necessary and PowerAdvocate will not be a party thereto. You and each Participating Company warrant and covenant that its Contact Information (as defined in paragraph 9), its posting of any materials on the Site, and its other uses of and activities on the Site do not and shall not: (a) infringe any third party s copyright, patent, trademark, trade secret or other intellectual property rights, or other proprietary rights or rights of publicity or privacy; (b) violate any law, statute, ordinance or regulation (including, without limitation, those governing export control, unfair competition, deceptive trade practices, and false advertising); or (c) constitute activities that are scandalous, deceptive, inaccurate, misleading, defamatory, libelous, obscene, harassing or threatening. You and each Participating Company will comply with all applicable laws, statutes, ordinances and regulations regarding its use of the Site, and regarding its ordering of, bidding on or purchase of goods and services, and its posting and retrieval of information, on or through the Site. Access to the Site by means of screen scrapers, web crawlers or similar methods is prohibited. Any Supplier Company acting as a representative or agent for another Supplier Company (e.g., a manufacturer's representative) acknowledges and agrees that these erms of Use are intended to bind itself and the Supplier Company that it represents. Each Participating Company represents and warrants that it has all necessary right, title and interest to enter into this Agreement and to perform its obligations under this Agreement and, in the case of a Supplier Company acting as a representative for another Supplier Company, that it has the power to bind that other Supplier Company to these erms of Use.

6. Third Party Links

he Site may contain links to third-party web sites not under the control or operation of PowerAdvocate. PowerAdvocate does not endorse these third-party web sites, and is not responsible for the contents of any linked site or any link contained in a linked site. You may provide a hypertext link to the Site on another web site, so long as such link is done in good taste and does not create the false appearance that PowerAdvocate is associated with or sponsoring the linking web site. he use of techniques to frame the Site within a third-party web site is not permitted under this Agreement. PowerAdvocate reserves the right to revoke its consent to any link at any time in PowerAdvocate s sole discretion.

7. Warranties and Li itations of Liability

HE SI E IS P VIDED N AN "AS IS" AND "AS AVAILABLE" BASIS. P WE ADV CA E A ES N WA AN IES ANY IND, E P ESS I PLIED, WI H ESPEC EP ESEN A I NS : HE SI E; ANY G DS, SE VICES ΙN AIN E ED N H UGH HE SI E; ANY BID EVEN S HA AY BE C NDUC ED N H UGHS U CING IN ELLIGENCE, INCLUDING (i) HE I PLIED WA AN IES E CHAN ABILI Y, I NESS A PA ICULA PU P SE, I LE, AND N N-IN INGE EN , (ii) HA HE SI E HE IN E NE WILL EE ANY PA ICULA E UI E EN S, WILL BE AVAILABLE, ACCESSIBLE, UNIN E UP ED, I ELY, ACCU A E, SECU E PE A EWI H U E , AND (iii) ANY I PLIED WA AN Y A ISING C U SE DEALING **USAGE** ADE. P WE ADV CA E A ES N EP ESEN A I N WA AN YAS HINESS AND ACCEP ABILI Y C EDI W HINESS, US W ANY PA ICIPA ING C **PANIES** HE UALI Y, SUI ABILI Y, C NDI I NS G DS AND SE VICES P CU ED UGH ANY PA ICIPA ING C PANIES. ANY ECAS S HE WA D-L P JEC I NS ENDS C N AINED N HE SI E A E N GUA AN EES AC UAL U U E C NDI I NS. AC UAL U U E C NDI I NS AY DI E A E IALLY WHA IS **ECAS** ES I A ED N HE SI E DUE A VA IE Y AC S HA C ULD INCLUDE CHANGING SUPPLY AND DE AND C NDI I NS, CHANGING GL BAL NA I NALEC N IC PE ANCE, LAB ISSUES, SHIPPING AND ANSP A I N ISSUES, P DUC I N IS A ES, CE AJEU E HE A I U E EN PE ISSIBLE UNDE APPLICABLE LAW, P WE ADV CA E AND EVEN S. I S SUBSIDIA IES AND A ILIA ES, AND HEI ESPEC IVE E PL YEES, DI EC S, AND AGEN S, ANY IND WHA S EVE , INCLUDING, WI H U BE LIABLE ANY DA AGES LI I A I N, ANY AND ALL DI EC, INDI EC, INCIDEN AL, SPECIAL, PUNI IVE AND C NSE UEN IAL

DAMAGES (INCLUDING WITHOUT LIMITATION FOR LOST PROFITS, REVENUES OR DATA), ARISING OUT OF OR IN CONNECTION WITH THE SITE, USAGE OF THE SITE, OR THOSE RESULTING FROM ANY GOODS OR SERVICES PURCHASED OR OBTAINED OR MESSAGES RECEIVED THROUGH, OR TRANSACTIONS ENTERED INTO AS A RESULT OF USING THE SITE. THE LIMITATIONS OF LIABILITY PROVIDED IN THESE TERMS OF USE INURE TO THE BENEFIT OF POWERADVOCATE, AND ITS SUBSIDIARIES AND AFFILIATES, AND THEIR RESPECTIVE OFFICERS, DIRECTORS, EMPLOYEES, ATTORNEYS AND AGENTS. IN THE EVENT THAT A PARTICIPATING COMPANY HAS A DISPUTE WITH ANOTHER PARTICIPATING COMPANY, BOTH SUCH PARTICIPATING COMPANIES HEREBY RELEASE POWERADVOCATE, AND ITS SUBSIDIARIES AND AFFILIATES, AND THEIR RESPECTIVE OFFICERS, DIRECTORS, EMPLOYEES, ATTORNEYS AND AGENTS, FROM ALL CLAIMS, LOSSES, LIABILITIES, DEMANDS, AND DAMAGES OF EVERY KIND AND NATURE (DIRECT, INDIRECT, SPECIAL, PUNITIVE, CONSEQUENTIAL OR OTHERWISE) ARISING OUT OF OR IN ANY WAY CONNECTED WITH SUCH DISPUTE.

8. o fide tial I formatio

PowerAdvocate recognizes the importance of protecting confidential and proprietar information collected or posted on the Energ Intelligence Platform and of not disclosing such information to unauthorized third parties. As such, PowerAdvocate enters into confidentialit agreements with PowerAdvocate customers that contain PowerAdvocate's sole obligations concerning the treatment of confidential or proprietar information collected or posted b that customer on the Site.

9. I tellect al roperty

"PowerAdvocate" (alone and together with the three rings) is a registered trademark of Power Advocate, Inc. In addition, "Energ Intelligence Platform," "Spend Intelligence", "Cost Intelligence", "Market Intelligence", and "Sourcing Intelligence" are trademarks or service marks of Power Advocate, Inc. Unless otherwise noted on the Site, all other trademarks, service marks, and logos used in this Site are the trademarks, service marks or logos of their respective owners. All ownership rights -- including all right, title, and interest in all patents, cop rights, trademarks, trade secrets and other intellectual propert rights -- in the Site, including an software associated with the operation or functioning of the Site, are and will remain in PowerAdvocate or its licensors. You and each Participating Compan will not undertake to cop right, trademark or patent the Site, or an portion thereof. You and each Participating Compan acknowledge that all or portions of the Site (including the software and methodologies associated with the operation or functioning of the Energ Intelligence Platform) ma be cop righted, trademarked or patented b PowerAdvocate or another part . You and each Participating Compan acknowledge that no such act will cause or be construed as causing an portion of the Energ Intelligence Platform to be in the public domain. You and each Participating Compan will not, and will not attempt to, modif, reverse engineer, disassemble or decompile the Site, or permit or cause an third part to do so on our behalf. An changes, advice, modifications or evaluations of or concerning the Site generated or proposed b an part will be the exclusive propert of PowerAdvocate and will not give an one other than PowerAdvocate an right, title or interest in or to the Site. All ideas, concepts, know-how or techni ues relating to the use, operation or functioning of the Site will be the exclusive propert of PowerAdvocate or PowerAdvocate's licensors. You and each Participating Compan are granted only a limited, revocable, non-transferable license to print and download portions of an materials created b PowerAdvocate ("PowerAdvocate Materials") and posted on the Site solel for internal, non-commercial use, provided that an cop right notice and an other notices that appear on an such copies are maintained and unmodified. An other use, cop ing, redistribution, publication, or retransmission of an portion of an PowerAdvocate Materials on the Site is strictly prohibited without the express written permission of PowerAdvocate. All PowerAdvocate Materials on the Site are, and shall continue to be, owned b PowerAdvocate, Each Participating Compan shall also maintain an cop right notice and an other notices that appear on an materials created b an third part and posted on the Site. PowerAdvocate retains all rights to an data, modules, components, designs, utilities, subsets, ob ects, program listings, tools, models, methodologies, programs, s stems, anal sis frameworks, leading practices ("Technical Elements") owned or developed b PowerAdvocate prior to, or independentl from, the provision of the Site (and an modifications or enhancements to PowerAdvocate's Technical Elements developed in the course of providing the Site) (collectivel, "PowerAdvocate Technical Elements") and PowerAdvocate retains exclusive ownership rights to all PowerAdvocate Technical Elements. PowerAdvocate retains all rights to its knowledge, experience and know-how (including processes, ideas, concepts and techni ues) ac uired in the course of providing the Site, and, sub ect to the confidentialit obligations in the separate contracts referenced in Section , ou and each Participating Compan hereb grant to PowerAdvocate a perpetual, worldwide, paid-up license to use, cop, modif and or sublicense, in the course of

PowerAdvocate's business, any Technical Elements acquired or developed as a result of providing the Site.

0 Contact Information

"Contact Information" shall mean any and all contact information (name, address, phone numbers, email address) that you provide to PowerAdvocate during registration for the Energy Intelligence Platform or during any other use of the Site. During registration, you shall provide -- and Participating Company shall ensure that its Users provide -- true, accurate, current and complete Contact Information. During registration or any other use of the Site that collects Contact Information, you will ensure that all Contact Information is office or home office contact information and is not private home contact information. PowerAdvocate uses the Contact Information in furtherance of, and consistent with, the Site and otherwise in its normal course of business. By providing your Contact Information, you provide your consent to PowerAdvocate's contacting you by email or telephone in its normal course of business, including to determine your interest in any PowerAdvocate offerings.

Governing Law and J risdiction

This Agreement shall be deemed to have been made and performed entirely in the Commonwealth of Massachusetts, and shall be governed by and construed pursuant to the laws of the Commonwealth of Massachusetts without regard to its provisions regarding the conflicts of laws. You and each Participating Company and PowerAdvocate hereby agree the state and federal courts of Massachusetts shall be the exclusive forum and venue to resolve disputes involving PowerAdvocate and arising out of or relating to these Terms of Use or any use of the Site. By using the Site and thereby agreeing to these Terms of Use, you and each Participating Company consent to personal jurisdiction and venue in the state and federal courts in Massachusetts with respect to all such disputes.

mendment

PowerAdvocate may modify this Agreement from time to time by posting the modified Agreement on the Site. Any use of the Site after the posting of the modified Agreement constitutes that user's and that Participating Company's agreement to be bound by such modified version of this Agreement. PowerAdvocate reserves the right to change the Site at its discretion at any time. PowerAdvocate may add or remove features, services or otherwise modify the Site, all without any liability whatsoever.

3 Order of Precedence

THESE TERMS OF USE SHA OT A TER OR O ERRIDE A Y CO F ICTI TERMS A D CO DITIO S OF A Y OTHER WRITTE CO TRACT THAT YOU OR A PARTICIPATI COMPA Y MAY HA E WITH POWERAD OCATE OR WITH A OTHER PARTICIPATI COMPA Y. In the event of any conflicting terms under a written contract signed by you or a Participating Company with PowerAdvocate and these Terms of Use, the terms of the written contract will prevail over the conflicting terms in these Terms of Use.

Miscellaneo s

Any notice, report, approval, or consent required or permitted under this Agreement shall be in writing and in the English language. otices to PowerAdvocate may be sent to Power Advocate, Inc., 179 incoln Street, Boston, MA 02111, Facsimile: 857-453-5656, Attention: Daniel P. Sullivan. o failure or delay in exercising any right under this Agreement will operate as a waiver thereof, nor will any partial exercise of any right or power under this Agreement preclude further exercise. If any provision of this Agreement is unenforceable or invalid, that provision shall be limited or eliminated to the minimum extent necessary so that this Agreement shall otherwise remain in full force and effect and enforceable. For all purposes under this Agreement, each party shall be and act as an independent contractor of the other and shall not bind nor attempt to bind the other to any contract with third-parties. o agency, partnership, joint venture, employee-employer, or franchisor-franchisee relationship is intended nor created by this Agreement.



Sourcing Intelligence® Quick Start for Suppliers

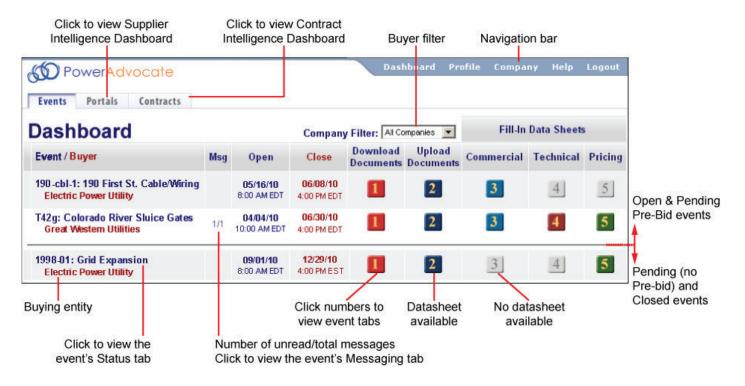
owerAdvocate Sourcing Intelligence enables suppliers to access buyer documents and submit documents over a web-based sourcing platform.

Logging In

- 1. Launch a web browser and go to www.poweradvocate.com.
- 2. Click the orange Login button.
- 3. Enter your account User Name and Password (both are case-sensitive) and click Login.
- 4. Click the **Events** tab if it is not already displayed.

Dashboard

Your Dashboard lists the events you have been invited to. A line divides currently accessible events from others.



- Click an event name to view its Status tab, which displays a summary of your activity and key event dates. To view specific details of an event, click the buttons 1 2 3 4 5 to view the corresponding tab.
- To return to the Dashboard, click Dashboard in the navigation bar at the top of the window.
- An event will not appear on your Dashboard until the Bid Event Coordinator has added you as a participant.

In addition to the Events tab, you may also see:

- An **Opportunities** tab, if a buyer opens an event to all owerAdvocate suppliers; you can review a high-level event description, and may request full access to the event.
- A Portals tab, if a buyer subscribes to owerAdvocate Supplier Intelligence
- A Contracts tab, if a buyer subscribes to owerAdvocate Contract Intelligence.

2 of 4

Sourcing Intelligence® Quick Start for Suppliers

Downloading Bid Packages

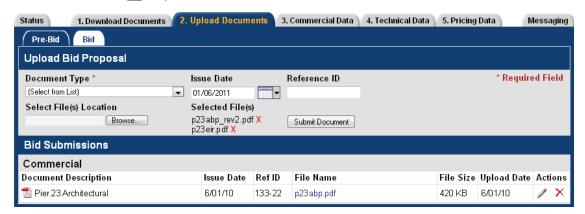
All of the buyer's bid package documents, including specifications and engineering drawings, are centrally stored on the owerAdvocate platform. To view bid documents, click on your Dashboard or on the 1. Download Documents tab from within the event.



- You can access the Bid sub-tab after the bid opens. You can access Buyer documents before the event from a Pre-Bid sub-tab if the buyer requires a re-Bid submittal; the buyer must approve your submittal before you can access the Bid sub-tab. Likewise, you will see a Post Bid sub-tab if the buyer invites you to participate in post-bid negotiations.
- To view or download a document, click the file name; you may be prompted to open or save the file.
- To download multiple documents:
 - 1. Select the checkbox in the **Download** column for each document you wish to download, or click **Select All**.
 - Click Download Selected Files.
 - 3. Click **Start** to download a .zip file containing the selected documents.

Uploading Documents

To upload your documents, click 2 on your Dashboard, or on the 2. Upload Documents tab from within the event.



- As with the 1. **Download Documents** tab, you may be able to access and upload documents to **Pre-Bid**, **Bid**, and **Post Bid** sub-tabs as appropriate.
- To upload a document:
 - 1. Specify a **Document Type**, and edit the Issue Date and Reference ID if necessary.
 - 2. Click **Browse**, navigate to and select the document, and then click **Open**; multiple files can also be compressed into one .zip file for upload.
 - Click Submit Document.
- Late documents are accepted at the Buyer's option, but are flagged in red text.

Sourcing Intelligence® Quick Start for Suppliers

Completing Datasheets

o view the event datasheets, click **3 4.** Technical, or **5.** Pricing tabs from within the event. Buttons/tabs are grayed out (e.g., **3**) if the buyer did not create a particular type of datasheet.



- Complete the datasheets over the course of the Bid Open period; datasheets may have multiple sub-tabs.
- Click Save Data often to avoid data loss. Once the bid closes, saved data is automatically submitted to the buyer.
- Once the bid closes, you are normally unable to modify datasheets. However, at the buyer's option, you may upload
 additional documents on the 2. Upload Documents tab (which are flagged as being late).
- o view a printer-friendly version of a datasheet, click

 Printable.

Communicating with the Bid Event Coordinator

Buyer companies use one of two communication options in Sourcing Intelligence: Email or PowerAdvocate Messaging.

Email

Click the \(\sqrt{i}\) icon next to the Buyer Contact's name to contact them through your default email application (e.g., Outlook).



PowerAdvocate Messaging

o send a message to the Bid Event Coordinator (BEC), go to the **Messaging** tab and click **Create New Message**. o read or reply to a message from the BEC, click the message subject.



- You can send messages to the BEC and Buyer eam; replies are sent your Supplier eam and the Buyer eam.
- BECs can message the Buyer eam and all Supplier eams at once; Supplier eams can respond but not see other Supplier eams' responses.
- Supplier eams cannot message each other, or see other Supplier eams' correspondence with the Buyer eam.
- You can receive external email notification of new PowerAdvocate messages.

4 of 4

Sourcing Intelligence® Quick Start for Suppliers

Getting More Information

Click **Help** on the navigation bar to display the online help.



- Supplier documentation can be downloaded from the online help system.
- Call PowerAdvocate support at 857-453-5800 (on-Fri, 8 a.m. to 8 p.m. Eastern Time) or email support@poweradvocate.com.

PowerAdvocate Sourcing Intelligence®



Suppliers' Frequently Asked Questions May 2016

How do I log in to Sourcing Intelligence?

- 1. Launch a web browser and go to www.poweradvocate.com, and then click the orange Login button.
- PowerAdvocate Login Enter your account User Name and Password (both are case-sensitive). ر ز
- Click Login. რ



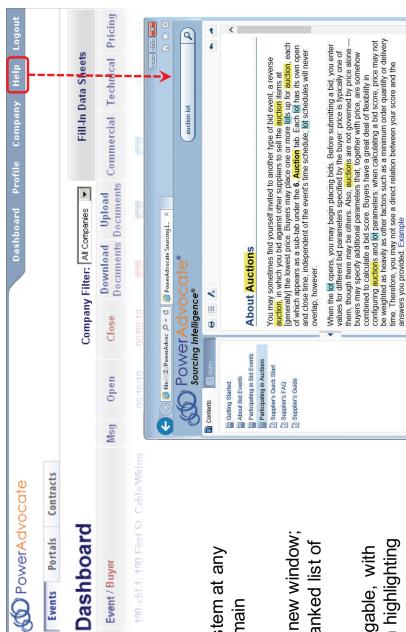
Tips

- > Participating in a Reverse Auction requires logging into PowerAdvocate using IE9 or higher.
- > If you received an email from a Bid Event Coordinator inviting you to register, follow the instructions in the email to complete the registration process.
- Portals and Contracts tabs may appear if buyers also subscribe to Supplier Intelligence or Contract Intelligence, respectively. An **Opportunities** tab may also appear, which is described on page 5. A

There are five sections that may appear on your 6. Auction tab

How do I get more information if I need it?

You can contact PowerAdvocate Support at support@poweradvocate.com or by calling **857-453-5800**, Monday through Friday (excluding U.S. Federal Holidays) from 8:00 AM to 8:00 PM Eastern Time

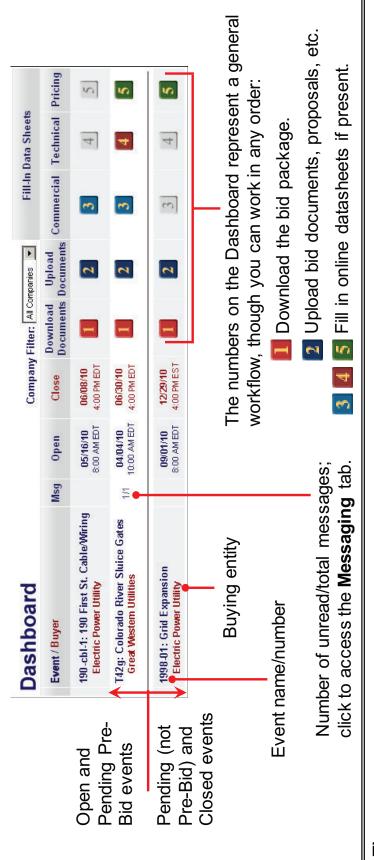


Online Help

- You can access the Help System at any time by clicking Help on the main navigation bar
- The Help System opens in a new window; use full-text search to get a ranked list of relevant help topics
- The Help System is fully navigable, with features such as search term highlighting
- You can download PDF versions of the documentation from within the Help System

What information is displayed on my Dashboard?

Your Dashboard displays all bid events to which you have been invited.



Lips

- If an event is missing a type of datasheet, that number & its corresponding tab are grayed out (e.g., 3).
- ➤ Events with links in the Msg column use PowerAdvocate Messaging; others use standard email
- Supplier contacts are invited individually by the buyer

How do I find other supplier opportunities?

Buyer companies have the option to make their bid events visible to all PowerAdvocate-registered suppliers.

When these opportunities exist, your an **Opportunities** tab displays some high-level event information for you to evaluate.



To request access to a posted event:

Click 🙈

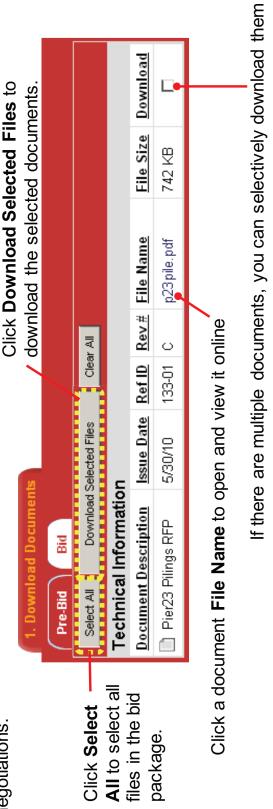
A pop-up appears asking you to verify your qualifications. You may also enter Optional Comments to the buyer, if you have something to add

2. Click Submit Request.

The Accessible column will display Pending until the buyer approves your request. Once approved, the event will appear on your Events tab. If the buyer does not approve your request, the event will be removed from your Opportunities tab

How do I access the buyer's bid package?

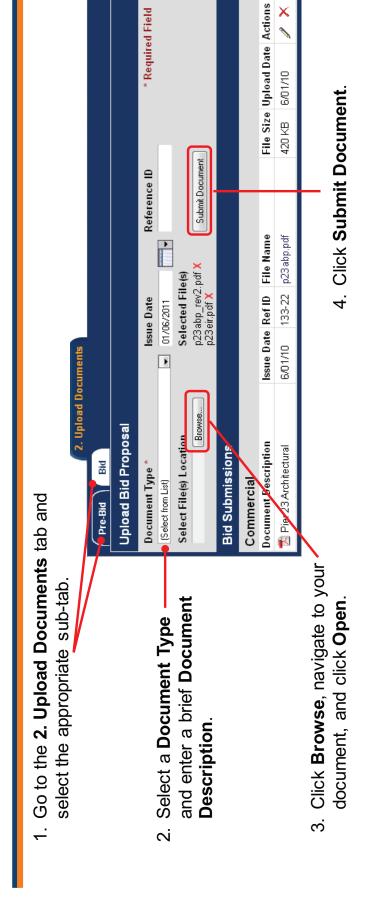
Once a buyer invites you to participate in a bid event, that event appears on your Dashboard. You can begin downloading the buyer's bid documents after the event opens. From the Dashboard, click 🚺 to access the 1. Download Documents > Bid tab, where you can download the buyer's entire bid package, download selected documents, or view individual documents online. If the buyer invites you to Pre-Bid, you can access documents from the 1. Download Documents > Pre-Bid tab before the event opens; the buyer must approve your Pre-Bid submittal before you can access the Bid sub-tab. Likewise, a **1. Download Documents > Post Bid** sub-tab indicates an invitation to post-bid negotiations.



Tip

Selected documents are saved in a .zip file named BidPackage-nnnn-n.zip (nnnn-n is a unique ID)

How do I submit documents to the buyer?



Lips

- ➤ Issue Date and Reference ID are optional, though they are helpful for tracking documents.
- \nearrow You can add, modify (\nearrow), or delete ($\cancel{\times}$) documents at any time before the event closes.
- > There is no limit on the number or size of documents that you can upload; multiple files can also be compressed into a .zip archive for upload.
- ► Late documents, if the buyer opts to accept them, are flagged in red text.

How do datasheets work?

In addition to your proposal, buyers often request that you complete datasheets as part of your bid package. Datasheets are online forms that allow buyers to collect specific data to tabulate and compare across suppliers.

Click one of the datasheet tabs.

Messaging

4. Technical Data 5. Pricing Data

3. Commercial Data 4. Commercial

Kour information can be changed after it is saved. If you leave this page without saving it first, you will lose all unsaved data 1. Download Documents 2. Upload Documents 3. Company - 27 2. M&WBE Rep. What is the name and title of the Supplier's representative ("the 1. Supplier Info ... Save Data 2. Fill out the required information in the online form.

3. Click Save Data.

- Multiple users from the same company cannot simultaneously fill out a datasheet when one user saves, others' work will be lost.
- ➤ Be sure to click Save Data before navigating elsewhere, or data may be lost. Save your work often.
- ➤ There is no **Submit** button. Data is automatically submitted when the bid closes.
- The buyer may block access to datasheets once the bid closes. A

How do I communicate with the buyer? (1 of 2)

The buyer uses one of the following messaging options in Sourcing Intelligence:

 Standard email – Click an si icon to create a message to the buyer contact in your default email application.

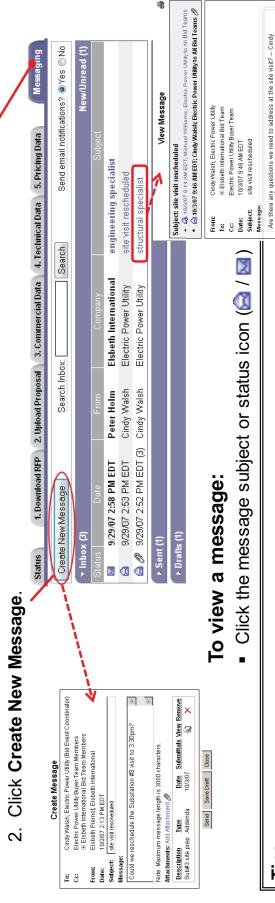


PowerAdvocate Messaging – See the following slide.

How do I communicate with the buyer? (2 of 2)

To create a message in PA Messaging:

1. Click the event's Messaging tab or the link in the Msg column on your Dashboard.



sd

<u>Description</u> site prep questions ➤ New messages are sent to the Bid Event Coordinator and copied to the Buyer and Supplier Teams.

RFx View

Attachments:

- ➤ Messages/file attachments are embedded within an event, and cannot be viewed outside of that event.
- Messages are sent to entire teams; one-to-one messaging is not allowed.
- ➤ You can choose to receive [external] email notifications of new event-related messages

DRAFT REQUEST FOR PROPOSALS

FOR

VARIABLE RENEWABLE DISPATCHABLE GENERATION

ISLAND OF HAWAI'I

FEBRUARY 2, 2018

Docket No. 2017-0352

Appendix F – Mutual Confidentiality and Non-Disclosure Agreement



Hawaiʻi Electric Light

APPENDIX F MUTUAL CONFIDENTIALITY AND NON-DISCLOSURE AGREEMENT

Independent Power Producers – ("IPPs")

1. Background

The Companies have or intend to issue a Request for Proposals ("RFP") for renewable energy generation. The IPP has or intends to propose a nominal [] MW, [TYPE OF PLANT] plant located at [LOCATION] on the island of [NAME OF ISLAND], State of Hawai'i ("Proposal").

In connection with the IPP's Project, the Companies may conduct an interconnection requirements study ("IRS") to establish the requirements for interconnection of the IPP's proposed renewable energy generation facility to the Companies' electric grid. The RFP process may also result in the award of a potential power purchase agreement, the terms of which must be negotiated and agreed upon by the parties ("PPA Negotiations"). For purposes of this Agreement the term "Project" refers to the RFP, Proposal and potential IRS and PPA Negotiations.

In order to evaluate the Project, either party may from time to time provide to the other party certain Confidential Information, as defined herein. The parties are willing to provide such Confidential Information to each other upon the terms and conditions of this Agreement.

2. <u>Confidential Information</u>

Except as set forth in Section 3 below, "<u>Confidential Information</u>" means all non-public, confidential or proprietary information disclosed by either party (the "<u>Provider</u>") to the other party (a "<u>Recipient</u>") its affiliates and its and their directors, officers, employees, agents, advisors, consultants (including, without limitation, financial advisors, counsel and accountants) and controlling entities or individuals (collectively, "<u>Representatives</u>") whether disclosed orally or disclosed or accessed in written, electronic or other form of media, and whether or not marked or otherwise identified as "confidential," including, without limitation:

- (a) all information concerning the Provider and its affiliates', and their customers', suppliers' and other third parties' past, present and future business affairs including, without limitation, finances, customer information, supplier information, products, services, designs, processes, organizational structure and internal practices, forecasts, sales and other financial results, records and budgets, business, marketing, development, sales and other commercial information and strategies;
- (b) information concerning the Companies' generation, transmission, and distribution systems (e.g., engineering and operating characteristics of the Companies' transmission lines and substations) ("Critical Infrastructure Confidential Information");
- (c) the Provider's unpatented inventions (whether or not they are patentable), ideas, methods and discoveries, techniques, formulations, development plans, trade secrets, know-how, unpublished patent applications and other confidential intellectual property;
- (d) all designs, specifications, documentation, components, source code, object code, images, icons, audiovisual components and objects, schematics, drawings, protocols, processes, and other visual depictions, in whole or in part, of any of the foregoing;
- (e) any third-party confidential information included with, or incorporated in, any information provided by the Provider to the Recipient or its Representatives; and
- (f) all notes, analyses, compilations, reports, forecasts, studies, samples, data, statistics, summaries, interpretations and other materials ("Notes") prepared by or for the Recipient or its Representatives that contain, are based on, or otherwise reflect or are derived from, in whole or in part, any of the foregoing.

3. <u>Exclusions from Confidential Information</u>

Except as required by applicable federal, state, or local law or regulation, the term "Confidential Information" as used in this Agreement shall not include information that:

- (a) at the time of disclosure is, or thereafter becomes, generally available to and known by the public other than as a result of, directly or indirectly, any violation of this Agreement by the Recipient or any of its Representatives; provided, however, that Confidential Information shall not be disqualified as Confidential Information (i) merely because it is embraced by more general or generic information which is in the public domain or available from a third party, or (ii) if it can only be reconstructed from information taken from multiple sources, none of which individually shows the whole combination (with matching degrees of specificity);
- (b) at the time of disclosure is, or thereafter becomes, available to the Recipient on a non-confidential basis from a third-party source, provided that such third party is not and was not prohibited from disclosing such Confidential Information to the Recipient by a contractual or other obligation to the Provider;

- (c) was known by or in the possession of the Recipient or its Representatives, as established by documentary evidence, prior to being disclosed by or on behalf of the Provider pursuant to this Agreement;
- (d) was or is independently developed by the Recipient, as established by documentary evidence, without reference to or use of, in whole or in part, any of the Provider's Confidential Information; or
- (e) was or is learned of established entirely from public sources, as established by documentary evidence, without reference to or use of, in whole or in part, any of the Provider's Confidential Information.

The parties acknowledge and understand that the confidentiality obligations of this Agreement apply only to the Confidential Information shared in connection with the Project. The parties may share other information with each other under other agreements, provisions or understandings which are not related to the Project. Such information sharing shall be subject to the provisions of the agreements and confidentiality provisions associated thereto and this Agreement shall not be construed to infringe upon or apply to such agreements or provisions.

4. Non-Disclosure of Confidential Information

Unless otherwise agreed to in writing by the Provider, the Recipient agrees as follows:

- (a) except as required by law, not to disclose or reveal any Confidential Information to any person or entity other than its Representatives who are actively and directly participating in the evaluation of the Project or who otherwise need to know the Confidential Information for the purpose of evaluating the Project.
- (b) not to use Confidential Information for any purpose other than in connection with its evaluation of the Project or the consummation of the Project.
- (c) except as required by law, not to disclose to any person or entity (other than those of its Representatives who are actively and directly participating in the evaluation of the Project or who otherwise need to know for the purpose of evaluating the Project) any information about the Project, or the terms or conditions or any other facts relating thereto, including, without limitation, the fact that discussions are taking place with respect thereto or the status thereof, or the fact that Proprietary Information has been made available to the Recipient or its Representatives.
- (d) to use diligent efforts to safeguard and protect the confidentiality of the Confidential Information, including, at minimum, implementing the same commercial measures that the Recipient uses to protect its own confidential information. Before disclosing the Confidential Information to any Representative, the Recipient will inform such Representative of the confidential nature of such information, their duty to treat the Confidential Information in accordance with this Agreement and shall ensure that such Representative is legally bound by the

terms and conditions of this Agreement or subject to confidentiality duties or obligations to the Recipient that are no less restrictive than the terms and conditions of this Agreement.

(e) Any provision herein to the contrary notwithstanding, the Companies may disclose Confidential Information to the State of Hawai'i Public Utilities Commission ("Commission") and/or the State of Hawai'i Division of Consumer Advocacy (including their respective staffs) provided that such disclosure is made under a protective order entered in the docket or proceeding with respect to which the disclosure will be made or any general protective order entered by the Commission.

5. Required Disclosure and Notice

If the parties or any of their Representatives become legally compelled (by deposition, interrogatory, request for documents, subpoena, civil investigative demand, court order, or similar process) to disclose any of the Confidential Information, the compelled party shall undertake reasonable efforts to provide the other party with notice within three (3) business days of such requirement or advice prior to disclosure so that the other party may (a) seek a protective order or other appropriate remedy, (b) consult with the other party with respect to the compelled party taking steps to resist or narrow the scope of such requirement or advice, and/or (c) waive compliance, in whole or in part, with the terms of this Agreement. If such protective order or other remedy is not obtained, or the other party waives compliance with the provisions hereof, the compelled party agrees to furnish only that portion of the Confidential Information which it is legally required to so furnish and, at the request of the other party, to use reasonable efforts to obtain assurance that confidential treatment will be accorded such Confidential Information, it being understood that such reasonable efforts shall be at the cost and expense of the party whose Confidential Information has been sought. In any event, neither the IPP nor any of its Representatives will oppose action by the Companies to obtain an appropriate protective order or other reliable assurance that confidential treatment will be accorded the Confidential Information

6. Return or Destruction of Confidential Information

At any time during or after the term of this Agreement, at the Provider's written request, and in any event, upon the termination of the Agreement, the Recipient shall certify within ten (10) business days that it has destroyed all Confidential Information by using industry standard data elimination methods used to prevent unauthorized disclosure of information, and for Personally Identifiable Information (defined as personally identifiable information of individuals, and any information that may be used to track, locate or identify such individuals (or which is otherwise protected by privacy laws), including any automatically generated information (such as IP addresses and other customer identifiers) that identifies or is unique or traceable to a particular individual or computer or other electronic device capable of accessing the internet, including without limitation, name, address, telephone number, social security number, credit card account numbers, email addresses, user identification numbers or names and passwords, which is disclosed to the Recipient or its subcontractors in connection with this Agreement by the Provider, which products and services are used or intended to be used for personal, family or household purposes), such methods shall be consistent with Hawaii Revised Statute 487-R;

provided, however, that with respect to Confidential information in tangible form, the Recipient may return such Confidential Information to the Provider within ten (10) business days in lieu of destruction. The Recipient's sole obligation with respect to the disposition of any Notes shall be to redact or otherwise expunge all such Confidential Information from such Notes and certify to the Provider that it has so redacted or expunged the Confidential Information. Notwithstanding the foregoing, with respect to any Confidential Information stored in Recipient's disaster recovery backups or other electronic archives, Recipient is not required to destroy such Confidential Information if it would impose a material cost or burden; provided, however, such Confidential Information shall be destroyed when such archives are destroyed in accordance with Recipients records retention policies.

7. <u>Authority</u>

Each party represents and warrants that it has full power and authority to enter into and perform this Agreement, and the person signing this Agreement on behalf of each has been properly authorized and empowered to enter into this Agreement, understands it and agrees to be bound by it.

8. No Representations or Warranties

Neither the Provider nor any of its Representatives make any express or implied representation or warranty as to the accuracy or completeness of any Confidential Information disclosed to the Recipient hereunder, and the Recipient agrees that it is not entitled to rely on the accuracy or completeness of any Confidential Information. Neither the Provider nor any of its Representatives shall be liable to the Recipient or any of its Representatives relating to or arising from the use of any Confidential Information or for any errors therein or omissions therefrom. Notwithstanding the foregoing, the Recipient shall be entitled to rely solely on such representations and warranties regarding Confidential Information as may be made to it in any final agreement relating to the Project, subject to the terms and conditions of such agreement.

9. No Other Obligations

Neither this Agreement nor the disclosure of the Confidential Information shall result in any obligation on the part of either party to enter into any further agreement with the other with respect to the subject matter hereof or otherwise, to purchase any products or services from the other, or to require either party to disclose any further information to the other. Nothing in this Agreement shall be deemed to constitute either party hereto as partner, agent or representative of the other party or to create any fiduciary relationship between the parties. Either party may offer products or services which are competitive with products or services now offered or which may be offered by the other. Subject to the express terms and conditions of this Agreement, neither this Agreement nor discussions and/or communications between the parties will impair the right of either party to develop, make, use, procure, and/or market any products or services, alone or with others, now or in the future, including those which may be competitive with those offered by the other. Whether or not the Project is consummated, neither party shall issue a press release or release any information to the general public concerning such transaction or the absence thereof without the express prior written consent of the other, and the parties agree that neither

party will use the other's name whether by including reference to the other in any press release, list of customers advertising that its services are used by Companies or otherwise, without written authorization by the respective party's authorized representative.

10. <u>Property Rights in Confidential Information</u>

All Confidential Information shall remain the sole and exclusive property of the Provider and nothing in this Agreement, or any course of conduct between the parties shall be deemed to grant to the Recipient any license or rights in or to the Confidential Information of the Provider, or any part thereof. Unless otherwise expressly agreed in a separate license agreement, the disclosure of Confidential Information to the Recipient will not be deemed to constitute a grant, by implication or otherwise, of a right or license to the Confidential Information or to any patents or patent applications of the Provider.

11. Publicly Traded Companies

The IPP acknowledges that the Companies' holding company is a publicly traded company, and that Confidential Information of the Companies may constitute material, non-public information with respect to the Companies. The IPP understands, and will advise its Representatives to whom Confidential Information of the Companies is disclosed, of the restrictions imposed by the United States securities laws on (a) the purchase or sale of securities by any person in possession of material, non-public information with respect to such securities, and (b) the communication of material, non-public information with respect to securities to a person who may purchase or sell such securities in reliance upon such information.

12. Remedies

- (a) Each party acknowledges and agrees that any breach or threatened breach of this Agreement may give rise to an irreparable injury to the Provider or its Representatives, for which compensation in damages is likely to be an inadequate remedy. Accordingly, in the event of any breach or threatened breach of this Agreement by the Recipient or its Representatives, the Provider shall be entitled to seek equitable relief, including in the form of injunctions and orders for specific performance, in addition to all other remedies available at law or in equity.
- (b) In the event that the Recipient learns of dissemination, disclosure, or use of the Confidential Information which is not permitted by this Agreement, the Recipient shall notify the Provider immediately in writing and shall use reasonable efforts to assist the Provider in minimizing damages from such disclosure. Such remedy shall be in addition to and not in lieu of any other rights or remedies available to the Provider at law or in equity.

13. Cumulative Remedies

No rights or remedy herein conferred upon or reserved to either party hereunder is intended to be exclusive of any other right or remedy, and each and every right and remedy shall be cumulative and in addition to any other right or remedy under this Agreement, or under applicable law, whether now or hereafter existing.

14. Notice

- (a) By delivering written notice, either party may notify the other that it no longer wishes to receive or provide Confidential Information. Any further information received or provided by the party who received such notice following receipt of such notice, shall not be subject to the protection of this Agreement.
- (b) All notices, consents and waivers under this Agreement shall be in writing and will be deemed to have been duly given when (i) delivered by hand, (ii) sent by electronic mail ("E-mail") (provided receipt thereof is confirmed via E-mail or in writing by recipient), (iii) sent by certified mail, return receipt requested, or (iv) when received by the addressee, if sent by a nationally recognized overnight delivery service (receipt requested), in each case to the appropriate addresses and E-mail Addresses set forth below (or to such other addresses and E-mail addresses as a party may designate by notice to the other party):

(1) Companies:

By Mail:

Hawai'i Electric Light Company, Inc.

P.O. Box 1027

Hilo, HI 96721-1027

Attn: Sharon Hirai, System Operation & Planning Department

Delivered By Hand or Overnight Delivery:

Hawai'i Electric Light Company, Inc.

54 Halekauila St

Hilo, HI 96720

Attn: Sharon Hirai, System Operation & Planning Department

By E-mail:

Hawai'i Electric Light Company, Inc.

Attn: Sharon Hirai, Power Purchase Contracts Administrator

Email: sharon.hirai@hawaiielectriclight.com

By Mail:

Hawaiian Electric Company, Inc.

P.O. Box 2750

Honolulu, Hawaii 96840

Attn: Director of Procurement, Renewable Acquisition

Department

<u>Delivered By Hand or Overnight Delivery:</u>

Hawaiian Electric Company, Inc. Central Pacific Plaza 220 South King St, 21st Floor Honolulu, HI 96813

Attn: Director of Procurement, Renewable Acquisition

Department

By E-mail:

Hawaiian Electric Company, Inc.

Attn: Director of Procurement, Renewable Acquisition

Department

Email: renewableacquisition@hawaiianelectric.com

With a copy to:

By Mail:

Hawaiian Electric Company, Inc. Legal Department P.O. Box 2750 Honolulu, Hawaii 96840

<u>Delivered By Hand or Overnight Delivery:</u>

Hawaiian Electric Company, Inc. American Savings Bank Tower 1001 Bishop Street, Suite 1100 Honolulu, Hawaii 96813 Attn: Legal Department

By E-mail:

Hawaiian Electric Company, Inc.

Legal Department

Email: legalnotices@hawaiianelectric.com

(2) [Purchaser][Vendor][Supplier]

By Mail:

[INSERT ADDRESS/CONTACT]

Delivered By Hand or Overnight Delivery:
[INSERT ADDRESS/CONTACT]

By E-mail:

[INSERT ADDRESS/CONTACT]

With a copy to:

By Mail:

[INSERT ADDRESS/CONTACT]

<u>Delivered By Hand or Overnight Delivery:</u>
[INSERT ADDRESS/CONTACT]

By E-mail:

[INSERT ADDRESS/CONTACT]

15. No Waiver

Except as otherwise provided in this Agreement, no delay or forbearance of a party in the exercise of any remedy or right will constitute a waiver thereof, and the exercise or partial exercise of a remedy or right shall not preclude further exercise of the same or any other remedy or right.

16. Governing Law

This Agreement is made under, governed by, construed and enforced in accordance with, the laws of the state of Hawaii. Any action brought with respect to the matters contained in this Agreement shall be brought in the federal or state courts located in the State of Hawaii. Each party agrees and irrevocably consents to the exercise of personal jurisdiction over each of the parties by such courts and waives any right to plead, claim or allege that the State of Hawaii is an inconvenient forum or improper venue. Notwithstanding the foregoing, Companies, at its option, may elect to submit any such dispute to binding arbitration pursuant to the commercial arbitration rules of Dispute Prevention & Resolution, Inc. or the American Arbitration Association then in effect in which case the parties agree that any alternative dispute resolution shall take place in the State of Hawaii.

17. Attorneys' Fees and Costs

If there is a dispute between the parties and either party institutes a lawsuit, arbitration, mediation or other proceeding to enforce, declare, or interpret the terms of this Agreement, then the prevailing party in such proceeding shall be awarded its reasonable attorneys' fees and costs.

18. <u>Assignment Prohibited</u>

This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors, legal representatives, and permitted assigns. Neither party shall have the right to assign any of its rights, duties or obligations under this Agreement, by operation or law or otherwise, without the prior written consent of the other party. Any purported assignment in violation of this section shall be null and void.

19. No Third Party Beneficiaries

Nothing expressed or referred to in this Agreement will be construed to give any person or entity other than the parties any legal or equitable right, remedy, or claim under or with respect to this Agreement or any provision of this Agreement. This Agreement and all of its provisions and conditions are for the sole and exclusive benefit of the parties and their successors and permitted assigns.

20. Entire Agreement

This Agreement constitutes the entire agreement between the Parties relating to the subject matter hereof, superseding all prior and contemporaneous agreements, understandings or undertakings, oral or written with respect to the subject matter. Any amendment or modification of this Agreement or any part hereof shall not be valid unless in writing and signed by the Parties. Any waiver hereunder shall not be valid unless in writing and signed via by the Party against whom waiver is asserted.

21. Term and Survival

This Agreement shall remain in full force and effect for a period of two (2) years from the Effective Date. All confidentiality obligations within this agreement shall survive following expiration or termination of this Agreement.

22. <u>Severability</u>

If any term or provision of this Agreement, or the application thereof to any person, entity or circumstances is to any extent invalid or unenforceable, the remainder of this Agreement, or the application of such term or provision to persons, entities or circumstances other than those as to which it is invalid or unenforceable, shall not be affected thereby, and each term and provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law, and the parties will take all commercially reasonable steps, including modification of the Agreement, to preserve the economic "benefit of the bargain" to both parties notwithstanding any such aforesaid invalidity or unenforceability.

23. Negotiated Terms

The parties agree that the terms and conditions of this Agreement are the result of negotiations between the parties and that this Agreement shall not be construed in favor of or against any party by reason of the extent to which any party or its professional advisors participated in the preparation of this Agreement.

24. <u>Counterparts and Electronic Signatures</u>

This Agreement may be executed in counterparts, each of which shall be deemed an original, and all of which shall together constitute one and the same instrument binding all Parties notwithstanding that all of the Parties are not signatories to the same counterparts. For all purposes, duplicate unexecuted and unacknowledged pages of the counterparts may be discarded and the remaining pages assembled as one document. The parties agree that this Agreement and any subsequent writings, including amendments, may be executed and delivered by exchange of executed copies via E-mail or other acceptable electronic means, and in electronic formats such as Adobe PDF or other formats mutually agreeable the parties which preserve the final terms of this Agreement or such writing. A party's signature transmitted by E-mail or other acceptable electronic means shall be considered an "original" signature which is binding and effective for all purposes of this Agreement.

[Signature Page Follows]

IN WITNESS WHEREOF, each party has caused this Agreement to be executed on its behalf by a duly authorized representative, all as of the Effective Date.

| Ву: |
|---|
| Print Name: |
| Its: |
| HAWAI'I ELECTRIC LIGHT COMPANY, IN ("HAWAI'I ELECTRIC LIGHT") |
| By: |
| Print Name: |
| Its: |
| |
| [Insert Name of IPP] |
| ("IPP") |
| By: |
| Print Name: |
| Its: |

HAWAIIAN ELECTRIC COMPANY, INC.

("HAWAIIAN ELECTRIC")

DRAFT REQUEST FOR PROPOSALS

FOR

VARIABLE RENEWABLE DISPATCHABLE GENERATION

ISLAND OF HAWAI'I

FEBRUARY 2, 2018

Docket No. 2017-0352

 $Appendix\ G-Description\ of\ Available\ Sites$



Hawai'i Electric Light

APPENDIX G VARIABLE RENEWABLE DISPATCHABLE GENERATION DESCRIPTION OF AVAILABLE SITES

On December 12, 2016, the Hawaiian Electric Companies issued a Land Request for Information ("Land RFI") seeking information on available land for potentially siting future utility scale renewable energy projects on the islands of Oʻahu, Maui, Molokaʻi, Lanaʻi, and Hawaiʻi. Information from responding landowners is available upon request by following the instructions at http://hawaiianelectric.com/landrfi.

This information is being provided for proposers' consideration only. Project proposals submitted in response to this RFP are not required to be sited at a location identified through the Land RFI. Hawaiian Electric also makes no representations as to the suitability of the listed sites for renewable energy production with regard to resource quality, interconnection constraints, zoning and permitting issues, community support, or other issues. Proposers should perform their own evaluation of these factors in determining whether a site is suitable for renewable energy project development. After further evaluation, proposers that are interested in any of the identified Land RFI parcels are invited to engage in further discussions directly with landowners to negotiate any required rights to use the property.

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

Project Permitting Assistance and Resources

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

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

Hawaii Clean Energy Programmatic Environmental Impact Statement

http://energy.hawaii.gov/testbeds-initiatives/hawaii-clean-energy-peis/peis-overview

The Hawaii Clean Energy Programmatic Environmental Impact Statement (PEIS) analyzes, at a programmatic level, the potential environmental impacts of clean energy activities and technologies in the following clean energy categories: (1) Energy Efficiency, (2) Distributed Renewables, (3) Utility-Scale Renewables, (4) Alternative Transportation Fuels and Modes, and (5) Electrical Transission and Distribution

Hawaii Statewide GIS Program

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

Provides Hawaii GIS data and other resources to support site identification and analysis

Aloha Aina: A Framework for Biocultural Resource Management in Hawai'i's Anthropogenic Ecosystems

 $\underline{https://nmshawaiihumpbackwhale.blob.core.windows.net/hawaiihumpbackwhale-prod/media/archive/council/pdfs/aloha_aina.pdf}$

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.

DRAFT REQUEST FOR PROPOSALS

FOR

VARIABLE RENEWABLE DISPATCHABLE GENERATION ISLAND OF HAWAI'I

FEBRUARY 2, 2018

Docket No. 2017-0352

Appendix H - (Reserved)



Hawai'i Electric Light

DRAFT REQUEST FOR PROPOSALS

FOR

VARIABLE RENEWABLE DISPATCHABLE GENERATION

ISLAND OF HAWAI'I

FEBRUARY 2, 2018

Docket No. 2017-0352

Appendix I – Interconnection Facilities and Cost Information



Hawaiʻi Electric Light

Hawaii Electric Light Company APPENDIX I- INTERCONNECTION FACILITIES AND COST INFORMATION 2017

Developers are responsible for the cost of interconnecting their project with the Hawaiian Electric system. To assist developers in assessing the impacts of location on potential projects, the per unit cost figures provided in the sections and tables below are to be used to provide an approximate estimated cost for interconnecting, including substation, communications, and transmission or distribution line cost to the existing Hawaiian Electric System. The per-unit cost figures below should not be used to create a detailed project estimate. A detailed project estimate typically requires a certain level of engineering to assess project site conditions and to factor in other parameters specific to the project.

The project proposal must 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 proposed project's requirements are different than what is assumed in the notes, the developer must identify each difference and provide an estimated additional cost or savings resulting from those different requirements.

2.1 Transmission & Distribution Line Interconnection Costs

| Component | Description | Cost per Mile |
|-----------|---|---------------|
| 1 | New 69kV Overhead line (accessible 500' spans) | \$800,000 |
| 2 | 69kV overbuild with existing 12kV (accessible 500' spans) | \$1,000,000 |

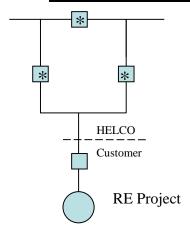
Notes:

- 1. New 69kV Overhead line (accessible) consists of 70' height H-4 wood poles (61' above / 9' below grade).
- 2. 69kV Overbuilt line (accessible) consists of 75' height H-4 wood poles with 12kV distribution and HTCOM facilities attached.
- 3. Note: Exclusions to these rough costs are as follows but not limited to:
 - a. Development of the PUC application/proceedings timeline
 - b. State or County right-of-way permitting and SMA
 - c. Environmental studies cost
 - d. Survey proposed line extension route
 - e. Easement/Land Issues if discovered in the course of final design
 - f. Archaeological survey and monitoring cost/duration (if needed)
 - g. Clearing/grading along power line corridor and access road
 - h. Final design adjustments required to negotiate terrain, physical landmarks, existing utilities and access
 - i. Straight line path for optimal pole placement with minimal anchors.

- j. Construction of permanent roadways/truck access
- k. Helicopter services
- 1. Traffic Control
- m. Removals (MECO & HTCOM as applicable)
- n. Salvage and depreciation credits
- o. Street lights
- p. Delays due to weather and material acquisitions
- 4. All estimates are provided in 2017 dollars.

2.2 Substation Interconnection Costs

2.2.1 Substation 69kV Interconnection Costs FIRM and VARIABLE Projects



| DI | T | • . |
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| Component | Description | Cost |
|-----------|--|-------------|
| 1 | *3 – 69kV circuit breaker ring bus (HELCO) | \$4,000,000 |
| | | |

Notes:

- 1. Substation land that is received has been graded per Hawaii Electric Light's civil and structural requirements. No costs for excavation and fill are included in the estimates.
- 2. Permits are not included in indicated costs.
- 3. Costs are in 2017 dollars.
- 4. Estimate does not contain any of the following costs:
 - a. Telecommunication infrastructure
 - b. Relay Coordination Study
 - c. Project Management
 - d. Any required upgrades to existing substations to integrate the new generating facility into the system.
- 5. Substation relay protection requirements have not been identified, so costs are based upon typical line protection relaying requirements.

6. Control house and local SCADA equipment are included in cost estimates.

2.3 Telecommunications

- 1. Point-to-point microwave: \$1,040,000 with the following assumptions:
 - a. There is line-of-sight between the communications endpoints.
 - b. Frequencies are available.
 - c. There are existing structures/buildings and available space on either end to house the radio equipment.
 - d. Telecommunications grounding standards are up-to-date at both sites.
 - e. -48V DC power is available.
 - f. This estimate does not include any special permit/approval that is required site-specific.
 - g. Space is available to locate antenna towers/structures at both ends.
 - h. Interconnection to Hawaii Electric Light's existing communications is not included.
- 2. Fiber with overbuild and new construction: \$205,000 per mile with the following assumptions:
 - a. The poles are in good condition and do not need replacing.
 - b. The poles are not overloaded.
 - c. The poles and the attachments are in accordance with NESC 2002 and no work is required to upgrade the poles to current standards.

DRAFT REQUEST FOR PROPOSALS

FOR

VARIABLE RENEWABLE DISPATCHABLE GENERATION ISLAND OF HAWAI'I

FEBRUARY 2, 2018

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Appendix J – Rule 19 Tariff



Sheet No. 44 Effective November 5, 2007

RULE NO. 19

Interconnection and Transmission Upgrades

A. GENERAL

1. Definitions

- a. "Betterment" means and includes any upgrading to a facility made solely for the benefit of and at the election of the Company, not attributable to the interconnection requirements. The Betterment includes any provisions for future expansion which cannot be charged to replacement. It also includes any related system work beyond that required for interconnection. If an existing facility is replaced with one of greater functional capacity or capability, the difference between the upgraded facility and a replacement facility of equivalent functional capacity is considered Betterment. It does not mean the substitution of a replacement facility for an existing facility, that is, an underground facility for an overhead facility, unless otherwise provided for in the RFP.
 - Example 1: A substation with a three breaker scheme is required to connect the Generating Facility to the grid. If the Company installs a substation with a six breaker ring bus scheme, the difference between installing a substation with a three breaker scheme and one with a six breaker scheme would be the Betterment.
 - Example 2: A transmission line needs to be upgraded to accommodate a new Generating Facility. The existing line is designed to withstand a 56 mph wind speed. The project includes upgrading the facilities to withstand a 100 mph wind speed. The increase in the design to the 100 mph wind speed criteria would be the Betterment.
 - Example 3: A transmission line needs to be upgraded to accommodate a new Generating Facility. In response to the Company's application to upgrade the line, the Commission orders that the line be placed underground. The cost difference between the overhead upgrade and the installation of the underground facilities would not be considered Betterment.
- b. "Company's Dispatch" means the Company's sole and absolute right to control, from moment to moment, through Supervisory Control, or otherwise, and in accordance with good engineering and operating practices in the electric utility industry, the rate of delivery of energy offered by the bidder to the Company.
- c. "Company's System" means the electric system owned and operated by the Company (to include any non-utility owned facilities) consisting of power plants, transmission and distribution lines, and related equipment for the production and delivery of electric power to the public.

HAWAII ELECTRIC LIGHT COMPANY, INC.

Sheet No. 44B Effective November 5, 2007

RULE NO. 19 - Continued

Interconnection and Transmission Upgrades

Example 2: A proposed Generating Facility is remotely located in a region of the island where there are no existing Transmission System facilities. In this case, if the size of the Generating Facility requires that it be tied to the existing Transmission System, the new Transmission System facilities (i.e. all electrical wires, equipment, and other facilities at the transmission voltage level) constructed from the Generating Facility to the Company's existing Transmission System facilities would be considered Interconnection Facilities.

- j. "Interconnection Requirements Study (IRS)" means a study, performed in accordance with the terms of the IRS Letter Agreement and with the applicable terms of the RFP and any resulting PPA, to identify the Interconnection Facilities, System Upgrades and other system requirements and all associated costs to integrate the proposed Generating Facility with the Company's System, and includes a detailed steady-state and a dynamic analysis. The IRS is conducted by the Company or its consultant and the bidder is responsible for the cost of conducting the IRS.
- k. "Interconnection Requirements Study Letter Agreement (IRS Letter Agreement)" means the letter agreement and any written, signed amendments thereto, between the Company and the bidder that describes the scope, schedule, and payment arrangements for the IRS.
- "IRP" means an electric utility's Integrated Resource Plan that has been submitted to the Commission for review and approval in the utility's IRP proceeding, in accordance with the Commission's IRP Framework.
- m. "IRP Framework" means the Commission's Framework for Integrated Resource Planning, dated May 22, 1992, as amended by In re Public Util. Comm'n, Docket No. 05-0075, Decision and Order No. 22490, filed on May 26, 2006.
- n. "Point of Interconnection" means the point of delivery of Energy and/or Capacity supplied by the bidder to the Company, where the facilities owned by the bidder interconnect with the facilities owned or to be owned by the Company. The bidder shall own and maintain the facilities from the Generating Facility to the Point of Interconnection. The Company shall own and maintain the facilities from the Point of Interconnection to the Company's System (see examples given in Attachment A). The Point of Interconnection will be identified in the IRS.
- "PPA" means a power purchase agreement or contract by the Company to purchase firm capacity, energy, or both.

HAWAII ELECTRIC LIGHT COMPANY, INC.

Sheet No. 44D Effective November 5, 2007

RULE NO. 19 - Continued

Interconnection and Transmission Upgrades

v. "Transmission System" means all electrical wires, equipment, and other facilities at the transmission voltage levels (such as 138kV or 69kV) owned or provided by the utility, through which the utility provides electrical service to its customers.

2. Application of Tariff

This Tariff shall apply to an RFP issued pursuant to the Framework and Interconnection Requirement Studies arising from the RFP process. In the event that there is a conflict between any provision of this Tariff and that of an RFP issued pursuant to the Framework and reviewed by the Commission in accordance with Sections III.B.2 and IV.B.6.e. of the Framework, the provisions of the RFP shall prevail. The terms and conditions established in a PPA arising from the RFP and approved by the Commission shall ultimately control over the requirements and terms of both this Tariff and the RFP.

3. Independent Observer

As established in the Framework, the duties and responsibilities of an Independent Observer (IO) include, among other duties and responsibilities, reviewing and monitoring the Company's communications, methods, and implementation of this Tariff, the RFP and related IRS processes.

B. INTERCONNECTION STUDY PROCESS FOR COMPETITIVE BIDDING

1. RFP Package Data -- available to all prospective bidders.

RFP packages issued by the Company shall contain general and regional system information to provide prospective bidders with high level guidance relating to the Company's existing transmission infrastructure. For example, RFP packages may include information in the form of an island map with areas of the Transmission System identified that are at or near their loading limits to provide high level guidance to bidders on areas of the island with transmission constraints. These constraints may include "load pockets", which are load-driven transmission constraints as well as areas of generationdriven transmission constraints. Because transmission impacts are to a large extent specific to the characteristics of supply-side proposals, definitive transmission information cannot be provided in these maps. Detailed geographic maps of the transmission system may not be part of this information due to security concerns. Rather, a map of the island with areas of the map shaded to identify areas (rather than circuits) of transmission constraints, may be provided.

HAWAII ELECTRIC LIGHT COMPANY, INC.

Sheet No. 44F Effective November 5, 2007

RULE NO. 19 - Continued

Interconnection and Transmission Upgrades

- b. For each bid, a high level estimate of the costs of Interconnection Facilities and required System Upgrades will be developed based solely on the high level evaluation identified in Section B.4.a. of this Tariff and on unitized cost estimates (e.g., \$/mile for 138kV line, \$/transformer).
- c. Results of the high level evaluation and high level estimate of the costs of Interconnection Facilities and required System Upgrades will be factored into the determination of which bids make the short list based on the requirements specified in the RFP.
- d. Basic curtailment analysis of the proposed Generating Facility and related impacts to operations of existing Generating Facilities may also be factored into the determination of which bids make the short list based on the requirements specified in the RFP.
- Full Interconnection Requirements Study performed only on short list bids.
 - a. An IRS shall be performed only for bid(s) that have met the RFP requirements, passed the threshold criteria, and made the short list, or as otherwise specified in the RFP.
 - b. An IRS would be performed either serially starting with the bid evaluated as the most competitive at the point of the evaluation process, then proceeding to the next most competitive bid on the short list or in parallel on all or some of the short list bidders simultaneously. The determination of whether or not IRS work is to be performed serially, in parallel, or a combination of the two will be based upon factors such as resource availability, number of short list bids, RFP schedule, and relative competitiveness of one bid to others, and the availability of all information and data from bidders necessary to perform the IRS work
 - c. The Company may if practicable "bundle" IRS work for multiple short list bids into a single IRS if the bids are, among other factors, technically, operationally and geographically (e.g., size, location, technology, timing, operating characteristics, etc.) identical or sufficiently similar to each other.
 - d. The results of the IRS, including identified Interconnection Facilities, System Upgrades, Point of Interconnection, and Grid Connection Point, will be provided to the bidder.
 - e. Bidders shall be responsible for incorporating the costs of their Interconnection Facilities into their bids. The RFP may provide bidders with an opportunity to revise their pricing proposals under certain circumstances. Any pricing change, if permitted under the terms of the RFP, will prompt a re-evaluation of short list bidders in the selection of the winning bid as provided for in the RFP.

HAWAII ELECTRIC LIGHT COMPANY, INC.

Sheet No. 44H Effective November 5, 2007

RULE NO. 19 - Continued

Interconnection and Transmission Upgrades

- 4. The Company shall install and maintain the identified System Upgrades arising from the interconnection of the Generating Facility and shall be responsible for the cost of such System Upgrades.
 - a. The Company's cost for System Upgrades will be considered as a factor in the bid evaluations.
 - b. The degree to which the System Upgrades provide System Benefits and/or Betterments will be considered in the bid evaluations.
- 5. Standards and Interconnection Agreements
 - a. Interconnection Facilities and System Upgrades owned or to be owned by the Company shall be constructed in accordance with the Company's applicable standards and in accordance with the PPA or the Interconnection Agreement, if there is a separate Interconnection Agreement.
 - b. Generating Facilities and Interconnection Facilities owned by the bidder shall be constructed in accordance with applicable State and County code requirements and in accordance with the PPA or the Interconnection Agreement, if there is a separate Interconnection Agreement.
 - c. The bidder's Generating Facility may be interconnected and operated in parallel with the Company's System in accordance with the terms and conditions of the PPA between the Company and the bidder, and/or the terms and conditions of an Interconnection Agreement between the Company and the bidder, if there is a separate Interconnection Agreement.
 - d. The bidder will be required to furnish, install, operate, and maintain suitable and sufficient equipment, to maintain adequate records, and to follow such operating procedures, as may be specified by the Company to protect the Company's System from damage resulting from the parallel operation of the Seller's Facility, including the equipment, records and operating procedures more fully described in the PPA and/or Interconnection Agreement, if there is a separate Interconnection Agreement.
 - e. Interconnection Facilities shall be designed, installed operated and maintained in accordance with good interconnection practice. The objectives of good interconnection practice include, but are not limited to,
 - Safety To protect the safety of utility personnel, utility customers, and the public.

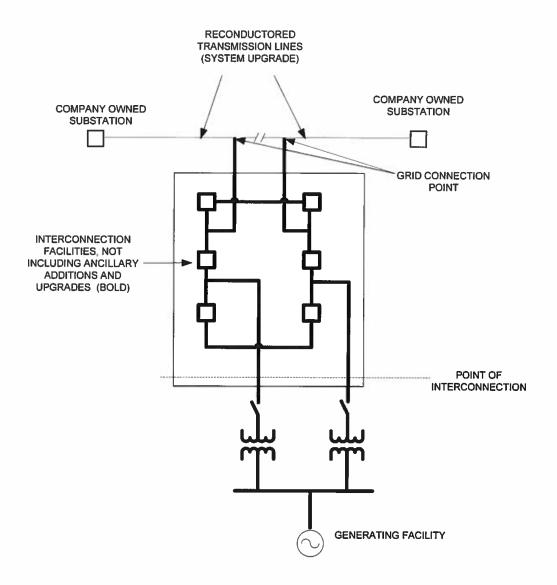
HAWAII ELECTRIC LIGHT COMPANY, INC.

Sheet No. 44J Effective November 5, 2007

RULE NO. 19 - Continued

Interconnection and Transmission Upgrades

Attachment A



HAWAII ELECTRIC LIGHT COMPANY, INC.

DRAFT REQUEST FOR PROPOSALS

FOR

VARIABLE RENEWABLE DISPATCHABLE GENERATION ISLAND OF HAWAI'I

FEBRUARY 2, 2018

Docket No. 2017-0352

Appendix K - (Reserved)



Hawai'i Electric Light

DRAFT REQUEST FOR PROPOSALS

FOR

VARIABLE RENEWABLE DISPATCHABLE GENERATION

ISLAND OF HAWAI'I

FEBRUARY 2, 2018

Docket No. 2017-0352

Appendix L – Selection Criteria



Hawai'i Electric Light

APPENDIX L SELECTION CRITERIA VARIABLE RENEWABLE DISPATCHABLE GENERATION ISLAND OF HAWAI'I

A. Introduction

This document outlines the evaluation and selection process the Company will implement for reviewing, evaluating, and selecting resources at each stage in the evaluation process. The document outlines the Company's process for receiving Proposals, conducting the initial Eligibility and Threshold assessment and the bid evaluation process, ultimately resulting in selection of the Short List and Final Award Group.

The Company will employ a multi-step evaluation process for the Variable Renewable Dispatchable Generation RFP. The Proposals will be subject to a consistent and defined review, evaluation and selection process. Upon receipt of the Proposals, the Company will ensure that the Proposals meet the Eligibility requirements, and if met, will review the Proposals to ensure that the Threshold Requirements are met. Proposals that have successfully passed the Eligibility and Threshold criteria assessments will then enter a two-step Proposal evaluation process. The process includes the Initial Evaluation selection of a Short List, followed by the opportunity for Short-Listed Proposals to provide Best and Final Offers, and then a Detailed Evaluation process to arrive at a Final Award Group.

B. Receipt of Proposals

Proposals must be submitted through the PowerAdvocate Platform by the proposal close date specified in Chapter 3 of the RFP. The PowerAdvocate Platform will not accept the submission of late information for this event.

Figure 1 below from the RFP Document illustrates the complete evaluation process.

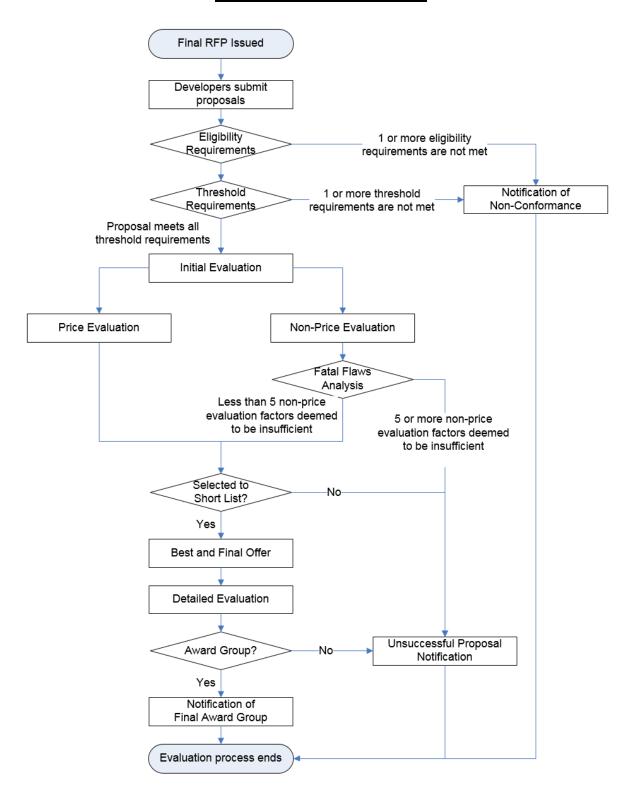


Figure 1 – Evaluation Workflow

C. Eligibility Requirements Assessment

The Company RFP team, with oversight from the Independent Observer, will begin a review of the Proposals to determine if the Proposals meet the Eligibility Requirements. If a Proposal is deemed not to meet the Eligibility Requirements, the reasons for such failure will be identified and documented. From Section 4.2 in the RFP:

- The Proposal must be received on time via the PowerAdvocate Platform.
- The non-refundable Proposal Fee must be received on time.
- The Proposal must not contain material omissions.
- The Proposal must be signed and certified by an officer or other authorized person of the Proposer.
- There must not have been illegal or undue attempts by or on behalf of the Proposer or others to influence the Proposal review process.
- The Proposal must not contain misrepresentations.
- The Proposers must fully execute the agreements or other documents required pursuant to this RFP.
- The Proposer must provide a certificate of good standing from the State of Hawai'i Department of Commerce and Consumer Affairs.
- The Proposer must provide Federal and State tax clearance certificates for the Proposer.
- The Proposal must not be contingent upon changes to existing county, state or federal laws or regulations.
- The proposed Project must be located on the Island of O'ahu.
- No single point of failure from the Facility shall result in a decrease in net electrical output greater than 135 MW.
- Storage systems that are coupled with a Facility must only be charged by the renewable energy generated by the Facility and not delivered from the grid.

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 Eligibility Requirements. 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.

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¹ As a general rule, if a Proposer does not include a requested document or may inadvertently exclude minor information or provides inconsistencies in its information, it may be given a chance to cure the inadequacies. If a Proposer does not include significant sections of its Proposal and providing the Proposer with the opportunity to cure is deemed a benefit to that Proposer at the expense of the competitors it could be classified as non-conforming and eliminated for failure to meet the eligibility requirements.

D. 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 that fail to meet a Threshold Requirement will be eliminated from further consideration upon concurrence with the Independent Observer. The Threshold Requirements for this RFP are the following:

- **Site Control:** The Proposal must demonstrate that the Proposer has Site Control for all real property required for the successful implementation of a specific Proposal at a Site not controlled by the Company, including any Interconnection Facilities for which the Proposer is responsible. If the Threshold Requirement for Site Control is met, Site Control will be further evaluated as a part of the Non-Price evaluation.
- **Performance Standards:** The proposed Facility must be able to meet the attributes identified in this RFP and the Performance Standards identified in the Model Renewable Dispatchable Generation PPA ("Model PPA").
- **Proven Technology:** The Company will only consider Proposals utilizing technologies that have been successfully reached commercial operations in multiple commercial applications at the scale being proposed.
- **Experience of the Proposer:** The Proposer, its affiliated companies, partners, and/or contractors and consultants on the Proposer's Project team must have experience in the development and operation of at least one (1) electricity generation project through the commercial operations stage where such project was of a similar in size (i.e., no less than half of the size of the project being proposed in response to this RFP), scope, technology, and structure to the Project being proposed by Proposer.
- **Credit/Collateral Requirements:** Proposers shall agree to post Development Period Security and Operating Period Security as described in <u>Section 3.13</u> of the RFP.
- Available Transmission Circuit Capacity: The output capacity of the Proposed project must not exceed the available capacity of the transmission circuit to which it will interconnect.
- **Financial Viability of Proposer:** Proposers must provide a basic financial plan for the project with details on the sources of debt and equity, capital structure, etc.
- **Guaranteed Commercial Operations Date:** The project's Guaranteed Commercial Operations Date must be no later than December 31, 2022.

If necessary, during the Eligibility and Threshold evaluation, the Company may identify specific follow-up questions for each Proposer to ensure that a complete and thorough evaluation can then be undertaken. Proposers will have up to three (3) business days to complete and submit their responses from the date of the request by the Company. Proposals that fail to meet a Threshold Requirement will be eliminated from further consideration upon concurrence with the Independent Observer.

E. Initial Evaluation Resulting in Selection of the Short List

Proposals that meet both the Eligibility and Threshold requirements will then be subject to a price and non-price assessment. Two teams have been established to undertake the bid evaluation process: (1) the Price Evaluation Team and (2) Non-Price Evaluation Team. Each team will work independently and not divulge the scoring or ranking of Proposals to the other team.

The results of the price and non-price analysis will be a relative ranking and scoring of all eligible proposals within technology buckets where the inclusion of storage will be treated as a separate technology bucket (i.e., Solar PV, Solar PV plus energy storage, wind, wind plus storage, etc.). For the short-listing process, price-related criteria will be weighed at 60% of the total ranking and non-price at 40%. The Company's objective for the Short List selection process is to identify and select proposals that are low cost and viable projects, as defined by the price and non-price weights at this stage in the process.

Price Evaluation

For the initial price analysis, an equivalent energy price (Levelized \$/MWh) will be calculated for each Proposal based on information provided in the Proposal including the Lump Sum Payment (\$/month), Energy Payment Price (\$/MWh), and the Net Energy Potential ("NEP") RFP Projection (MWh) information defined in Section 3.11.2 of the RFP.

In order to fairly evaluate Proposals with different technologies and characteristics while using an equivalent energy price in Levelized \$/MWh at this stage in the evaluation, the Company will group Proposals being evaluated into technology buckets.² The Company will then conduct the comparative evaluation and award evaluation points to Proposals within each technology bucket in accordance with the relative ranking based on levelized price per MWh. The Proposal with the lowest levelized price in each technology bucket will receive 600 points and all other proposals in that technology bucket will receive points based on the percentage increase in the Proposal's levelized price when compared to the lowest levelized price in the same technology

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² The process of grouping proposals into technology buckets rather than merely calculating levelized costs for each proposal and ranking accordingly has several advantages for such a solicitation process with multiple technology options. First, levelized cost analysis is a reasonable screening tool that can be used effectively to evaluate "like" or similar proposals or technologies with similar characteristics. Second, ranking and selecting proposals in technology buckets ensures that all technologies will have the opportunity to compete during the final evaluation process when the implications of each proposal on the utility system costs are evaluated. Third, effectively comparing technologies or proposals with different operating characteristics is challenging and does not provide reasonable results when using a levelized cost methodology. For example, in All-Source RFPs, it is not reasonable or effective to compare a Demand-Response product that offers 100 hours of operations relative to a combined cycle project that can operate at a very high capacity factor. The levelized costs of each option will be dependent on the capacity factor of each option rather than a "one size fits all" result. The bucketing process, which allows for comparison of like resources, therefore eliminates the potential shortcomings associated with the use of levelized costs as a screening tool for comparing different projects in such a process.

bucket. For example, if Proposal B's levelized price is 10% higher than the lowest cost Proposal (i.e., Proposal A), the lowest cost Proposal will be awarded 600 price points, while Proposal B, which is 10% higher in price will be awarded 90% of the points or 540 points. The result of this assessment will be a ranking and scoring of each proposal within each technology bucket.

Non-Price Evaluation

For the non-price analysis, each Proposal will be evaluated based on each of the eleven (11) non-price criteria categories set forth in Appendix L, with each non-price criteria category in Appendix L weighted equally. The non-price criteria categories include:

- 1. Community Outreach and Engagement
- 2. Cultural Resource Impacts
- 3. Environmental Review and Permitting
- 4. Experience and Qualifications
- 5. Financial Strength and Financing Plan
- 6. State of Project Development and Schedule
- 7. Site Control
- 8. Environmental Compliance/Impacts
- 9. O&M Plan
- 10. Model PPA Contract Exceptions
- 11. Financial Compliance

Proposals will be evaluated using the following non-price criteria to assess their merit in the general areas of project development feasibility and operational viability.

Community Outreach and Engagement – Gaining community support is an important part of a project's viability and success. Proposals will be evaluated on their plan to inform the neighboring community of the project, incorporate changes based on community input, and any community outreach and engagement efforts that have been performed to date. At a minimum, proposals should include a community outreach plan that describes the proposer's intentions to work with the neighboring community to provide project information during project development and construction and to address any local and community issues that may arise. Additional preference will be given to proposers who have already established contacts to work with the local community and have proposed a community benefits package. Preference will also be given to developers and/or their selected community consultant that have successfully worked with one or more Hawai'i communities for project development (energy or projects with similar community issues). This criteria is aligned with the Companies' new community engagement process whereby all developers will be required to engage in community outreach prior to signing a PPA with the Companies. This process is also outlined in the RFP document.

Cultural Resource Impacts – Projects should be mindful of their potential impact to cultural resources. Parties should, at a minimum, 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. Proposals will be evaluated on their plan to assess and mitigate their impact to cultural resources and any assessments that have been conducted to date. At a minimum, proposers should have already contracted with aconsultant with expertise in this field to begin a cultural impact assessment for the project. Additional preference will be given to Proposals that are further along in the assessment process and are able to provide a mitigation/action plan or are able to provide a date for when a mitigation/action plan will be available that addresses any identified cultural resource issues.

Environmental Review and Permitting Plan – Completing any necessary environmental review and obtaining the required permitting in a timely manner is important to meeting construction schedules. 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, and the degree of certainty offered by the Proposer in securing the necessary permits. At a minimum, proposers should have identified all major permits and approvals required and have a preliminary plan for securing the permits. Additional 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.

Experience and Qualifications – Developers with a demonstrated ability to construct and interconnect projects to the Company grid can reasonably be expected to be able to successfully complete a project with a higher level of confidence than those without any prior experience. Therefore, proposals will be evaluated based on the experience of the Developer in constructing, interconnecting and operating projects through the commercial operations stage of similar size (i.e., no less than half of the size of the project being proposed in response to this RFP), scope and technology. At a minimum, the proposer and its team should have experience with developing at least one project of a similar size and technology to the one being proposed. Additional preference will be given to proposers with experience in successfully developing, financing constructing, and operating multiple projects that are similar to the one being proposed and/or that have prior experience developing a project in Hawai'i.

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 the project is financeable. The financial strength of proposers or their credit support providers will be considered, including their credit ratings. At a minimum, the Proposal should include a basic financial plan for the project covering the sources of debt and equity, capital structure, etc. and provide evidence of general support for the project financing. The financing participants are expected to be reasonably strong financially. Additional preference will be given to financial plans that are more comprehensive and also achievable, provide stronger evidence (for example, a letter from a financial institution or bank) that the project is financeable, and that can demonstrate that the proposer has the capability and financial strength to develop and finance the project. 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. 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, and Annual O&M and the reasonableness of 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.

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 Commercial Operations Date required to be no later than December 31, 2022 and are more likely to be able to pass along tax credit savings to customers. At a minimum, projects should be able to demonstrate that there is a reasonable chance that the project will be able to meet the 2019 investment tax credit safe harbor and a commercial operations date no later than December 31, 2022. Additional preference will be given to proposals that are able to demonstrate via a detailed critical path schedule, including identifying adequate slack time, that there is a high likelihood that the project will be able to meet the 2019 investment tax credit safe harbor and commercial operations by the end of 2022.

Site Control – This criterion relates to the status of site ownership and control by the project sponsor as well as the maturity of site control. In addition, developmental requirements and restrictions such as zoning of the site and the status of easements are considered. At a minimum, the proposer should have executed a letter of intent to develop the site and have a reasonable plan for addressing zoning, rights of ways, and

easements. Additional preference will be given to Proposers who: (1) own the site or have executed an agreement or option to purchase or lease the site, (2) propose a site that is currently appropriately zoned, or (3) have obtained or have letters of intent to obtain any required rights of ways and easements. It is anticipated and acceptable that there may be non-exclusive agreements or options for a particular site which would be contingent upon selection of projects.

Environmental Compliance / Impacts – This criterion relates to the potential 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. At a minimum, proposed projects should be expected to have a minimal impact for most environmental areas and proposals should provide a preliminary plan to mitigate the identified impacts to remain in environmental compliance which should not significantly affect the project timeline. Additional preference will be given to proposals that provide a more detailed plan as well as those that have already proactively taken steps to mitigate environmental impacts.

O&M Plan – Operations and maintenance is an important aspect of project operations. This is especially important in the context of the new Model PPA structure, which relies on the continued performance of the Facility in exchange for fixed monthly payments. Proposals will be evaluated on their plan for operating and maintaining the Facility throughout the contract term including the status of any agreements with an O&M provider, the reasonableness of the O&M funding levels and mechanism, staffing levels, as well as any design plans that identify and incorporate features to ensure appropriate reliability is built into the project. At a minimum, proposals should include a reasonable O&M plan that identifies expected funding and staffing levels. Additional preference will be given to proposals that provide a more comprehensive plan or those that have identified a potential O&M provider or have already executed a minimum letter of intent with a reputable O&M provider.

Model PPA Contract Exceptions – Proposers may propose modifications to the Model PPA, including modifications that are intended to address a project's specific technology and operating characteristics. However, in general, Proposers are encouraged to accept the contract terms identified in the Model PPA where possible in order to expedite the overall RFP process and potential PPA negotiations. Proposers who elect to propose modifications to the Model PPA shall provide a red-line version of the Model PPA with their requested modifications as a component of their Proposals and shall also provide a detailed explanation and supporting rationale for each of the proposed modifications to the Model PPA in order to enable the Company and Independent Observer to evaluate the

impact that the proposed modifications will have on the overall risk assessment associated with the evaluation of each Proposal.

Financial Compliance – The proposed Project must not cause the Company to be subject to consolidation and capital lease treatment as set forth, respectively, in Financial Accounting Standards Board ("FASB") Accounting Standards Codification Topic 810, Consolidation ("ASC 810") and 840, Leases ("ASC 840") as issued and amended from time to time by FASB, nor lease treatment as set forth in FASB Accounting Standards Codification 842, Leases, effective January 1, 2019 ("FASB ASC 842"), as issued and amended from time to time by FASB. At a minimum, 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: (1) trigger a capital lease accounting treatment under FASB ASC 840; (2) trigger lease treatment under FASB ASC 842; or (3) result in the Seller under the PPA being a Variable Interest Entity ("VIE") that would trigger consolidation of the Sellers's finances on to the Company's financial statements under FASB ASC 810. The Company will perform a preliminary consolidation and capital lease assessment based on the Proposals received. If the Company believes that the Proposal may be subject to such treatment, it will inform the Proposer and either may request additional information or work with the Proposer to structure its agreement to avoid the lease and consolidation treatment. The Company reserves the right to allow a Proposal to proceed through the evaluation process through selection of the Short List and work with the Proposer on this issue during Model PPA negotiations. Projects that appear less likely to cause lease and/or consolidation treatment based on Company's assessment will be rated more favorably. A final consolidation and capital lease assessment will be performed prior to execution of a PPA. Final analysis will focus on PPA revisions or proposal changes which, for lease consideration, could influence the right to direct the use of the project asset over the PPA term, and for consolidation issues, revisions or changes that could potentially affect determination of the primary beneficiary of the contractual arrangement, e.g., having or affecting the ability to direct activities that significantly impact economic performance of the project asset, such as the ability to direct or control operations and maintenance activities.

Each of the eleven non-price criteria will be scored on a scale of 1 (poor) to 5 (highly preferable). The total non-price score will be the sum of the scores for each of the eleven individual non-price criteria.

The Company will then award non-price evaluation points in accordance with the relative ranking of scores within each technology bucket. The Proposal in each technology bucket with the highest total non-price score will receive 400 points and all other Proposals within that technology bucket 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 flaw analysis will also be conducted such that any Proposal that is deemed to not meet the minimum standards level³ for five (5) or more of the eleven (11) non-price criteria will be disqualified given that any Proposal that has failed to meet the minimum standards of nearly half of the non-price criteria is indicative of the lack of general feasibility and operational viability of a proposed project.

Selection of the Short 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 within each technology bucket.

The Company will select a Short List from the highest scoring Proposals from across the different technology buckets. While the Company has retained flexibility in the RFP to determine how many projects to advance to the Short List, the Company currently intends to select up to the number of projects targeted, plus one, in the RFP from each technology bucket for the Short List. For example, the Oʻahu Variable RFP is targeting two (2) projects in Stage 1. Thus, up to three (2+1=3) projects from each technology bucket will be selected to the Short List. ⁴ The Companies have the right in consultation with the Independent Observer to select more projects to the Short List, if for example, significantly more Proposals are received for one technology as compared to others in response to the RFP.

The following illustrative example n is provided to explain the process from the Initial Evaluation stage to to the Short List stage:

- There are thirteen proposals, four PV projects (#1, #2, #3, #4), four PV+ storage projects (#5, #6, #7, #8), and five wind projects (#9, #10, #11, #12, #13);
- The ranking for each project matches its numbering (e.g., project #1 has a higher total points score than project #2);
- Projects #1, #2 and #3, #5 and #6, and #9 and #10 are all on the same circuit;
- The remaining projects are each on different circuits; and
- The RFP targets two projects to be selected (so up to 2+1=3 projects to be selected to advance from each technology bucket to the Short List).

In this illustration, project #3 would be eliminated because it is on the same circuit with #1 and #2 within its respective bucket. Therefore, the projects selected to advance to the short list are: #1, #2, #4 from the PV bucket; #5, #6, #7 from the PV+ storage bucket; and #9, #10, #11 from the wind bucket for a total of nine projects advancing to the Short List.

³ A score of three (3) is the "meets minimum standards" level that a Proposal must achieve in at least six criteria.

⁴ In cases where the highest scoring Proposals within a technology bucket propose to interconnect to the same circuit, only up to two of the highest scoring Proposals on the same circuit will be kept and all others on that circuit will be eliminated. Thus, within each technology bucket, there will be no more than two projects on the same circuit that become eligible for selection to the Short List.

Proposals that are not included on the Short List will be released from further consideration when the Short List is established.

F. Best and Final Offers and Detailed Evaluation

The Company will solicit a Best and Final Offer from Proposers selected to the Short List. Proposers will have the opportunity to update (downward only) the pricing elements in their Proposals, including the:

- Lump Sum Payment (\$/year) amount
- Energy Payment price (\$/MWh) amount

Proposers will not be allowed to increase their price,⁵ but may elect to maintain the same pricing submitted in their original Proposal. If a Proposer does not modify its Proposal, the original Proposal will be deemed its Best and Final Offer.

The Company will then further evaluate Proposals by assessing the proposed cost of the delivered energy and operating characteristics of the proposed Project. The Company intends to use the PLEXOS model⁶ for this analysis. The evaluation will be based on the Total Net Cost (Costs and Benefits) to the Company of integrating a Proposer's proposed Project onto the Company's system which includes:

- 1. The cost to dispatch the Project and the energy purchased;
- 2. The fuel cost savings (benefits) and any other direct savings (IPP savings from dispatchable fossil fuel savings) resulting from the displacement of generation by the proposed Project;
- 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.

For conducting this analysis, the Company will replace units in a reference plan with the proposed resource and re-run its resource plan with the specific Short-Listed Proposal.

During the Detailed Evaluation process, the Company may elect to have face-to-face meetings with Proposers to better assess the Proposals and status of the proposed Project(s).

⁵ 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.

⁶ The PLEXOS Integrated Energy Model software is developed by Energy Exemplar. Refer to their website: www.energyexemplar.com for additional information on the software.

As noted above, 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 Standard & Poor's ("S&P") that is applicable to the Proposal being submitted. 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.

The Company's RDG PPA proposes a fixed payment. S&P's methodology of imputed debt begins with calculating the present value of total fixed payments over the life of the contracts, using a 7% discount rate. It then determines a risk factor to apply to the contracts to reflect the riskiness to the utility based on the terms of the contract and assurances of cost recovery. The risk factor is applied to the present value of the fixed payments under the contract to calculate the imputed debt (risk factor x present value of fixed contract payments = imputed debt). For resources where the contract price is stated as a single, all-in energy price, S&P has published a revised methodology which calculates the fixed costs for imputed debt purposes based on a proxy capacity charge stated in \$/kW-year for a new peaking unit. While the Company does not expect such projects given the RDG PPA structure, for such projects, the Company would calculate the imputed debt impact based on the current S&P methodology by first determining the approximate monthly cost (capacity x capacity factor x proxy capacity charge/12 months). The Company will then calculate the net present value of the stream of monthly costs over the duration of the PPA term.

The Company proposes to apply a risk factor consistent with guidance from S&P regarding the risk factor that would be applicable to the Company's entering into the particular type of PPA and the cost-recovery mechanism. Under current guidance from S&P, the Company plans to use a risk factor of 25% in light of the power cost adjustment recovery provisions available to PPAs that the Company would expect to enter into pursuant to this RFP. The cost of rebalancing the capital structure for the calculated imputed debt, in order to maintain the Company's target equity/total capitalization ratio will be included in the calculation of the Total Net Cost as indicated above.

^{7 1}

⁷ Each Proposal will be evaluated under generally accepted accounting standards, to determine whether or not it is a lease. If the Proposal is deemed to be a lease, it will be evaluated to determine whether it is an operating lease or a capital lease obligation. If the Proposal is deemed a capital lease obligation, the incremental cost of additional common equity to maintain the Company's target equity/total capitalization ratio will be considered in the proposal evaluation. If the Proposal is deemed an operating lease or other off-balance sheet obligation, the Company proposes to use the imputed debt methodology published by Standard & Poor's.

In addition to the above described analysis, during the evaluation and before the Proposals advance to the Final Award Group, the Company will perform load flow analyses to determine if certain Project combinations introduce transmission 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, large Projects on separate transmission circuits that are in close proximity with each other could introduce additional transmission 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 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 its price as a result of such minor modification. In addition, the Company will ensure Projects selected as the Final Award Group are not on the same transmission circuit.

In addition, a sensitivity analysis may be performed that considers the Interconnection Costs Savings Rate included in Proposals selected to the Short List in the event that there are Proposals with approximately the same Total Net Cost to the Company in the detailed evaluations. The Company may run additional scenario analyses if requested by the IO and the time and capability exist to run such analyses.

G. 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 from which to begin contract negotiations. The Company intends to select two (2) Projects in this Stage 1 RFP. 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. Any Project not selected to the Final Award Group may be resubmitted in Stage 2 of this RFP or in a subsequent RFP.

Unless time permits and in consultation with the Independent Observer, after the selection of the Final Award Group, if at any time a project no longer continues, the Company will not seek a replacement project in Stage 1 but will seek the supply of renewable energy from the Stage 2 solicitation process.

DRAFT REQUEST FOR PROPOSALS

FOR

VARIABLE RENEWABLE DISPATCHABLE GENERATION ISLAND OF HAWAI'I

FEBRUARY 2, 2018

Docket No. 2017-0352

Appendix M – Revisions to RDG PPA for Storage



Hawai'i Electric Light

PPA Revisions to Accommodate Projects that contain Storage

Proposals may contain storage which may be charged during periods when full potential export is not being taken by the Company, and used to provide energy to the Company during periods when source energy is not available. The Company maintains complete dispatch rights over the entire Facility and may dispatch the Facility at any time. Revisions to the RDG PPAs will be necessary for proposals that include storage. Such revisions shall include, but shall not be limited to the following sections of the RDG PPAs.

| Section | Revision |
|----------------------------|---|
| Article 2.5 – | Modify this section to include the energy storage equipment in the calculation |
| Availability Factor; | of the availability factor, availability benchmark and liquidated damages. |
| Liquidated Damages; | |
| Termination Rights | |
| Article 2.6 – | Modify this section to include energy storage in the calculation of the |
| Measured | performance ratio, performance ratio benchmark and liquidated damages. |
| Performance Ratio; | |
| Liquidated Damages; | |
| Termination Rights | |
| Attachment A, | Add specifications for Energy Storage system. |
| Section 5 - | |
| Equipment | |
| Attachment B, Section | 3 – Performance Standards |
| 3 (b) (i) – Reactive | Clarify that this section applies to each generator and each energy storage unit. |
| Amount | |
| 3 (c) (i) and 3 (c) (ii) – | Clarify that energy storage is expected to assist in meeting these performance |
| Ramp Rates, | standards |
| 3 (h) – Fault Ride | |
| Through, | |
| 3 (m) – Frequency | |
| Response | |
| Attachment B, Exhibit | Provide capability curves for generator and energy storage. |
| B-2 | |