

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Requests of)
)
HAWAIIAN ELECTRIC COMPANY, INC.,)
HAWAII ELECTRIC LIGHT COMPANY, INC.,)
AND MAUI ELECTRIC COMPANY, LIMITED)
)
To Institute a Proceeding Relating)
To a Competitive Bidding Process)
To Acquire Dispatchable and)
Renewable Generation.)
)

DOCKET NO. 2017-0352

ORDER NO. 35286

APPROVING THE HAWAIIAN ELECTRIC COMPANIES' PROPOSED
FINAL VARIABLE REQUESTS FOR PROPOSALS, WITH A MODIFICATION

PUBLIC UTILITIES
COMMISSION

2018 FEB 20 PM 4:16

FILED

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OF THE STATE OF HAWAII

In the Matter of the Requests of)	
HAWAIIAN ELECTRIC COMPANY, INC.,)	Docket No. 2017-0352
HAWAII ELECTRIC LIGHT COMPANY, INC.,)	
AND MAUI ELECTRIC COMPANY, LIMITED)	Order No. 35286
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To Institute a Proceeding Relating)	
To Competitive Procurement)	
Of Dispatchable and)	
Renewable Generation.)	
_____)	

APPROVING THE HAWAIIAN ELECTRIC COMPANIES' PROPOSED
FINAL VARIABLE REQUESTS FOR PROPOSALS, WITH A MODIFICATION

The Public Utilities Commission ("commission"), by this Order, approves, with a modification, the HAWAIIAN ELECTRIC COMPANIES'¹ Proposed Final Variable Requests for Proposals ("Proposed Final Variable RFPs"), filed on February 2, 2018, in connection with the procurement process to acquire new, dispatchable and renewable energy resources for Oahu, Maui, and Hawaii Island. The HECO Companies shall issue the

¹The Parties to this docket are HAWAIIAN ELECTRIC COMPANY, INC. ("HECO"), HAWAII ELECTRIC LIGHT COMPANY, INC. ("HELCO"), MAUI ELECTRIC COMPANY, LTD. ("MECO") (collectively, the "HECO Companies" or "Companies"); and the DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS, DIVISION OF CONSUMER ADVOCACY ("Consumer Advocate"), an ex officio party to this proceeding, pursuant to Hawaii Revised Statutes § 269-51 and Hawaii Administrative Rules § 6-61-62(a).

Proposed Final Variable RFPs, consistent with the commission's direction set forth in this Order.

I.

Background

On July 14, 2017, the commission issued an order accepting the Companies' Power Supply Improvement Plans ("PSIPs"), which set forth the Companies' intention to competitively procure new grid-scale generation resources. Those plans included procurement of approximately 400 MW of new renewable resources across the HECO Companies' service territories by 2021.²

By letter dated June 6, 2016, HECO requested, and by letters dated January 6, 2017, HELCO and MECO requested, that the commission: (1) open a docket for the purpose of receiving filings, reviewing approval requests, and resolving disputes relating to the Companies' plans to acquire dispatchable firm generation and new renewable energy generation on the islands of Oahu, Hawaii, Maui, Molokai, and Lanai; and (2) appoint an Independent Observer, consistent with the applicable provisions of the Framework.

²See Docket No. 2014-0183.

A.

Procedural History

On October 6, 2017, the commission opened the subject docket to receive filings, review approval requests, and resolve disputes, if necessary, related to the HECO Companies' plan to acquire dispatchable firm generation and new renewable energy generation.³ At the time, the commission stated that it expected that procurement of new dispatchable and renewable generation through this round of solicitations will generally adhere to the Framework for Competitive Bidding,⁴ but the commission may exercise its discretion to expedite and/or amend certain parts of the Framework to accommodate time constraints that may apply to the potential commercial transactions under these solicitations.⁵

On October 13, 2017, the HECO Companies filed a letter request ("Letter Request") asking the commission to establish additional procedural steps, as set forth in the Letter Request,

³Order No. 34856, "Opening the Docket," filed on October 6, 2017 ("Order No. 34856"). The aforementioned HECO Companies' June 6, 2016 and January 6, 2017 letters requesting that the commission open the docket were included as attachments to Order No. 34856.

⁴See Docket No. 2003-0372, Instituting a Proceeding to Investigate Competitive Bidding for Generating Capacity in Hawaii, Decision and Order No. 23121, Exhibit A - Framework for Competitive Bidding ("Framework"), filed on December 8, 2006.

⁵Order No. 34856 at 1.

"in order to provide further clarity regarding the process leading up to the issuance of the final, approved RFPs."⁶

On October 23, 2017, the HECO Companies filed their Draft RFPs with the commission.⁷

On October 27, 2017, the commission issued Order No. 34932 ("Order No. 34932"), "Declining to Amend the Initial Procedural Steps Set Forth In Order No. 34856," stating that the commission would not be "adopt[ing] the Companies' proposed amendments to the stakeholder comment filing deadline, or [amending] the designation of the commission as

⁶Letter Request at 1.

⁷"Hawaiian Electric Companies' Draft Requests for Proposals, Books 1 and 2, Filed October 23, 2017; Exhibit 1, Draft Request for Proposals for Renewable Firm Capacity and Dispatchable Energy Resources on the island of Maui (including Appendices A-L); Exhibit 2, Draft Request for Proposals for Renewable Energy Project(s) on the island of O'ahu (including Appendices A-L); Exhibit 3, The Hawaiian Electric Companies' Proposed Process for Successful Execution of the Competitive Bidding Program; Exhibit 4, Timelines for Each Proposed Procurement; Exhibit 5, The Hawaiian Electric Companies' Code of Conduct and Code of Conduct Manual for the Competitive Bidding Program; Exhibit 6, The Hawaiian Electric Companies' Interconnection Requirements Study Process; and Exhibit 7, Suspension of Lanai and Molokai RFPs," filed on October 23, 2017. In Exhibit 7, the Companies explain their distinct reasons for requesting to suspend the variable renewable dispatchable generation RFPs for Lanai and Molokai.

The various RFPs will be referred to as the "Maui Proposed Final Variable RFP," "Oahu Proposed Final Variable RFP," and "Hawaii Proposed Final Variable RFP" (collectively, the "Proposed Final Variable RFPs"), and the "Maui Firm RFP," throughout this Order.

the recipient of those stakeholder comments, set forth in Order No. 34856.”⁸

On November 13, 2017, several stakeholders filed comments on the Companies’ Draft RFPs.

On December 20, 2017, the HECO Companies filed their “Response to Stakeholder Comments,” and attached exhibit, in the instant docket (“December 20, 2017 Filing”).

On January 12, 2018, the commission issued Order No. 35224, “Providing Guidance on the Hawaiian Electric Companies’ Proposed Requests for Proposals for Dispatchable and Renewable Generation,” which appointed NAVIGANT CONSULTING, INC. (“Navigant”) as the Independent Observer (“IO”) for the Maui Variable RFP and Maui Firm RFP, and BATES WHITE, LLC (“Bates White”) as the IO for the Oahu and Hawaii Island Variable RFPs.⁹ Order No. 35224 directed the HECO Companies to work with the respective IOs to draft Proposed Final Variable RFPs, in accordance with the guidance therein, and set forth a procedural schedule to govern the next steps in this proceeding. The commission also directed the Companies to prioritize the Oahu, Maui, and Hawaii Island Variable RFPs, but directed the Companies to be prepared to initiate the Maui Firm RFP subsequent to

⁸Order No. 34932 at 6.

⁹Order No. 35224 at 39.

receiving further guidance from the commission and the IO, which the commission stated was expected to occur in the first quarter of 2018.

The commission also stated that it intended to institute appropriate competitive safeguards to ensure a level playing field for all participants in both the Variable and Firm procurement efforts, and intended to initiate a separate proceeding to more comprehensively consider necessary competitive safeguards and requirements for any potential affiliate transactions and relationships, including development of a robust and comprehensive Code of Conduct, to help further address any issues surrounding self-build and affiliate bids.¹⁰

On February 2, 2018, the Companies filed their "Proposed Final Draft Variable Requests for Proposals," with the commission.¹¹

¹⁰The commission notes that it intends to initiate such a proceeding shortly.

¹¹"Hawaiian Electric Companies' Proposed Final Draft Variable Requests for Proposals, Books 1-3; and Certificate of Service," filed on February 2, 2018. The Proposed Final Draft Variable RFPs include: Exhibit 1, Description of Development of the Proposed Final Variable RFPs; Exhibit 2, Proposed Final Draft RFP for Variable Renewable Dispatchable Generation on the island of O'ahu; Exhibit 3, Proposed Final Draft RFP for Variable Renewable Dispatchable Generation on the Island of Maui; Exhibit 4, Proposed Final Draft RFP for Variable Renewable Dispatchable Generation on the Island of Hawai'i; Exhibit 5, Revised Procurement Dates and Subsequent Timelines; Exhibit 6, Revised Code of Conduct;

On February 16, 2018, the Companies filed a letter with the commission setting forth "Corrections and Errata to Submitted Proposed Final Draft Variable Requests for Proposals."¹²

B.

Competitive Bidding Process

By Decision and Order No. 23121, filed on December 8, 2006, in Docket No. 03-0372, the commission adopted the Framework to govern competitive bidding as a mechanism for acquiring new energy generation in Hawaii. Under the Framework, competitive bidding is the required mechanism for acquiring a future generation resource or a block of generation resources, subject to certain conditions and exceptions.¹³ The process of acquiring a future generation resource through a competitive bidding process is described in the Framework.

Exhibit 7, Maui Specific RDG PPA Attachments; and Exhibit 8, Hawai'i Island Specific RDG PPA Attachments.

¹²HECO's February 16, 2018 Corrections and Errata Letter proposes revised language to clarify Section 4.3's Threshold Requirements related to Site Control (referencing the Proposed Final Variable RFP at Exhibit 2 at 31, Exhibit 3 at 33, and Exhibit 4 at 30) to avoid any inconsistency between the Threshold Requirements related to Site Control and provisions regarding Site Control in other areas of the RFP (for example, Appendix L).

¹³Framework, Part II.A.3, at 3-4.

As a general matter, the "primary role" of the commission in a competitive bidding process is to ensure that each competitive bidding process "is fair in its design and implementation so that selection is based on the merits;" that projects selected through a competitive bidding process are consistent with the utility's PSIPs; that the utility's actions represent prudent practices; and that throughout the process, the utility's interests are aligned with the public interest, even where the utility has dual roles as designer and participant.¹⁴

To assist the commission, the Framework contemplates the use of an IO in a variety of situations, as the commission deems beneficial and necessary.¹⁵ The IO has numerous obligations under the Framework, which include monitoring all steps in the competitive bidding process, including the communications between the utility and bidders; certifying to the commission at various stages of the competitive bidding process that the utility's judgment creates no unearned advantage for the utility; advising the utility on its decision-making during the various stages of the competitive bidding process; and reporting to the

¹⁴Framework, Part III.B.1, at 12. The original Framework language made reference to the utilities' "Approved [Integrated Resource Plan]," rather than to the PSIPs.

¹⁵Framework, Part III.C.1, at 13.

commission on its monitoring results during each stage of the process.¹⁶

However, as the commission previously stated,¹⁷ while this round of procurements will generally adhere to the Framework, the commission has exercised its discretion to expedite and/or amend certain parts of the Framework to improve the efficiency of the process.

As such, the commission has utilized the following process thus far in this docket:

1. The commission directed the HECO Companies to file their draft RFPs and supporting documentation, along with a detailed description of how the Companies propose to successfully execute the competitive bidding process, within fifteen (15) days of Order No. 34856 (filed on October 6, 2017), including:
 - a. Dates and subsequent timelines for each proposed procurement;
 - b. The HECO Companies' evaluation methodology, including pricing and non-pricing criteria;
 - c. A Code of Conduct;

¹⁶Framework, Part III.C.2, at 13-15.

¹⁷See Order No. 34856 at 1 n.1 ("The commission expects that procurement of new dispatchable and renewable generation through this round of solicitations will generally adhere to the Framework for Competitive Bidding, but the commission may exercise its discretion to expedite and/or amend certain parts of the Framework to accommodate time constraints that may apply to the potential commercial transactions under these solicitations.")

- d. The Proposed Interconnection Study Process, including the length of time needed to conduct the Interconnection Studies and associated review periods; and
 - e. Power Purchase Agreements ("PPAs") that will be used throughout the procurement(s).
2. The commission solicited comments by interested stakeholders on the draft RFPs and supporting documentation, which were subsequently filed in this docket and served on the HECO Companies and Consumer Advocate;
 3. The Companies filed their response to the stakeholder comments, as directed by Order No. 34856 (December 20, 2017);
 4. The commission provided guidance on the HECO Companies' Proposed Requests for Proposals for Dispatchable and Renewable Generation in Order No. 35224 (January 12, 2018);
 5. The commission gave stakeholders the option to file comments/proposals on potential incentive mechanisms (by January 29, 2018);
 5. The utility submitted its Proposed Final Variable RFPs (February 2, 2018);
 6. The commission makes a determination regarding the Proposed Final Variable RFPs, accompanied by formal comments from the IOs provided to the commission on the Proposed Final Variable RFPs (February 20, 2018);
 7. The Companies are to issue the Final Variable RFPs within 5 business days after commission approval of the Proposed Final Variable RFPs.

II.

Discussion

A.

IO's Comments

Both Navigant and Bates White provided "Pre-Bid Reports" to the commission on the HECO Companies' Proposed Final Variable RFPs.¹⁸ The comments from the IOs' Pre-Bid Reports are summarized below.

1.

Navigant Pre-Bid Report

The Navigant Pre-Bid Report found that the "changes made by the Company reflected in the Proposed Final Variable RFP [were] responsive to [Navigant's] key concerns, and increase the clarity, transparency, and objectives underl[y]ing the solicitation."¹⁹

¹⁸"Pre-Bid Report of Navigant Consulting, Inc. as Independent Observer," prepared for the State of Hawaii Public Utilities Commission, dated February 12, 2018 ("Navigant Pre-Bid Report"); and "Pre-Bid Report of the Independent Observer for the Hawaiian Electric Companies' Request for Proposals for Dispatchable and Renewable Generation on O'ahu and Hawai'i Island," prepared for the Hawaii Public Utilities Commission, dated February 12, 2018 ("Bates White Pre-Bid Report"). Both reports are included as attachments to this Order, per Order No. 35224 at 38 (stating that the commission determination regarding the Proposed Final Variable RFPs would be accompanied by formal comments from the IOs).

¹⁹Navigant Pre-Bid Report at 2.

a.

Navigant Comments On The Maui Proposed Final Variable RFP

Regarding the Maui Proposed Final Variable RFP, Navigant states that the HECO Companies have "addressed many of the Stakeholder comments and our concerns."²⁰ Specifically regarding a self-build option ("SBO"), Navigant notes that the Maui Proposed Final Variable RFP states that the Companies "will not be submitting an SBO nor accepting proposals from its affiliates[,] " which Navigant thinks "significantly improves the probability of meeting the aggressive RFP timeline and securing Projects that will benefit from the 2019 [Investment Tax Credit]."²¹ Other key changes that Navigant highlights in the Maui Proposed Final Variable RFP, include:

1. The proposal fee structure was modified to allow up to three project variations under a single proposal and fee;
2. The Evaluation process has been further defined, reducing areas of ambiguity and flexibility;
3. The requirement to submit a detailed Project "proforma" was changed to a requirement that only key cost estimates must be provided for Non-price evaluation;
4. The evaluation process was changed to allow up to two Projects to be considered for the shortlist from each technology bucket,

²⁰Navigant Pre-Bid Report at 2.

²¹Navigant Pre-Bid Report at 9.

plus one additional project, so long as the third project does not reside on the same circuit as the first two Projects; and

5. The Companies have agreed to use the same assumptions as those used for their PSIPs, and to not change them for the evaluation.²²

b.

Navigant Comments On The Maui Draft Variable RDG PPA

With regard to the Maui Draft Variable Renewable Dispatchable Generation ("RDG") PPA ("Maui Draft Variable RDG PPA"), Navigant states that "the changes made by the Company . . . in response to the most common Stakeholder concerns (rights of the Company under a Project financing, termination rights of the Company due to a delay in the Project, rights of the Company under a consolidation event) adequately resolve those concerns."²³ Ultimately, Navigant concludes that the terms of the Draft Variable RDG PPA are negotiable, and thus, this will "allow[] a Stakeholder who becomes a Proposer to address these concerns directly with the Company through submittal of Maui RDG PPA markups as part of the solicitation process as well as during the PPA negotiation process."²⁴

²²Navigant Pre-Bid Report at 9.

²³Navigant Pre-Bid Report at 2.

²⁴Navigant Pre-Bid Report at 2.

However, Navigant is concerned that the terms of the Maui Draft Variable RDG PPAs' Project readiness ("Availability") and Project efficiency ("Measured Performance Ratio" for PV and "BOP Efficiency Ratio" for wind) measures are not based on industry standards, and/or include performance targets that are not based on industry data.²⁵ Navigant states that these standards may cause Proposers to oversize their proposed Projects (e.g., redundant inverters or wind turbines) and/or add additional contingency funds to mitigate the risk of liquidated damages due to shortfalls against the targets that are significantly higher than actual industry availability and efficiency data would support.²⁶ Navigant ultimately recommends that the Companies modify the Measured Performance Ratio based on an International Electrotechnical Commission ("IEC") standard similar to that for the Wind RDG PPA, and recommend that the performance targets be reviewed "against industry data and adjusted as necessary."²⁷

²⁵Navigant Pre-Bid Report at 10.

²⁶Navigant Pre-Bid Report at 11.

²⁷Navigant Pre-Bid Report at 11.

c.

Navigant Comments On The Evaluation Methodology

Regarding the Evaluation Methodology, Navigant found that the Companies were responsive to key concerns raised by Navigant and the commission, stating that the revised Evaluation Methodology "provide[s] the appropriate expanded level of information required for a proposer to adequately apprise itself of the key factors that it must address in its response to the RFPs."²⁸ Navigant states that it is comfortable with the expanded information provided by the Companies regarding specific steps to be taken as part of the Price and Non-price Evaluation Protocol and criteria,²⁹ including:

1. Supplementation of Appendix L with much of the information contained in the internal Company scoring guidelines;
2. Removal of the provision requiring experience interconnecting with the Hawaiian Electric grid, and replacement with a requirement regarding experience interconnecting a project of no less than half of the size of the Project being proposed;
3. Removal of the Companies' unilateral right to reject a proposal, and inclusion of different treatment of the Financial Compliance Criteria (as a Threshold Criteria rather than a Non-Price Evaluation Criteria);

²⁸Navigant Pre-Bid Report at 2.

²⁹Navigant Pre-Bid Report at 2.

4. Inclusion of further detail and narration with respect to the specific steps to be undertaken as part of both the Price and Non-price criteria evaluations;
5. Modification of the "fatal flaw" provision regarding proposal rejection, such that now 5 (instead of 2) of the 11 criteria must be poor for a proposal to be rejected; and
6. Modification of internal scoring guidelines to further define the standards, changed in response to Navigant's comments about the evaluator previously having wide discretion that could have resulted in inconsistent scoring.³⁰

2.

Bates White Pre-Bid Report

Bates White concluded that overall, "the [Proposed Final Variable RFPs], as filed and as a whole package, are reasonable. There are no fatal flaws, in our view, that should prevent the [c]ommission with going forward with the Stage 1 RFPs."³¹ Bates White emphasizes that "[b]ecause time is of the essence . . . it is important that the Companies act in good faith to effectively complete the Stage 1 RFP process both successfully and in a timely fashion."³²

³⁰Navigant Pre-Bid Report at 13.

³¹Bates White Pre-Bid Report at 4 (referring to the Oahu and Hawaii Island Proposed Final Variable RFPs).

³²Bates White Pre-Bid Report at 4-5.

a.

Bates White Comments On The Oahu And
Hawaii Island Proposed Final Variable RFPs

Bates White initially notes that the Companies "have revised the RFP[s] to not allow either a self-build or an affiliate bid[,] " in Phase 1, stating that while Bates White "rarely advocate[s] for measures that could reduce the number of bids and the amount of competition, we do so here for Stage 1[,] " citing as support that "the Companies are in the process of revising their Code of Conduct, which is imperfect[,] " and that "the Stage 1 RFP is meant to procure projects that capture the full available tax credits, which requires an efficient process on an aggressive timeframe."³³

Regarding the Proposed Final Variable RFPs, Bates White states that the most significant revisions include:

1. Elimination of the concept of "non-negotiable" terms of the PPA(s);
2. Clarification regarding projects that required "extensive system upgrades" to be considered those that would jeopardize the Guaranteed Commercial Operations Date;
3. Additional clarity, explanation, and justification regarding available circuit-level capacity;
4. Better explanation of how energy storage is to be included, bid, and evaluated; and

³³Bates White Pre-Bid Report at 5.

5. Reduced redundancy and increased clarity in Section 3.7, which provides guidance on how a project proposal would be disqualified.³⁴

b.

Bates White Comments On The Oahu And
Hawaii Island Draft Variable RDG PPAs

Bates White states that the revised Draft Variable RDG PPA reduces "overly restrictive and/or onerous language," including:

1. Removal of a provision that would allow the Companies to immediately terminate the PPA if the seller failed to meet a project milestone date, and replacement with a cure period, and inclusion of a liquidated damages clauses;
2. Retention of the Availability Factor and the Measurement Performance Ratio, which can help keep ratepayers from paying a fixed price for an underperforming asset;³⁵
3. Clarification that a lender may, in certain circumstances, take possession of the seller's project after a default event declared by the lender;

³⁴Bates White Pre-Bid Report at 6.

³⁵As noted above in Section II.A.1.b., while not calling into question the use of an Availability Factor and Measurement Performance Ratio, Navigant expressed some concern that the terms of the Maui Draft Variable RDG PPAs' Availability and Measurement Performance Ratio numerical measures are not based on industry standards, and/or include performance targets that are not based on industry data. The commission intends to discuss these concerns with Navigant moving forward, and will review the appropriateness of the measures of the Availability Factor and Measurement Performance Ratio, as necessary.

4. Removal of potentially restrictive language that would have prevented the seller from assigning its interest in the project to a wholly-owned subsidiary or to an affiliate; and
5. Clarification regarding financial consolidation and capital lease treatment of the PPAs.³⁶

c.

Bates White Comments On The Evaluation Methodology

Bates White notes the following improvements in the Evaluation Methodology:

1. Increased transparency and clarification concerning the Eligibility and Threshold Requirements;
2. Increased transparency and clarification of the Price and Non-Price scoring methodology;
3. Provision of substantial modeling assumptions and data for bidders to provide optimized, innovative proposals;
4. Fewer limitations on the number of projects that can be added to the Short List; and
5. A much clearer Detailed Evaluation.³⁷

³⁶Bates White Pre-Bid Report at 6-7.

³⁷Bates White Pre-Bid Report at 6.

B.

Commission Direction To The Companies
Regarding Issuance Of The Final Variable RFPs

Based on its review of the Proposed Final Variable RFPs, as well as the Pre-Bid Reports provided by the IOs, the commission approves the Companies' Proposed Final Variable RFPs,³⁸ subject to the following modification:

1.

Maui Proposed Final Variable RFP

In the Companies' December 20, 2017 Filing, they explained a willingness to perform a reverse auction for the Company-owned Waena site on Maui. However, due to timing, the Companies have instead developed a hybrid RFP process for the Maui Proposed Final Variable RFP, using the Waena site.³⁹ The Maui Proposed Final Variable RFP specifies that two (2) projects will be selected for the island. Of the two (2) projects to be selected on the island of Maui, one of those projects will be for the Waena site.

In the Proposed Final Variable RFP for Maui, the Companies have offered the Waena site for a PV + storage

³⁸This approval includes the corrections set forth in the Companies' February 16, 2018 "Corrections and Errata Letter."

³⁹See Proposed Final Variable RFP, Exhibit 1, at 9.

project for any interested proposer to utilize in their bid. According to the Companies' Final RFP, the Companies will provide the land and will build the switching station for such site at the Companies' cost.⁴⁰ The selected proposer will be responsible for all other costs associated with developing, operating, and maintaining the facility.

The Companies claim that this hybrid RFP process will be able to test if specifying a site and a technology and paying for a portion of the land and interconnection costs will result in a more streamlined, transparent, and successful RFP, translating to lower costs for customers. The Companies believe this process will help to inform the Commission, Consumer Advocate, Companies and stakeholders if a similar hybrid process, or moving to a full reverse auction, should be used in future procurements, or if the more traditional RFP process results in better pricing for customers.

The commission appreciates the Companies' intent to expedite and encourage competition through the Waena site opportunity. However, the commission requires the Companies to eliminate the requirement that one of the awarded projects on Maui be located at the Waena site, as the commission finds that this requirement is unnecessary. While the Companies may retain the

⁴⁰See Proposed Final Variable RFP, Exhibit 1, at 9-10.

two (2) project selection limit for the Maui Variable RFP, and may separately evaluate projects proposed for the Waena site, the Companies should select the best overall projects based on evaluation of those bids that have been short listed, in consultation with the IO.⁴¹ Any project proposed for the Waena site should be required to compete with other projects on its own merits.

As such, the Companies shall modify the Maui Final Variable RFP such that any references that one of the selected projects must be located at the Waena site, are stricken.⁴²

C.

Incentive For Exceptional Performance In
Procuring Low-Cost Renewable Energy Projects

Pursuant to Order No. 35224, on January 29, 2018, several stakeholders filed comments proposing a variety of mechanisms to serve as incentives for exceptional performance by the HECO Companies in procuring low-cost renewable energy projects. The commission is appreciative of the stakeholder comments and continues to evaluate potential incentive mechanisms.

⁴¹See Proposed Final Variable RFP, Exhibit 3, Appendix L.

⁴²See, e.g., Final Draft Variable RFP, Exhibit 3, at 38.

The commission intends to establish the final incentive mechanism by subsequent order.

III.

Orders

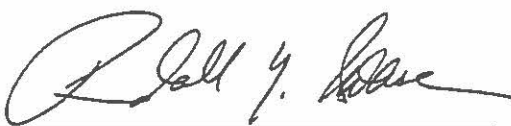
THE COMMISSION ORDERS:

1. The commission approves, with a modification, the Proposed Final Variable Requests for Proposals, filed by the HECO Companies on February 2, 2018, in connection with the procurement process to acquire new, dispatchable and renewable energy resources for Oahu, Maui, and Hawaii Island.

2. The HECO Companies shall issue the Final Variable RFPs, consistent with the commission's direction set forth in this Order.

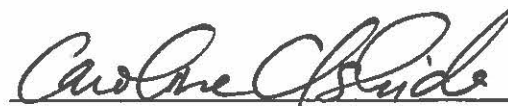
DONE at Honolulu, Hawaii FEB 20 2018.

PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

By 
Randall Y. Iwase, Chair

By 
Lorraine H. Akiba, Commissioner

APPROVED AS TO FORM:


Caroline C. Ishida
Commission Counsel

By 
James P. Griffin, Commissioner

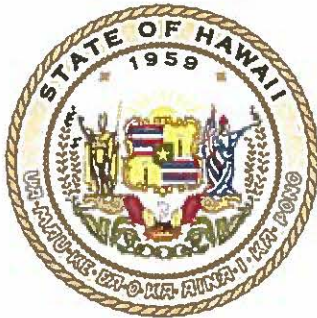


**Maui Electric Company Request for Proposals for Variable Renewable
Dispatchable Generation**

**Pre-Bid Report of Navigant Consulting, Inc.
as Independent Observer**

Prepared for:

The State of Hawaii Public Utilities Commission



**STATE OF HAWAII
PUBLIC UTILITIES COMMISSION**

Submitted by:
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February 19, 2018

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EXECUTIVE SUMMARY

This report summarizes the pre-bid assessments and findings (the “Pre-Bid Report”) of Navigant Consulting Inc. (“Navigant”) as the Independent Observer (“IO”) for the Request for Proposal for Variable Renewable Dispatchable Generation for the Island of Maui competitive procurement solicitation (the “Solicitation”) that is being performed by the Maui Electric Company (the “Company”). Under the Solicitation, the Company intends to issue a Request for Proposals (“Maui Variable RFP”) to the public to provide up to 270,000 megawatt hours (“MWh”) annually from new renewable dispatchable resources on the island of Maui with commercial operation by December 31, 2022 (each a “Project”, or “Facility” or “Resource”) over a preferred term of twenty (20) years. The new Projects would satisfy the new resource need identified by the Company in the 2016 Power System Implementation Plan for the Hawaiian Electric Companies (the “PSIP”). In the event the Solicitation does not yield all the energy needed to meet the Company’s requirements set forth in the PSIP, the Company may solicit additional proposals for new renewable dispatchable resources for commercial operation after December 31, 2022 under a separate solicitation. This Pre-Bid Report considers only the Maui Variable RFP and no potential separate solicitation.

The Company, along with the Hawaii Electric Company and the Hawaiian Electric Light Company (together the “Companies”), filed a draft request for proposals for variable dispatchable generating resources for the island of Oahu (the “Draft Variable RFP”) with the Hawaii Public Utilities Commission (the “Commission”) on October 23, 2017.¹ The Companies also filed a draft request for proposals for firm dispatchable generating resources for the island of Maui (the “Draft Firm RFP”). The Commission subsequently solicited comments from interested parties (“Stakeholders”) on the both the Draft Variable RFP and the Draft Firm RFP (together the “Draft RFPs”), and issued an Order concerning the Draft RFPs on January 12, 2018 (the “Order”).² In response to the Order, the Company filed a proposed final version of the Maui Variable RFP (the “Proposed Final Variable RFP”) with the Commission on February 2nd, 2018.

Under the Order, the Commission appointed Navigant to perform the services of an IO as described under the Framework for both the Maui Variable RFP and the Maui Firm RFP. The Commission also directed the Company to focus their near-term efforts on the Maui Variable RFP (and the rest of the Companies on their similar variable RFPs) and defer work on the Maui Firm RFP until further guidance is provided. Due to this deferral, this Pre-Bid Report considers the Maui Variable RFP only.

The Order also directed Navigant to work closely with the Company to remove overly restrictive or onerous language from the Draft Variable RFP, improve clarity and transparency of the proposal evaluation methodology, remove any overly restrictive and onerous language in the model power purchase agreements (PPAs) that accompany the Draft Variable RFP, and provide formal comments to the Commission in support of its scheduled determination on the Proposed Final Variable RFP on February 19, 2018. This Pre-Bid Report constitutes our formal comments.³

¹ Docket No. 2017-0352, Requests of Hawaiian Electric Company, Inc., Hawaii Electric Light Company, Inc., and Maui Electric Company, Limited Instituting a Proceeding Relating to a Competitive Bidding Process to Acquire Dispatchable and Renewable Generation, Draft Requests for Proposals, October 23, 2017.

² Hawaii Public Utilities Commission Instituting a Proceeding to Investigate Competitive Bidding for New Generating Capacity in Hawaii. Docket No. 03-0372, Decision and Order No. 23121 Exhibit A Framework for Competitive Bidding, December 8, 2006 (the “Framework”), section III (C)(2)(a)(i) page 13.

³ Hawaii Public Utilities Commission, Docket No. 2017-0352, Order No. 35224 - Providing Guidance on The Hawaiian Electric Companies’ Proposed Requests for Proposals for Dispatchable And Renewable Generation, Section II(B)

Upon issuance of the Order, we immediately began participating in conference calls hosted by the Companies to review and discuss the Order and to jointly develop a work plan for the next 13 business days to modify the Draft Variable RFP and all the associated documents. We held substantive discussions on the modifications, reviewed modified documents from the Companies, and participated in additional conference calls and in-person meetings during the final days prior to the February 2nd, 2018 filing.

We have completed the aforementioned work scope with respect to the Draft Variable RFP and the Proposed Final Variable RFP and find the following.

We find that the changes made by the Company reflected in the Proposed Final Variable RFP are responsive to our key concerns, and increase the clarity, transparency and objectives underlying the Solicitation. The changes made address the key Stakeholder concerns, particularly with respect to the participation of an SBO which was the subject of many comments. Further changes made by the Company reduce the more onerous requirements that were noted in the Draft Variable RFP and, accordingly, should help increase the confidence and participation rate of the developer community.

We find that the changes made by the Company reflected in the Proposed Final RDG PPA for Maui in response to the most common Stakeholder concerns (rights of the Company under Project financing, termination rights of the Company due to a delay in the Project, rights of the Company under a consolidation event) adequately resolve those concerns. Although numerous lesser concerns have not yet been addressed, we expect that the Company will continue to evaluate these concerns. Ultimately, the terms of the Maui RDG PPA are negotiable. This allows a Stakeholder who becomes a Proposer to address these concerns directly with the Company through submittal of Maui RDG PPA markups as part of the solicitation process as well as during the PPA negotiation process.

However, we are concerned that the Proposed Final Maui RDG PPA is using availability and efficiency measures that are not based on industry standards and/or performance targets that are not based on actual industry data. It may cause proposers to oversize their proposed Project (e.g., redundant inverters or wind turbines) and/or add additional contingency funds in order to mitigate the risk of liquidated damages due to shortfalls against targets that are not consistent with actual industry availability and efficiency data. Ultimately, the terms of the Maui RDG PPA are negotiable. We recommend that the Company be amenable to negotiating with proposers concerning the terms of availability and efficiency measurement methods and performance targets. For example, allowing the Measured Performance Ratio to be based on an IEC standard similar to that for the Wind RDG PPA, and allowing the performance targets to be adjusted as necessary based on actual industry performance versus such targets.

We find that the changes made by the Company reflected in the revised Evaluation Protocol are responsive to our key concerns. They provide the appropriate expanded level of information required for a proposer to adequately apprise itself of the key success factors that it must address in its response to the RFPs. In particular, proposers are now provided with expanded information regarding the specific steps to be undertaken as part of both the price and non-price evaluations.

This Pre-Bid Report summarizes our review and findings as of the date of this Pre-Bid Report. For our work, to some extent we have relied on documents, correspondence, analyses and other information provided to us the Company. While we believe this information to be reliable, it has not been independently verified for either accuracy or validity, and no assurances are offered with respect thereto. We make no representations, warranties or opinions concerning the enforceability or legality of the laws, regulations, rules, agreements or other similar documents reviewed as part of our work. Navigant and its

employees are independent contractors providing professional services to the Commission and are not officers, employees, or agents of the Commission.

INTRODUCTION

Commission Guidance

In the Order, the Commission provided guidance to the Companies and the Independent Observers concerning the following topical areas: 1) self-build and affiliate transactions, 2) language in the Draft RFPs, 3) evaluation methodology and 4) the PPAs.⁴

With respect to self-build and affiliate transactions, the Commission expressed a strong preference against self-build or affiliate bids for the first phase of the variable RFPs.⁵

With respect to language in the Draft RFPs, the Commission agreed with some Stakeholders that the proposed Draft RFPs may contain overly-restrictive, potentially onerous, and/or unclear language and directed the Companies to work with the IOs to remove such language from the Draft RFPs. The Commission identified several sections of the Draft RFPs for review including those concerned with submission of multiple proposals (Section 1.8.2), modification or cancellation of the solicitation process (Section 1.12.1), acceptable Project configurations (Section 1.2.13), resource needs and requirements (Section 2.1), proposed compliance and bases for disqualification (Section 3.7), Project description (Section 3.11), threshold requirements (Section 4.3) and consultation with the IO concerning selection (Section 4.5.2). The Commission also requested more clarity on how the Companies intend to consider certain terms and concepts, and how proposals will be judged with respect to extensive system upgrades.

With respect to the evaluation methodology, the Commission directed the Companies to work closely with the IOs to improve clarity and transparency of the evaluation methodology to enable bidders to optimize their Project design, not limit the potential for innovative Project proposals, make modeling assumptions available to participants, explain cost assumptions for a proxy storage unit and describe how the Companies intend to dispatch and charge the storage units. The Commission also expressed concern about potentially restrictive parameters within the selection criteria including interconnection experience in Hawaii and capital lease treatment as threshold requirements. Additionally, the Commission agreed with many Stakeholders in asking for additional detail regarding the price and non-price evaluation, including the weights of the price and non-price criteria and how each proposal will be scored. Finally, the Commission directed the Companies to work with the IOs to determine the reasonableness of limiting both the number of overall Projects selected for each island and the number of Projects per circuit.

With respect to the PPAs, the Commission declined to pre-approve the new renewable dispatchable generation ("RDG") PPA proposed by the Companies, and directed the Companies to allow bidders to propose modifications to the RDG PPA as part of their bids. The Commission further directed the Companies to work with the IOs to remove any overly restrictive and onerous language in the RDG PPA

⁴ Hawaii Public Utilities Commission, Docket No. 2017-0352, Order No. 35224 - Providing Guidance on The Hawaiian Electric Companies' Proposed Requests for Proposals for Dispatchable and Renewable Generation, Section II(B).

⁵ "First phase of the Variable RFPs" means the Maui Variable RFP and the similar RFPs for the other islands for resources achieving commercial operation by December 31, 2022.

including non-negotiable provisions and sections that are outdated or would unnecessarily belabor the PPA negotiation process.

Our Work Scope

In the Order, the Commission appointed Navigant Consulting Inc. ("Navigant", "we" or "us") as the Independent Observer for the Maui Variable RFP and the Maui Firm RFP and directed us to monitor the competitive bidding process and report on the progress and results to the Commission in the instant proceeding. We were also directed to work with the Company in drafting the Proposed Final Variable RFP consistent with the guidance set forth above.

The Commission further directed the Company to prioritize finalizing the Maui Variable RFP, and to be prepared to initiate the Maui Firm RFP subsequent to receiving further guidance in the first quarter of 2018. Finally, the Commission stated it intends to initiate a separate proceeding to comprehensively consider necessary competitive safeguards and requirements for any potential affiliate transactions and relationships, including development of a robust and comprehensive Code of Conduct.

Our Activities

Upon issuance of the Order, we immediately began participating in conference calls hosted by the Companies to review and discuss the Order and to jointly develop a work plan for the next 13 business days to modify the Draft Variable RFP and all the associated documents. We then began substantive discussions on each of the guidance items, understanding the Companies' position and establishing our own position on each, and recommending specific changes to the documents to resolve the positions where necessary. The Companies then modified the documents for our review, which was then the subject of additional conference calls and in-person meetings during the final days prior to the February 2nd 2018 filing date. We then began preparation of this Pre-Bid Report for submission to the Commission prior to the scheduled Commission determination date of February 19th 2018.

As part of this work, the Companies made changes to their Code of Conduct and their Procedures Manual and provided those for our review, and subsequently included the revised documents in their February 2nd filing. However, we have not thoroughly reviewed those revised documents at this time given that the Company will not be submitting a self-build resource or be accepting any affiliate proposals in the Solicitation, and that the Commission intends to establish a separate proceeding concerning the Code of Conduct. We expect to provide our review of the Code of Conduct and Procedures Manual as part of that proceeding.

ASSESSMENT OF THE DRAFT VARIABLE RFP, SUPPORTING DOCUMENTS AND CHANGES MADE BY THE COMPANY

Summary of Documents Reviewed

Our work included review of the following documents:

- Draft Request for Proposals for Variable Renewable Dispatchable Generation for the Island of Oahu (filed 10/23/2017)
- Draft Request for Proposals for Variable Renewable Dispatchable Generation for the Island of Maui (filed 2/2/2018) including:
 - Appendix A Definitions
 - Appendix B Proposer's Response Package / IRS Data Sheet
 - Appendix C1 Model PV RDG PPA
 - Appendix C2 Model Wind RDG PPA
 - Appendix G Description of Available Sites
 - Appendix I Interconnection Facilities and Cost Information
 - Appendix L Selection Criteria
 - Appendix M Revisions to RDG PPA for Storage

Please note that the following appendices were not reviewed in detail at this time due to lack of relevance to the guidance or time constraints: Appendix D Code of Conduct Procedures Manual, Appendix E Power Advocate User Information, Appendix F Mutual Confidentiality and Non-Disclosure Agreement, Appendix H, Appendix J Rule 19 Tariff, and Appendix K Ground Lease.

- Maps of Maui showing land parcels offered in response to the Land Request for Information issued previously, major transmission circuits and associated constraints
- Spreadsheet showing details of Maui transmission constraints
- Variable RFP Evaluation Protocol
- Non-Price Evaluation Scoring Sheets
- Gantt chart of solicitation schedule, a document describing the tasks within the schedule, and a final compressed schedule
- Pro-forma financial model template for proposers to submit for their proposed Project
- Prior filings concerning system level hosting capacity for each island
- Prior filings concerning system avoided cost
- Example of proposal levelized price calculation

- December 2016 Power Supply Implementation Plan, and Appendix K. Analytical Steps and Results, and Appendix J. Modeling Assumptions Data
- Documents from Standard & Poor's concerning imputed debt methodology, and prior filings by the Companies concerning cost of capital and imputed debt

Assessment of the Draft Variable RFP and Subsequent Changes by the Company

The Draft Variable RFP seeks Projects that have the capability (individually or collectively) to provide up to 270,000 MWh of renewable energy annually. Under the Draft Variable RFP, the Company seeks the full rights and capability to turn on and off the Projects to balance the electrical generation needs on Maui. This will be accomplished through the Company's automated control systems whereby signals are sent from the Company directly to the Projects to increase or curtail production.

Under the Draft Variable RFP, the Company intends to select up to two (2) Projects on Maui to meet the stated production capability target. One of the Projects will be located on the Company's own Waena site which the Company knows will avoid extensive electrical system upgrades and costs. Only one technology type, solar plus storage, is eligible to be proposed on the Waena site. The second Project to be selected can be of any acceptable renewable technology and can be located on an alternative circuit and site on Maui.

Proposers are to quote a fixed "Lump Sum" price to cover the fixed costs of the proposed Project, plus an Energy Payment Price to cover the variable operations and maintenance costs of the proposed Project. Projects must comply with the stated Availability target under the relevant RDG PPA, among other performance metrics. In order for a proposal to advance to the evaluation process under the RFP, it must meet certain stated eligibility and threshold requirements. The eligibility requirements state that proposals must be in conformance with the RFP rules as established which are largely within the control of the proposer to address and comply with. The threshold requirements address specific concerns with respect to the quality and attributes of the proposal, including:

- Site Control
- Performance Standards
- Proven technology
- Proposer Experience
- Credit/Collateral Requirements
- Available Transmission Circuit Capacity
- Financial Viability of the Proposer
- Guaranteed COD

The above threshold requirements, as further defined in the RFP, must be met.

Bids received under the RFP are subject to a multi-stage RFP evaluation process which commences with the eligibility and threshold determinations, then proceeds through an Initial Price and Non-Price

evaluation, which is weighted and composed of 60% and 40% of the total evaluation score, respectively. As part of the Non-Price Evaluation, proposals which are found to be insufficient in five or more of the 11 non-price evaluation factors are removed from further consideration. The highest scoring Projects, grouped by technology "buckets", in addition to the highest scoring Projects proposed for the Waena site, are selected as part of the short list. Projects that proceed to the Short List are asked to submit a "Best and Final Offer" or BAFO, where Proposers will have an opportunity to revise their proposed pricing downward. A detailed evaluation process ensues, which includes a Load Flow Analysis to determine the impacts that the highest scoring Projects have on transmission reliability, either standalone or in conjunction with each other (highest scoring Waena proposal with the highest scoring proposal elsewhere). The remaining, highest scoring proposals, one (1) located on the Waena site, and one (1) located on an alternate circuit/location in Maui, would proceed to the Final Award Group. Projects in the Final Award Group proceed to contract negotiations with the goal of executing a PPA. However, this is not guaranteed under the RFP. Projects which fail to proceed at this late stage may be replaced, if time permits, under the RFP. Otherwise, the Company would seek to procure the remainder in a subsequent solicitation released in the future.

Stakeholder Comments

Stakeholders posted comments on both the Draft Firm RFP and the Draft Variable RFP. The Draft Variable RFP was written for the island of Oahu with the understanding that it would serve as a template for the variable RFPs for Maui and Hawaii. Many terms and conditions are common between the Draft Firm RFP and the Draft Variable RFP.

Several Stakeholders raise concerns over the potential for a Self-Build Option ("SBO") to be proposed by the Company in competition with proposals from developers. The common concern is that allowing an SBO would raise a number of issues including self-dealing, access to advantaged and privileged information and conflicts of interest.

One Stakeholder raises an issue with the lack of available pricing components, requesting additional components to cover "wear and tear" associated with ramping. Certain Stakeholders raised issue with the Company's unilateral ability to waive requirements, modify or cancel the solicitation. Others request the ability to propose off-shore wind and have these proposals evaluated on a separate track from the Solicitation given the significant differences in costs, benefits, and other attributes versus land based wind and solar.

Stakeholders also express concern with the ability of the Company to unilaterally modify, cancel or otherwise make determinations in the course of the RFP without oversight. One requests clarity in the division of costs between the lump sum payment and the energy only payment, and that a storage component with a discharge duration shorter than four hours be allowed. Another requests that the evaluation process be simplified, a set of common assumptions be used for the system modelling, and that the benefits of a diversity of fuel sources be captured as part of the evaluation.

Our Concerns

We have some of the same concerns as the Stakeholders. We also have our own additional concerns based on review of additional areas and our experience with solicitations of this type.

We agree with Stakeholders with respect to the potential for an SBO. We believe the necessary processes for an appropriate evaluation of disparate proposals – those subject to the RDG PPA, and an

SBO that would not be subject to the RDG PPA, are not yet in place and cannot be developed within the required timeframe for the Solicitation.

We are also concerned with the Company's ability to waive requirements, modify or cancel the solicitation under terms of the Draft Variable RFP.

With respect to allowing additional pricing components for capture of "wear and tear" costs, we believe this would unnecessarily complicate the evaluation process by requiring development and vetting of additional assumptions concerning the forecast number of and nature of dispatch requests by the Company. The renewable technologies most likely to be proposed, wind and solar, generally do not experience these type of costs. For technologies that do, such as biofueled resources, these costs can be covered through the quoted Energy Payment pricing component.

With respect to a separate solicitation for off-shore wind, that is a policy decision and is beyond the scope of our work as IO.

Our additional key concerns with the Draft Variable RFP and the changes we recommended to the Company are as follows:

- The proposal fee requirements are restrictive as to the number of proposal variations that could be submitted. We recommended modification of the proposal fee requirements to allow more variations to be submitted under a single fee without counting each as "separate" proposal that would trigger separate proposal fees.
- The description of the evaluation process implies a significant amount of "flexibility" for the Company to adjust selection methodology and criteria during the evaluation period. We recommended a more specific methodology be developed and described.
- Proposers are required to provide a detailed Project "proforma" of the cost, performance and financial assumptions that will underpin their proposed Projects. We believe requiring this type of commercially sensitive information in advance of potential negotiations is unreasonable. We recommended reducing this requirement to provision of only key cost estimates for the purposes of non-price evaluation.
- We are concerned that proposers may not have sufficient transmission information in order to avoid triggering extensive system upgrades. We recommended that more information be provided on the locations and circumstances under which such upgrades would be triggered.
- Regarding the Company's modelling assumptions, we requested that key assumptions and forecasts be provided in the RFP as appendices or otherwise, and these be "locked down" and not changed during the evaluation process.
- There is a restriction on the number of Projects that could be located on the same circuit, regardless of whether such Projects might be accommodated under the available hosting capacity. We recommended revisions to allow consideration of the most economic and viable Projects available that can be accommodated.

Company Response

Review of the Proposed Final Variable RFP reveals that the Company has addressed many of the Stakeholder comments and our concerns.

With respect to an SBO, the Proposed Final Variable RFP now states that the Company will not be submitting an SBO nor accepting proposals from its affiliates. We believe this change significantly improves the probability of meeting the aggressive RFP timeline and securing Projects that will benefit from the 2019 ITC. The change should also improve confidence among proposers that the Solicitation will be a level competition. The Company may submit an SBO or accept affiliate proposals under a future variable RFP or the future Maui Firm RFP. We will revisit the issue as applicable in those future solicitations.

Other key changes made in the Proposed Final Variable RFP are as follows:

- The proposal fee structure has been modified to allow up to three (3) variations under a single proposal and fee. Considering that a storage component may also be proposed as a variation, up to six (6) variations are now possible.
- The Evaluation process has been further defined, reducing the areas of ambiguity and flexibility. A “technology bucket” methodology will be used for evaluating and comparing proposals, where proposals will be separated by technology category and then up to three (3) proposals from within each category will be advanced to the shortlist for more detailed evaluation. Additional proposals may be advanced in consultation with us as IO.
- The requirement to submit a detailed Project financial proforma has been reduced to a requirement to provide only key cost estimates for non-price evaluation.
- With respect to transmission upgrades, the evaluation process has been changed to allow for each technology bucket up to two (2) Projects on the same circuit to be considered for the shortlist, plus one (1) additional project so long as the third project does not reside on the same circuit as the first two Projects.
- For the detailed Proposal evaluation, the Company has agreed to use the same assumptions as those used for the PSIP and to not change them for the evaluation (e.g., “locked down”). A link to the relevant section in the PSIP (Appendix J) summarizing the pertinent assumptions is now provided.

We are satisfied with these key changes. They are responsive to our concerns.

Assessment of the Draft Variable RDG PPA and Subsequent Changes by the Company

As mentioned earlier, we were directed in the Guidance to work with the Company to remove any overly restrictive or onerous language in the model RDG and RAP PPAs. We first focused on the concerns that the Stakeholders had raised in their posted comments. For the most commonly expressed concerns, we discussed them with the Company in order to remove or revise overly restrictive or onerous language. We also identified our own concerns and addressed them with the Company.

Stakeholder Comments

Stakeholders posted comments on both the Draft Power Purchase Agreement for Firm Capacity Renewable Dispatchable Generation (the “Draft Firm PPA”) and the Model Power Purchase Agreement for Renewable Firm Capacity and Dispatchable Energy (the “Draft RDG PPA”). The majority of these

concerned the Draft Firm PPA, but in many cases the same or similar terms appeared in the Draft RDG PPA and were relevant for the Draft RDG PPA as well.

The most common Stakeholder concern was with the rights of the Company under Project financing. Upon a default by the Seller under Project financing (for example, failure to pay debt service), the Company would have had the right (among others) to acquire the lender's interest in the Project. Many Stakeholders claimed that lenders would refuse to finance a Project under these terms.

The next most common concern was with the termination rights of the Company due to a delay in the Project. Under the Draft RDG PPA, the Company would have had the right to immediately terminate the PPA if a guaranteed commitment milestone was not met. Many Stakeholders claimed this right was too broad and conflicted with similar termination rights for missing a guaranteed Project milestone.

The next most common concern was with the rights of the Company under a consolidation event. Under the Draft RDG PPA, if the Company determines that the PPA will require it to consolidate the Project's financials into its own, they can unilaterally acquire the Project at a fair market price. Many Stakeholders claimed that this would not fairly compensate the Seller.

Less frequently expressed concerns include the termination rights of the Company due to a Seller's written request to change the PPA or the Project, and the potential for protracted delays under the Company's right of first negotiation upon Project sale.

Our Concerns

Our concerns with the Draft RDG PPAs are similar to those identified by the Stakeholders. We have the additional concern that the proposed measurements for and evaluation of Project readiness and efficiency are based on relatively new methods, and the associated performance requirements are not based on data of how actual existing plants in the industry have performed.

Under terms of the RDG PPAs, Project readiness (defined as "Availability" for PV and "Production-based Availability" or "PBAF" for wind) are measured and compared to targets (98.9% for Availability and 94.5% for PBAF) with shortfalls triggering liquidated damages and potential PPA termination.⁶ The PBAF measure for wind is based on accepted industry standards.⁶ However, the Availability measure for PV is not. It is a simple equipment (inverter) based measure that is not consistent with the evolving industry standards for PV availability that are energy based (similar to those for wind availability).⁷ In addition, the proposed Availability performance target of 98.9% does not appear to be based on actual industry data for PV plants since, to our knowledge, such data is currently not available in the public domain. This is also true for the PBAF target for wind of 94.9%.

Also under terms of the RDG PPAs, Project efficiency (defined as "Measured Performance Ratio" for PV and "BOP Efficiency Ratio" for wind) is measured and compared to targets (the "Guaranteed Performance Ratio" or "GPR" for PV and "BOP Benchmark" for wind) with shortfalls triggering liquidated damages and potential PPA termination. The BOP Benchmark for wind is determined based on the same aforementioned IEC standards. However, Guaranteed Performance Ratio for PV does not appear to be

⁶ IEC 61400 – Part 12-1: Power performance measurements of electricity producing wind turbines, Part 26-2: Production-based availability for wind turbines, and Part 26-3: Availability for wind power stations.

⁷ IEC 61724 Photovoltaic (PV) System Performance and IEC 62446 Photovoltaic (PV) systems - Requirements for testing, documentation and maintenance.

based on accepted industry standards since there is no reference to IEC standards as there is in the RDG PPA for wind. In addition, the proposed MPR/GPR ratio target of 95% does not appear to be based on actual industry data for PV plants since, to our knowledge, such data is currently not available in the public domain. This is also true for the BOP Efficiency Ratio/BOP Benchmark ratio target for wind of 97%.

We feel that using availability and efficiency measures that are not based on industry standards and/or performance targets that are not based on actual industry data is unreasonable. Proposers may not be able to achieve similar supporting availability and efficiency guarantees from their equipment suppliers and constructors. They also may not be able to achieve reasonable financing terms from lenders. Proposers that submit markups to these terms with their proposals may receive poor non-price scores in this area. Numerous proposers trying to negotiate these important terms could result in a prolonged PPA negotiation process. Proposers may have to oversize their proposed Project (e.g., redundant inverters or wind turbines) and/or their proposed contingency funds in order to mitigate the risk of liquidated damages due to shortfalls against targets that are not consistent with actual industry availability and efficiency data.

Ultimately, the terms of the Maui RDG PPA are negotiable. We recommend that the Company be amenable to negotiating with proposers concerning the terms of availability and efficiency measurement methods and performance targets. For example, allowing the Measured Performance Ratio to be based on an IEC standard similar to that for the Wind RDG PPA, and allowing the performance targets to be adjusted as necessary based on actual industry performance versus such targets.

Company Response

Review of the Proposed Final RDG PPAs reveals that the Company has made changes in response to Stakeholder concerns. With respect to rights of the Company under Project financing, language concerning immediate acquisition of the lenders interest has been removed in favor of terms allowing the lender time to cure the default prior to the Company exercising its rights. With respect to the termination rights of the Company due to a delay in the Project, language concerning commitment milestones has been removed in favor of Project milestones and a cure period of 60 days for the Seller to achieve the guaranteed Project milestone before Company termination of the PPA. With respect to the rights of the Company under a consolidation event, language concerning fair market value has been removed in favor of a new "make whole" provision that provides coverage of the Seller's book value of assets plus verifiable costs of termination plus interest.

It's important to note that not all Stakeholder concerns have been addressed in the Proposed Final RDG PPAs. The most common concerns currently not addressed include the termination rights of the Company due to a Seller written request to change the PPA or the Project, and the potential for protracted delays under the Company's right of first negotiation upon Project sale. There are numerous other individual concerns as well.

Assessment of the Evaluation Protocol and Subsequent Changes by the Company

Our Concerns

The Evaluation Protocol consists of two parts. The first part consists of the relevant paragraphs and appendices (Appendix L) of the Draft Variable RFP. These are available to proposers. The second part

consists of the internal Company scoring guidelines. These are not available to proposers. We reviewed both parts of the protocol in consideration of both Stakeholder comments and our concerns based on our experience with renewable resource procurement. Stakeholder comments and our concerns center on the transparency and clarity of the evaluation process, such that the result is reasonably predictable based on the proposals received and the selection of proposals is not perceived as arbitrary in nature. Our key concerns with the protocol and the changes we recommended to the Company are described below:

- There is insufficient information about the price and non-price evaluation process and criteria for proposers to tailor their proposals to be successful and therefore best meet the needs of the Company. We recommended that additional information about the process be provided. While some information, specifically the exact scoring criteria, should not be publicly disclosed, much of the other information with respect to the cost evaluation and the evaluation criteria should be provided to offer proposers clarity with respect to the process.
- The non-price evaluation criteria has an overly prescriptive requirement that the proposer have interconnection experience in Hawaii. We recommended that this language be softened so that more developers, some of which are not yet participating in the Hawaiian market, can participate.
- In the body of the Draft Variable RFP there is a financial compliance threshold criteria which is unreasonable. It states that a proposal that causes the Company to be subject to consolidation and/or capital lease treatment pursuant to FASB rules may be unilaterally rejected by the Company. We recommended that this not be a threshold criteria, but rather be part of the non-price evaluation. A proposer has little control over how the Company will be treated in this regard.
- In the body of the Draft RFP, the description of the short-listing process requires more narration as to the steps needed to bring both the cost and non-cost factors together in rendering a determination. In addition, the “fatal flaw” provision whereby a proposal will be rejected if it receives two or more “poor” ratings out of the 11 criteria is unreasonable. We recommended that a greater number of poor ratings should be required to cause outright rejection.
- In the internal Company scoring guidelines there are some inconsistencies and overlapping descriptions that leave the evaluator with wide discretion and may result in inconsistent scoring. We recommended changes to clarify the descriptions and reduce the potential for inconsistent scoring considering the range of possibilities that might present during the evaluation process. For example, a proposal may present a set of circumstances that does not squarely fall between two scoring criteria.

Company Response

Review of the relevant paragraphs of the Proposed Final Variable RFP and Appendix J, and the internal Company scoring guidelines, reveals that the Company has addressed many of our concerns as described below:

- Appendix L has been supplemented with much of the information contained within the internal Company scoring guidelines.
- The requirement for experience interconnecting with the Hawaiian Electric grid has been removed in favor of experience interconnecting a project of no less than half of the size of the Project being proposed.

- The financial compliance criteria has been changed from a threshold criteria to a non-price evaluation criteria, and the Company's unilateral right to reject a proposal has been eliminated.
- Further detail and narration has been provided with respect to the specific steps to be undertaken as part of both the price and non-price evaluations. Further elaboration was provided in the context of Appendix L and the internal protocol document.
- The "fatal flaw" provision has been modified such that now five (instead of two) of the 11 criteria must be poor for a proposal to be rejected.
- The Company has modified the internal scoring guidelines to further define the standards noted in response to our comments.

We are satisfied with these key changes. They are responsive to our concerns. We will continue to work with the Company on the internal scoring guidelines which will be finalized prior to proposal receipt.

FINDINGS

Findings Concerning the Proposed Final Variable RFP

We find that the changes made by the Company reflected in the Proposed Final Variable RFP are responsive to our key concerns, and increase the clarity, transparency and objectives underlying the Solicitation. The changes made address the key Stakeholder concerns, particularly with respect to the participation of an SBO which was the subject of many comments. Further changes made by the Company reduce the more onerous requirements that were noted in the Draft Variable RFP and, accordingly, should help increase the confidence and participation rate of the developer community.

Findings Concerning the Proposed Final Maui RDG PPA

We find that the changes made by the Company reflected in the Proposed Final RDG PPA for Maui in response to the most common Stakeholder concerns (rights of the Company under Project financing, termination rights of the Company due to a delay in the Project, rights of the Company under a consolidation event) adequately resolve those concerns. Although numerous lesser concerns have not yet been addressed, we expect that the Company will continue to evaluate these concerns. Ultimately, the terms of the Maui RDG PPA are negotiable. This allows a Stakeholder who becomes a Proposer to address these concerns directly with the Company through submittal of Maui RDG PPA markups as part of the solicitation process as well as during the PPA negotiation process.

However, we are concerned that the Proposed Final Maui RDG PPA is using availability and efficiency measures that are not based on industry standards and/or performance targets that are not based on actual industry data. It may cause proposers to oversize their proposed Project (e.g., redundant inverters or wind turbines) and/or add additional contingency funds in order to mitigate the risk of liquidated damages due to shortfalls against targets that are not consistent with actual industry availability and efficiency data. Ultimately, the terms of the Maui RDG PPA are negotiable. We recommend that the Company be amenable to negotiating with proposers concerning the terms of availability and efficiency measurement methods and performance targets. For example, allowing the Measured Performance Ratio to be based on an IEC standard similar to that for the Wind RDG PPA, and allowing the performance targets to be adjusted as necessary based on actual industry performance versus such targets.

Findings Concerning the Revised Evaluation Protocol

We find that the changes made by the Company reflected in the revised Evaluation Protocol are responsive to our key concerns. They provide the appropriate expanded level of information required for a proposer to adequately apprise itself of the key success factors that it must address in its response to the RFPs. In particular, proposers are now provided with expanded information regarding the specific steps to be undertaken as part of both the price and non-price evaluations.

**PRE-BID REPORT
OF THE INDEPENDENT OBSERVER FOR THE

HAWAIIAN ELECTRIC COMPANIES'

REQUEST FOR PROPOSALS
FOR DISPATCHABLE AND RENEWABLE
GENERATION ON O'AHU AND HAWAI'I ISLAND**

**Presented to:
HAWAI'I PUBLIC UTILITIES COMMISSION**

**Prepared by
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February 12, 2018

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I. EXECUTIVE SUMMARY

A. Background

On January 12, 2018, the Commission issued an Order addressing the Hawaiian Electric Companies (“Companies”)¹ four draft Request for Proposals (“RFPs”) and stakeholder comments filed to date.² In the January 12 Order, the Commission appointed Bates White, LLC (“Bates White”) as the Independent Observer (“IO”) for the Oahu and Hawaii Island Variable RFPs.³ In addition, the Commission required the Companies “to work with the respective IOs to in drafting their Final RFPs”⁴ consistent with the guidance provided in the January 12 Order. The purpose of this report is to provide our view of the revisions made to the draft RFP documents, to explain and assess the process of working with the Companies and the other IO, and to provide the Commission with our recommendations on how best to proceed.

B. Our Work Scope

The Commission provided several specific areas of guidance for the Companies to follow in revising its RFPs and related documents. The areas of guidance included (a) self-build and/or affiliate bids, (b) specific requirements contained in the RFPs, (c) the evaluation methodology, (d) the RFP timeline, and (e) the PPAs related to these RFPs.⁵ The Commission directed the Companies, at various places in its January 12 Order, to “work closely with the IOs” in considering and making revisions to the RFP,⁶ the evaluation methodology,⁷ and the PPAs.⁸

We began our work with the Companies (and Navigant, the other IO) on January 13, 2018 with a “kick-off” call to discuss scope and logistics. We began by defining the scope of the work with the Companies and Navigant to make sure all parties were in agreement. For this, we relied primarily on the January 12 Order for guidance. We also reviewed stakeholder comments, which helped to define our scope. We memorialized the scope in an issues matrix, which served as a roadmap for our work over the coming weeks. From January 13 through February 2, we held at least ten conference calls with the Companies. During those calls, we discussed with the Companies the PPAs, the RFPs, the evaluation protocols, and all other aspects of the RFPs raised

¹ The Hawaiian Electric Companies include Hawaiian Electric Company, Inc. (“HECO”), Hawaii Electric Light Company, Inc. (“HELCO”), and Maui Electric Company, Ltd. (“MECO”).

² Public Utilities Commission of Hawaii, “Order No. 35224 Providing Guidance on the Hawaiian Electric Companies’ Proposed Requests for Proposals for Dispatchable and Renewable Generation,” Docket No. 2017-0352, January 12, 2018 (“January 12 Order”).

³ January 12 Order, page 30.

⁴ The Commission also appointed Navigant Consulting, Inc. (“Navigant”) as the IO for the Maui Variable and Maui Firm RFPs. January 12 Order, page 30.

⁵ January 12 Order, pages 31 to 36.

⁶ January 12 Order, pages 32 to 33.

⁷ January 12 Order, pages 34 to 36.

⁸ January 12 Order, page 37.

in the January 12 Order. HECO made available its subject matter experts relevant to the topics for discussion.

As we progressed, we kept track of areas in the RFP documents where the Companies' agreed to make changes that were meant to comply with the January 12 Order. In many cases, we made suggestions or sought explanations for various aspects of the original draft RFP documents, which required the Companies to discuss internally and provide additional information or set up further discussions later on. Regarding areas where the Companies did not agree with our recommendations, we made sure to discuss the issue at length and ensure we had received all relevant information from the Companies. We identify any such issues below.

After an all-day meeting with the Companies on January 30, the Companies worked on revisions to its draft RFP documents. The Company gave us a chance to review those documents before they filed all revised documents on February 2.

C. Findings⁹

From a process standpoint, we found the collaborative work with the Companies and Navigant to be very productive and efficient. In about two weeks' time, we were able to help effectuate substantial revisions to the RFP, evaluation, and PPA documents that will help clarify the process for bidders and encourage positive results for the Companies' ratepayers. We found the Companies to be responsive to all of our questions, requests for clarifications, and invitations for discussion on a variety of provisions within the documents. Moreover, the Companies were willing to make changes to those documents consistent with the dictates of the Commission's January 12 Order, stakeholders' concerns, and the IOs' suggestions.

Our major findings include:

1. **Our overall finding to the Commission is that the revised documents, as filed and as a whole package, are reasonable.** There are no fatal flaws, in our view, that should prevent the Commission from going forward with the Stage 1 RFPs.
2. Many of our findings rest on the premise that the Stage 1 RFPs are driven largely by the desire to capture the full value of tax credits, which makes time of the essence and justifies certain restrictions imposed in Stage 1, such as the prohibition of self-build/affiliate bids and limitations on the total number of projects that can be selected.
3. Because time is of the essence, and because the Stage 2 RFPs will procure all remaining Companies' needs, it is important that the Companies act in good faith to effectively complete the Stage 1 RFP process both successfully and

⁹ We note here that our work is limited as IO to the O'ahu and Hawaii Island RFPs only. Our collaboration with the Companies, which was limited to about two weeks of work, was not meant to address every item raised by every stakeholder, nor will we address every stakeholder item here. Our scope of work was made clear in the January 12 Order, as we note throughout this report. Moreover, our overall recommendation that the revised RFP documents is, as a total package, reasonable, is based on the reality that our collaboration with the Companies necessarily resulted in areas of compromise which ensured that no stakeholder, Commission, or IO will be fully satisfied with every provision, clause, term, or condition of the RFPs and the PPAs.

in a timely fashion. As an IO, we will monitor the Oahu and Hawaii Island RFPs with this in mind, noting the Commission's January 12 Order warning against self-serving actions by the Companies to delay, discourage, or impede competition.

4. We recommend that Stage 2 RFPs allow for self-build and/or affiliate bids. However, before Stage 2, the Companies should address (a) their Code of Conduct and (b) the use of imputed debt in the evaluation process, as explained in the body of our report.

We provide some additional, more detailed findings below.

1. Self-Build/Affiliate Bid

- The Companies have revised the RFP to not allow either a self-build or an affiliate bid. While we rarely advocate for measures that could reduce the number of bids and the amount of competition, we do so here for Stage 1. Our reasons include: (a) the Companies are in the process of revising their Code of Conduct, which is imperfect; (b) the Stage 1 RFP is meant to procure projects that capture the full available tax credits, which requires an efficient process on an aggressive timeframe—inclusion of a self-build or affiliate bid could slow down that process; and (c) the Commission has a clear preference against a self-build bid in Stage 1.
- We recommend that, going forward, the Code of Conduct revisions be addressed and finalized before the Stage 2 process begins, so that all parties understand the revised Code of Conduct and derive confidence in its ability to encourage a fair outcome free of undue preference for Company projects.
- Because Stage 2 of the RFP will procure the remainder of the Companies' needs, and the Companies expect to allow self-build and/or affiliate bids to participate, it becomes important to ensure that the Companies act in good faith to effectively complete the Stage 1 RFP process both successfully and in a timely fashion. As an IO, we will monitor the Oahu and Hawaii Island RFPs with this in mind, noting the Commission's January 12 Order warning against self-serving actions by the Companies to delay, discourage, or impede competition.

2. RFP

The revised RFPs contain numerous improvements; more significant revisions include:

- Elimination of the concept of “non-negotiable” terms of the PPA(s).
- Clarification regarding projects that required “extensive system upgrades” to be those that would jeopardize the Guaranteed Commercial Operations Date, which is a threshold requirement of the RFP, and thus threaten the ability of the project to capture the full

available tax credit.

- The revised RFPs provide additional clarity, explanation, and justification regarding available circuit-level capacity.
- The RFPs now better explain how energy storage is to be included, bid, and evaluated.
- The Companies reduced redundancy and increased clarity of its RFPs in section 3.7, which provides guidance on how a project proposal would be disqualified. Vague language has been removed.

3. Evaluation Protocols

The revised evaluation protocols also are much improved, as highlighted by:

- Increased transparency and clarification concerning the Eligibility and Threshold Requirements.
- Increased transparency and clarification of the Price and Non-Price scoring methodology.
- Provision of substantial modeling assumptions and data for bidders to provide optimized, innovative proposals.
- Fewer limitations on the number of projects that can be added to the Short List.
- A much clearer Detailed Evaluation.

While not a concern in the Stage 1 RFP, we do recommend that the Commission consider the issue of imputed debt as an evaluation factor before the Stage 2 RFPs.

4. PPA

The Companies have made several changes to the PPAs that reduce overly restrictive and/or onerous language. Some notable examples include:

- The Companies have removed a provision that would allow the Companies to immediately terminate the PPA if the seller failed to meet a project milestone date and replaced it with a cure period and includes liquidated damages clauses.
- Retention of the Availability Factor and the Measurement Performance Ratio which can help keep ratepayers from paying a fixed price for an underperforming asset.
- Clarification that a lender may, in some circumstances, take possession of the seller's project after a default event declared by the lender.
- Removal of potentially restrictive language that would have prevented the seller from assigning its interest in the project to a wholly-owned subsidiary or to an affiliate.

-
- Clarifications related to financial consolidation and capital lease treatment of the PPAs.

II. RELEVANT BACKGROUND AND IO'S SCOPE OF WORK

On October 23, 2017, the Companies filed draft documents related to four RFPs. Three RFPs would be for variable dispatchable renewable energy – one on O’ahu, another on Hawaii Island, and a third on Maui (collectively, the “Variable RFPs” or “the RFPs”) – as well as an RFP for firm dispatchable renewable energy on Maui.¹⁰ In November, several stakeholders¹¹ submitted comments on the draft RFPs and related documents, while on December 20, the Companies filed a response to those comments.

On January 12, 2018, the Commission issued an Order addressing the Companies’ draft RFPs and stakeholder comments filed to date. In the January 12 Order, the Commission appointed Bates White as the IO for the Oahu and Hawaii Island Variable RFPs.¹² In addition, the Commission required the Companies “to work with the respective IOs to in drafting their Final RFPs” consistent with the guidance provided in the January 12 Order.

A. Commission’s Substantive Guidance from its January 12 Order

The Commission provided several specific areas of guidance for the Companies to follow in revising its RFPs and related documents. The areas of guidance included (a) self-build and/or affiliate bids, (b) specific requirements contained in the RFPs, (c) the evaluation methodology, (d) the RFP timeline, and (e) the PPAs related to these RFPs.¹³ More specifically:

- **Self-Build/Affiliate Bids:** The Commission stated that it had a “strong preference against self-build or affiliate bids for the first phase of the Variable RFPs, to allow the procurement process to move forward without any direct or perceived conflicts of interest.”¹⁴ The Commission noted that “the Companies should focus their attention and limited resources on successfully executing the procurement process while meeting the aggressive timeline envisioned in the RFPs.”¹⁵
- **Specific RFP Requirements:** The Commission noted that “it agrees with some stakeholders that the proposed RFPs may contain overly-restrictive, potentially onerous,

¹⁰ Hawaiian Electric Companies’ Draft Requests for Proposals, Books 1 and 2, Docket No. 2017-0352, October 23, 2017 (“Companies October 23 Filing”).

¹¹ See comments from: Coeus Energy LLC (“Coeus”); Apollo Energy Corporation (“Apollo”); Initial Comments Progression Hawaii Offshore Wind, Inc. (“Progression Offshore”); AES Distributed Energy Inc. (“AES”); Renewable Energy Action Coalition of Hawaii, Inc. (“REACH”); Innovative Power Projects LLC (“Innovative Power”); Energy Freedom Coalition of America, LLC (“EFCA”); Longroad Development Company, LLC (“Longroad”); Ulupono Initiative LLC, Blue Planet Foundation, Earthjustice and Life of the Land (“Joint Commenters”); Energy Alliance; Hawaii Consumer Advocate (“Consumer Advocate”); Blue Planet Foundation (“Blue Planet”); all filed on November 13, 2017. On November 15, 2017, Marisco, Ltd. (“Marisco”) filed comments.

¹² January 12 Order, page 30.

¹³ January 12 Order, pages 31 to 36.

¹⁴ January 12 Order, page 31.

¹⁵ January 12 Order, page 31.

and/or unclear language.”¹⁶ The Commission noted several such sections of the draft RFPs.¹⁷ The Commission also directed the Companies to “provide additional clarity on how they intend to consider certain terms and concepts throughout the Draft Variable RFPs,” noting that sections 1.2.5 (Guaranteed Commercial Operations Date) is qualified by section 4.3 (Threshold Requirements).¹⁸ The Commission also directed the Companies “to provide more clarity on how proposals will be judged with respect to [the Threshold Requirement regarding the need for extensive system upgrades].”¹⁹

- **Evaluation Methodology:** The commission directed the Companies “to provide additional details in the Final RFPs related to the proposed Evaluation Methodology, to improve clarity and transparency to enable bidders to optimize their project design.”²⁰ The Commission directed the Companies “to amend language within the Draft RFPs that limit the potential for innovative project proposals to be submitted” and “to make modeling assumptions (load forecasts, system marginal energy costs, historical energy price curves, etc.) available to participating bidders.”²¹ The Commission required the Companies to explain “cost assumptions for the proxy storage unit” and “how the Companies intend to dispatch and charge the storage units.”²² The Commission noted its concern regarding “potentially restrictive parameters within the Selection Criteria, including eligibility requirements, such as interconnection experience in Hawaii, and Threshold Requirements, including but not limited to, capital lease treatment as a Threshold Requirement.”²³ Additionally, the commission stated that it “agrees with many stakeholders that several areas within the selection criteria require additional clarity and transparency,” noting that the Companies should provide additional detail regarding the Price and Non-Price Evaluation, including the weights of the Price and Non-Price criteria, and further describe how each project will be scored.”²⁴ Lastly, the Commission directed the Companies to consider “whether it is reasonable to limit both the number of overall projects selected for each island and the number of projects per circuit.”²⁵
- **RFP Timeline:** The Commission stated that it “believes the overall RFP timeline should be accelerated to enable finalized PPAs to be submitted to the commission for approval by the end of 2018.” Doing so, according to the Commission, would “allow the

¹⁶ January 12 Order, page 32.

¹⁷ The Commission identified the following sections: section 1.8.2, section 1.12.1, section 1.2.13, section 2.1, section 3.7, section 3.11, section 4.3, and section 4.5.2. January 12 Order, page 33.

¹⁸ January 12 Order, page 34.

¹⁹ January 12 Order, page 34.

²⁰ January 12 Order, page 34.

²¹ January 12 Order, page 35.

²² January 12 Order, page 35.

²³ January 12 Order, page 35.

²⁴ January 12 Order, page 35.

²⁵ January 12 Order, page 35.

commission to review and approve PPAs in early 2019, providing the maximum amount of time for developers to safe harbor materials and receive available tax credits.” The Commission also stated that “compressing the time for developers to prepare their bids is appropriate.”²⁶

- **PPAs:** The Commission began its guidance on the draft PPAs by noting that it “declines to pre-approve any form or version of a PPA prior to a filed PPA application, to avoid any potential restrictions on developer participation, and directs the Companies to allow bidders to propose modifications to either form of PPA as part of their bids.”²⁷ The Commission further directed the Companies “to remove any overly restrictive and onerous language in the model RDG and RAP PPAs, including non-negotiable provisions and sections that are outdated or would unnecessarily belabor the PPA negotiation process.”²⁸

B. IOs’ Scope of Work from January 12 Order

In addition to the specific directives laid out above, the Commission’s January 12 Order also required the Companies to work with the IOs in addressing all of the substantive issues it identified.²⁹ The Commission directed the Companies, at various places in its January 12 Order, to “work closely with the IOs” in considering and making revisions to the RFP,³⁰ the evaluation methodology,³¹ and the PPAs.³²

C. Summary of Bates White’s Process and Work with the Companies

We began our work with the Companies on January 13, 2018 with a “kick-off” call to discuss scope and logistics. Given the great deal of similarity between the three variable RFPs, the limited time available, and the broad scope of work we faced, we decided that our work with the Companies was best done in conjunction with Navigant. That meant that we would share our meetings with the Companies with Navigant. Despite this collaboration, we retained our independence in providing our views and analysis to the Companies during this process.

We began by defining the scope of the work with the Companies and Navigant to make sure all parties were in agreement. For this, we relied primarily on the January 12 Order for guidance. We also reviewed stakeholder comments, which helped to define our scope. We

²⁶ January 12 Order, page 36.

²⁷ January 12 Order, page 36.

²⁸ January 12 Order, page 37.

²⁹ January 12 Order, page 30.

³⁰ January 12 Order, pages 32 to 33.

³¹ January 12 Order, pages 34 to 36.

³² January 12 Order, page 37.

memorialized the scope in an issues matrix, which served as a roadmap for our work over the coming weeks. From January 13 through February 2, we held at least ten conference calls with the Companies. During those calls, we discussed with the Companies the PPAs, the RFPs, the evaluation protocols, and all other aspects of the RFPs raised in the January 12 Order. HECO made available its subject matter experts relevant to the topics for discussion; for example, they provided personnel from their Interconnection Services Division to discuss issues related to available circuit-level capacity.

As we progressed, we kept track of areas in the RFP documents where the Companies' agreed to make changes that were meant to comply with the January 12 Order. In many cases, we made suggestions or sought explanations for various aspects of the original draft RFP documents, which required the Companies to discuss internally and provide additional information or set up further discussions later on. Regarding areas where the Companies did not agree with our recommendations, we made sure to discuss the issue at length and ensure we had received all relevant information from the Companies. We identify any such issues below.

After an all-day meeting with the Companies on January 30, the Companies worked on revisions to its draft RFP documents. The Company gave us a chance to review those documents before they filed all revised documents on February 2.

III. ASSESSMENT OF THE DRAFT FINAL RFP, EVALUATION PROTOCOLS, AND PPAs

A. Assessment of the RFP and Resulting Changes

We begin with the RFPs. Here, again, we provide our comments regarding the O’ahu and Hawaii Island Variable RFPs only.

1. Self-Build/Affiliate Bid Options and Code of Conduct

The Commission³³ and several stakeholders identified concerns with the potential for the Companies to submit self-build and/or affiliate bids in the RFPs. Notably, the Commission referenced the Companies’ “limited resources” and “the aggressive timeline envisioned in the RFPs” as a reason for discouraging self-build and affiliate bids.³⁴ Also notably, some stakeholders suggested shortcomings in the Companies’ Code of Conduct as at least one reason for raising their concern with the possibility of a self-build or affiliate bid.³⁵

During our consultation with the Companies, they agreed to not allow either self-build or affiliate bids in Stage 1 of the RFPs.³⁶ The Companies also shared with us some proposed revisions to its Code of Conduct and invited our comment. We provided an initial set of comments on the Code of Conduct. Many of our comments the Company agreed to incorporate, and in general, the Companies’ revisions – as we reviewed them – were improvements. Other suggestions we made were not accepted.

In our experience in serving state public utilities commissions monitoring and evaluating competitive RFPs, it is important to encourage as much participation and competition as possible. This includes utility self-build and/or affiliate bids. In this case, however, we viewed the RFPs as a rare instance where disallowing self-build and/or affiliate bids would be preferable. This was driven by a few factors. First, the Commission’s January 12 Order made the Commission’s preference clear. Second, the Company was in the process of considering changes to its Code of Conduct, and several stakeholders identified concerns with the Code of Conduct—some of which we share. We are concerned, for example, about the latitude the Code of Conduct provides in sharing resources among the various Company “teams.” We understand the Companies claim that this latitude is necessary, given the size of the Companies’ personnel resources. While we make no judgment of the Companies’ claim here, we would note that if this is indeed the case, then we agree with the Commission that the Companies should focus their limited resources in Stage 1 on successfully and timely completion of the RFPs so that winning projects can take advantage of all applicable tax incentives. Third, we shared the Commission’s view that the schedule for the Variable RFPs is “aggressive” – particularly since all three will be

³³ January 12 Order, page 31.

³⁴ January 12 Order, page 31.

³⁵ See, for example, Coeus Chapter 1.5; Joint Commenters, pages 6 to 7; Energy Alliance, page 17; Consumer Advocated, pages 14 to 17.

³⁶ This is reflected in section 1.9 of the revised O’ahu RFP.

run concurrently – and thus the additional work and potential uncertainty caused by the presence of a utility self-build bid, in particular, could threaten the process’ likelihood of timely success— even more so if we grant the Companies’ position regarding its limited personnel resources. Thus, we agreed with the Companies’ decision to not allow self-build or affiliate bids in Stage 1 and found it to be in the best interest of ratepayers while also complying with the clear guidance of the January 12 Order.

It is our understanding that in Stage 2, the prohibition of self-build and/or affiliate bids will be lifted. We agree with this approach, with two caveats to note. First, it is important that the Code of Conduct revisions be addressed and finalized before the Stage 2 process begins, so that all parties understand the revised Code of Conduct and derive confidence in its ability to encourage a fair outcome free of undue preference for Company projects.³⁷ Second, the nature of the Variable RFPs – in which the Stage 2 RFPs will procure the Companies’ needs, less that which was procured in Stage 1 – mean that the less the Companies procure in Stage 1, the more it will seek to procure in Stage 2—when its self-build and/or affiliate bid(s) may participate. This could create a perverse incentive for the Companies to minimize the quantities procured in Stage 1. To address this concern, the Commission is contemplating the introduction of an incentive mechanism for the Companies’ timely and successful completion of the RFPs.³⁸

2. Removing “overly-restrictive, onerous, unclear” RFP provisions

The Commission noted that “it agrees with some stakeholders that the proposed RFPs may contain overly-restrictive, potentially onerous, and/or unclear language.”³⁹ The Commission noted several such sections of the draft RFPs.⁴⁰ Stakeholders raised similar concerns about the RFP.⁴¹

Setting aside the evaluation methodology contained in the RFP – which we cover in our next section – we agreed with the Commission and stakeholders that there was room for improvement in the RFP to make it more transparent and clear for bidders and to do so in a way that encouraged a timely, successful result.

The Companies have made several changes to the RFPs that represent a significant improvement.

- One of the biggest changes made by the Companies was to eliminate the concept of “non-negotiable” terms of the PPA(s). This will allow bidders more flexibility in negotiating a reasonable PPA and will prevent the potential for an accumulation of onerous, non-

³⁷ While we provided some initial comments to the Company during our consultations, it is not our intent to provide those initial comments in this document.

³⁸ January 12 Order, page 37.

³⁹ January 12 Order, page 32.

⁴⁰ The Commission identified the following sections: section 1.8.2, section 1.12.1, section 1.2.13, section 2.1, section 3.7, section 3.11, section 4.3, and section 4.5.2. January 12 Order, page 33.

⁴¹ See, for example, Energy Alliance, page 16; Joint Commenters, page 15; Apollo pages 2, 5; Coeus chapters 2, 3.

negotiable PPA provisions from having a negative impact on participation in the RFPs.

- Because some provisions of the PPA, which were originally considered non-negotiable, are no longer so in the revised RFP documents, the Companies have made other important revisions to the RFPs to explain that, while no provision is non-negotiable, some are important for properly allocating risk and delivering a product to the Companies that it needs. One example of this is the Companies' explanation of why a 20-year PPA term is preferred.⁴² Another example is why the Companies have put for the RDG PPA as its preferred PPA, as opposed to a RAP or take-or-pay PPA.⁴³
- The Companies removed several provisions, sentences, or requirements that were redundant, inconsistent, and/or unclear. For example, the original draft RFPs contained a sentence in Chapter 1 that stated: "To the extent practicable, the evaluation will consider differences in availability, load correlation, and technical/operational characteristics and capabilities of the proposed projects." This sentence, which *describes* one part of the evaluation process, lacks specificity; in deleting it and housing and clarifying its evaluation process in Appendix L, the Companies have reduced the potential for confusion among bidders about how their projects will be evaluated.
- The Companies have better explained and justified certain provisions of the RFPs. For example, in section 1.2.3, the Companies have explained their rationale for seeking a maximum of two projects for O'ahu in Stage 1. (Specifically, the Companies seek to limit the number of winning projects in Stage 1 to make sure such winning projects may be moved through the Interconnection Requirements Study ("IRS") process and PPA negotiations stage in time to capture the full value of available tax credits.) While we address the substance of this issue below in section B, we find it to be an improvement to explain to bidders (and the Commission) why this is the case.
- Another important improvement to the RFPs was the Companies' explanation and clarification regarding projects that required "extensive system upgrades." Like the Commission, we had concerns regarding the Companies' discretion in determining whether network upgrades would be "extensive," and thus disqualify a project. The Companies' revisions to Section 1.2.5 clarify that such upgrades are those that would jeopardize the Guaranteed Commercial Operations Date, which is a threshold requirement of the RFP, and thus threaten the ability of the project to capture the full available tax credits. We find this, at minimum, to be a helpful clarification, and we also agree with the Companies that some projects could require upgrades that could jeopardize

⁴² See revised O'ahu RFP, footnote 2.

⁴³ See revised O'ahu RFP, footnote 14. We found it compelling that the Companies could offer a third-party study of the issue – the December 2016 whitepaper by SEPA and ScottMadden – which provided support to the Companies' concern regarding curtailment risk in Hawaii and the increasingly limited benefits of must-take or as-available PPA structures.

the timeline of a full tax credit-eligible project.⁴⁴ In addition, while the judgment of this provision remains with the Companies, it now includes consultation with the IO.

- The Companies have better clarified the interaction between Stage 1 and Stage 2 of the RFPs, making clear that Stage 2 is meant to procure the remaining need for a given island following the Stage 1 RFP.⁴⁵
- The revised RFPs provide additional clarity, explanation, and justification regarding available circuit-level capacity.⁴⁶ In our conversations with the Companies, they clearly explained how they determined available capacity on their circuits and why it was so important in Stage 1 of the RFPs. We suggested the Companies include that explanation, which they have done. Also, as we note elsewhere, the Companies will provide all interested bidders with circuit-level capacity data for all potential projects, whether sited at a location identified in the Land RFI or not.⁴⁷
- The RFPs now better explain how energy storage is to be included, bid, and evaluated.⁴⁸
- The RFPs provide bidders with more clarity regarding the proposal fees associated with bidding in the RFPs,⁴⁹ the calculation and use of interconnection costs,⁵⁰ as well as more explicit instructions regarding required performance standards.⁵¹
- The Companies reduced redundancy and increased clarity of its RFPs in section 3.7, which provides guidance on how a project proposal would be disqualified. Vague language has been removed, and section 3.7 now contains all possible ways a bidder can be disqualified, thereby reducing potential confusion.
- In our view, section 3.11 of the revised RFPs (“Project Description”) has been improved by requiring only high-level cost information from bidders—see section 3.11.1 of the revised O’ahu RFP, for example. Moreover, while bidders are notified that “further detailed cost information” may be requested by the Commission or Consumer Advocate during the PPA approval process, it was important to us that this information be provided

⁴⁴ We would expect, in future RFPs, that this requirement be relaxed or removed as the importance of moving quickly is reduced. The Companies should not, as a general rule, reject proposals that require transmission upgrades, so long as the cost of those upgrades are incorporated into the evaluation methodology and the proper parties pay for those upgrades.

⁴⁵ See, for example, Chapter 1 of the revised O’ahu RFP.

⁴⁶ See, for example, section 2.2.1 of the revised O’ahu RFP.

⁴⁷ See also section 3.10 of the revised O’ahu RFP.

⁴⁸ See, for example, section 1.2.12 of the revised O’ahu RFP.

⁴⁹ See section 1.8.2 of the revised O’ahu RFP.

⁵⁰ See section 3.9.2 of the revised O’ahu RFP.

⁵¹ See section 2.1 of the revised O’ahu RFP.

only if requested by the Commission (or Consumer Advocate), not provided to the Companies as a proposal requirement, one that we would have viewed as onerous to bidders.

B. Assessment of the Evaluation Protocols and Resulting Changes

We turn next to changes to the Evaluation Protocols, which are housed in the RFP and Appendix L. The commission directed the Companies “to provide additional details in the Final RFPs related to the proposed Evaluation Methodology, to improve clarity and transparency to enable bidders to optimize their project design.”⁵² Several stakeholders identified concerns with or suggested revisions to the evaluation process.⁵³ Below, we address several issues related to the evaluation methodology. In general, the evaluation methodology – and the information provided to bidders – is greatly improved.

1. Increased Transparency, Clarifications to Eligibility, Threshold Requirements

The Companies have made several improvements to the Eligibility and Threshold Requirements provisions in sections 4.2 and 4.3 of the RFPs. First, the Companies have removed the overly restrictive requirement that bidders have interconnection experience in Hawaii. And while experience in Hawaii may have value, that value is more appropriately captured in the Non-Price Scoring portion of the evaluation. Second, the Companies have made any interaction between the Threshold Requirements with the Non-Price Scoring categories to be consistent. One concern we had was the overlap and interaction between the Threshold Requirements with the Non-Price Scoring categories. It was our view that the Threshold Requirement should capture the true minimum that is acceptable to the Companies, while the Non-Price score captures value above that minimum. We believe the Companies have achieved this for the applicable categories, such as site control. Third, the Companies have eliminated the “Financial Compliance” Threshold Requirement, which is better suited to be part of the Non-Price evaluation.

The Companies have also clarified the role of the IO in assessing the Eligibility and Threshold Requirements of each bid. This should give bidders additional comfort that the IO will have oversight of this portion of the evaluation process. Another important improvement is the introduction and explicit explanation of a cure period process for bidders during the assessment of Eligibility Requirements.⁵⁴ This will prevent rejection of a proposal for trivial mistakes or omissions that can be cured quickly.

⁵² January 12 Order, page 34.

⁵³ See, for example, Energy Alliance, pages 7 to 18; Coeus, Chapter 4 and Appendix L; Apollo, pages 2 to 3; AES, pages 2 to 3; REACH, pages 12 to 15; Longroad, pages 1 to 2; Joint Commenters, pages 7 to 8, 19 to 20; Consumer Advocate, pages 7 to 13.

⁵⁴ See, for example, section 4.2 of the revised O’ahu RFP.

2. Increased Transparency, Clarifications to Price/Non-Price Scoring

The Companies have also made a number of improvements to the transparency and clarity of the Price and Non-Price Scoring methodologies. In particular, revised Appendix L represents a considerable improvement from the original filing, as it now contains the entirety of the evaluation process – from receipt of proposals through selection of the Final Award Group – and has deleted vague, unclear language found in the original.⁵⁵

The Price Score evaluation is explained in much more detail and with greater clarity, and follows a logic that is reasonable and explained by the Companies. For example, the Companies will calculate a leveled price for all proposals in the Price Score evaluation for the initial short list, and will separate projects into technological categories, a decision we found to be reasonable given the Companies' logic explained in Appendix L.⁵⁶ The Companies have also provided an explanation of how the Price Scores will be developed—that is, the top scoring (lowest cost) project will score 600 points, with other projects getting proportional points based on their proposal's percentage difference with the lowest cost scoring proposal.

The Non-Price Scoring and criteria have also been improved. The Companies have specified how each of the eleven criteria will be scored⁵⁷ and how those scores will be compiled into an overall Non-Price Score.⁵⁸ The Companies have also clarified how the Price and Non-Price Scores will be combined to rank the projects in developing the initial short list.⁵⁹

We will make two additional observations about the changes made to the Non-Price Scoring. First, as we note above, we agree with the Companies' efforts to sync Threshold Requirements with the Non-Price Scoring categories. Importantly, where there is overlap, the Threshold Requirements specify the acceptable minimum, while the Non-Pricing Score assigns additional value for bids that beat that minimum.

Second, we note that the issue of introducing "fatal flaw" analysis⁶⁰ is, in our view, reasonable as written. In discussing this feature with the Companies, our concern was twofold: first, that a fatal flaw analysis of the Non-Price scores would introduce a third "minimum threshold" review of a proposal, with the first two being the Eligibility Requirements and the Threshold Requirements, without sufficient justification; second, that bidders would not know how to score the minimum acceptable score for a given Non-Price category. The Companies' proposed fatal flaw analysis proposal addresses our concerns. First, the Companies' have explained the "minimum" a bidder must provide in order to meet the minimum score of "3" for each Non-Price category. For example, Appendix L noted that "[a]t a minimum, proposers

⁵⁵ See, for example, original pages L-3 to L-4. The RFP has also been revised to improve clarity—section 4.4, for example, has been revised to remove language (bolded in the following quote) that stated that "Appendix L...provides the components of the price and non-price evaluation criteria that will be included in the initial evaluation, but is not necessarily an exhaustive list of all criteria that may be considered."

⁵⁶ Appendix L, page L-5, footnote 2.

⁵⁷ Appendix L, page L-10.

⁵⁸ Ibid.

⁵⁹ Appendix L, page L-5.

⁶⁰ Appendix L, page L-11.

should have identified all major permits and approvals required and have a preliminary plan for securing the permits” in order to get a minimum acceptable score of “3” for the “Environmental Review and Permitting Plan” criteria.⁶¹ Second, the Companies specified that only proposals that fail to meet the minimum acceptable threshold for at least five Non-Price categories will be rejected. Given that the minimum thresholds are not, in our view, exceedingly restrictive, and given there are eleven categories, some of which all evaluated bidders will have met by their virtue of passing the Threshold Requirements review (e.g., site control), we find this to be a reasonable approach as a diligence check on the viability of a project.

3. Assisting Bidders in Optimizing Project Proposals

We were in agreement with some stakeholders and the Commission that the Companies should provide bidders with additional data to allow bidders to provide innovative, optimized proposals in response to the RFPs. The IOs discussed this issue with the Companies to determine the data that the Companies had available; the Companies demonstrated that the best data available was provided as part of the PSIP process. This data included fuel price forecasts through 2045, energy sales and peak demand forecasts, and reliability criteria (including capacity value of various generation and storage technologies).⁶² Moreover, in addition to the PSIP data, the Companies will provide interested bidders with circuit-level hosting capacity data to allow bidders to optimally size and locate their projects.

4. Limitations on Quantities Shortlisted and Procured in Stage 1

The Companies have imposed various limitations on the quantities of projects that can be selected for the Initial Shortlist and ultimately procured. Specifically, the Companies have specified a maximum number of projects to be procured, per island, in Stage 1,⁶³ while also limiting the total number of projects, per technology category, that can be selected for the Short List.⁶⁴ We discuss these two limitations in order.

Regarding the limitation on the total number of projects to be procured in Stage 1, we ultimately agreed to the reasonableness of this approach due, again, to the stated purpose of Stage 1 of the RFP: to allow the Companies’ ratepayers to benefit from the full value of available tax credits. Since those full tax credits require expedited action by all involved parties, including the Companies, it is reasonable to consider limitations on the total number of projects selected for the Final Award Group. The Companies will have to conduct IRS studies and individual PPA negotiations with all winning suppliers, largely concurrently, and we took the Companies at their word regarding the limitations of their resources and personnel to complete the necessary

⁶¹ Appendix L, page L-1.

⁶² See revised O’ahu RFP at section 4.4, citing https://www.hawaiianelectric.com/Documents/about_us/our_vision/dkt_2014_0183_20161223_companies_PSIP_update_report_3_of_4.pdf at Appendix J.

⁶³ See, for example, section 4.8 of the revised O’ahu RFP, which specifies that the Companies intend to procure two projects in Stage 1.

⁶⁴ Appendix L, page L-11.

work (e.g., contract negotiations and IRS studies) in a timely fashion without capping the number of projects to be procured in Stage 1.

That said, because Stage 2 of the RFP will procure the remainder of the Companies' needs, and the Companies expect to allow self-build and/or affiliate bids to participate, it becomes important to ensure that the Companies act in good faith to effectively complete the Stage 1 RFP process both successfully and in a timely fashion. As IO, we will monitor the Oahu and Hawaii Island RFPs with this in mind, noting the Commission's January 12 Order warning against "self-serving actions by the Companies to delay, discourage, or impede competition."⁶⁵

Regarding the limitation on the number of projects, per technology, selected for the Short List, we would note that the RFPs have been improved insofar as that the Companies have removed the limitation to selecting one total project per circuit for the Short List. After discussions with the Companies, we determined that this limitation was needless, as allowing more than one project per circuit would not unduly slow the RFP process; moreover, it is always advisable to develop a Short List that is sufficiently robust. The Companies responded to this concern by allowing for up to two projects per circuit, per technology, to be selected for the Short List. We consider this to be an important revision, and while we would prefer to see an even more relaxed constraint on projects to be selected per circuit for the Short List, we find the Companies compromise to be reasonable.

5. Detailed Evaluation and the Imputed Debt Issue

The Companies' explanation of the Detailed Evaluation for those bids selected to the Short List is much improved and provides bidders with sufficient detail to understand how the bids will be evaluated in this stage. The Companies therein explain the analysis they will employ, including the use of PLEXOS, as well as the derivation of the "total net cost" to ratepayers for each project.⁶⁶ We would also point out that the Companies have added some useful flexibility to the Detailed Evaluation, allowing for minor modifications to a Proposal to avoid being rejected for only a slight exceedance of available transmission capability discovered during the Detailed Evaluation's Load Flow Analysis,⁶⁷ and has specified important roles for the IO in the Detailed Evaluation process, including the IO's ability to request that the Companies conduct additional scenario analyses.⁶⁸

⁶⁵ January 12 Order, page 32.

⁶⁶ Appendix L, page L-12.

⁶⁷ See revised O'ahu RFP, section 4.7. While the Company provides bidders with circuit-level available capacity before bids are submitted, that data is based on a Load Flow Analysis that only models changes in power injections at one point. During the Detailed Evaluation, the Companies conduct further Load Flow Analyses that consider combinations of projects on the Short List, which may result in additional constraints. The additional flexibility afforded by the Companies' revisions to section 4.7 address the scenario in which, for example, a 15 MW project is shown to violate a circuit-level constraint of 14 MW by a single MW; the revision would allow for the potential for a downward revision to the project's proposed capacity. This would only be done in consultation with the IO.

⁶⁸ Ibid.

We raise one final issue regarding the evaluation methodology, which is that of “imputed debt,” which the Companies include as part of the Detailed Evaluation.⁶⁹ The Company explains that it will “take into account the cost of rebalancing its capital structure resulting from any debt or imputed debt impacts associated with each Proposal...”⁷⁰ The Company then proceeds to explain the method used by Standard & Poor’s (“S&P”), which it uses to calculate the imputed debt of a given PPA.

We discussed this issue at length with the Companies, as we have concerns about the use of imputed debt in an evaluation process, particularly when there is a self-build proposal submitted, or any other resources that will be utility-owned such as a turnkey EPC project. That is not the case in Stage 1; however, in Stage 2, a self-build bid will likely be allowed. Our concern with the use of imputed debt in the evaluation process is two-fold. First, we look to determine if the “cost” of imputed debt is real or not—that is, are the ratings agencies calculating a debt equivalence for the utility’s PPAs? And if so, is the utility carrying additional equity to account for the imputed debt? Here, we can say definitively that S&P is indeed calculating a debt equivalence for the Companies’ PPAs⁷¹ and that the Companies point us to the testimony of their CFO in a 2016 rate case demonstrating that the Companies carry additional equity to account for imputed debt.⁷²

Second, we look at the potential impact on an RFP evaluation methodology. If we knew that all bids received were from third-party bidders offering a PPA, the impact of the use of imputed debt is limited. However, when a self-build bid or other Company-owned bid is included, the impact of the imputed debt methodology is increased, as the use of imputed debt in the evaluation serves to increase the cost of all third-party PPA bids, while having no impact on a self-build bid. At its heart, the “imputed debt” risk identified by S&P is the risk that the Companies will be unable to recover the full cost of the PPA from ratepayers—Moody’s, for example, notes that

“[s]ome utilities have the ability to pass through the cost of purchasing power under PPAs to their customers. As a result, the utility takes no risk that the cost of power is greater than the retail price it will receive. Accordingly we regard these PPA obligations as operating costs with no long-term debt-like attributes.”⁷³

While it may be the case that PPAs impose a debt equivalence cost on the Companies’ ratepayers – and the Moody’s quote above may call that into question, at least for its own treatment of PPAs, the costs of which are “passed through” to ratepayers – it is worth considering whether that risk is similar to the risk of the Companies not fully recovering the cost

⁶⁹ Appendix L, pages L-12 to L-13.

⁷⁰ Appendix L, page L-13.

⁷¹ See, for example, S&P Global Ratings, Hawaiian Electric Industries, Inc., February 5, 2018, at Table 3 “Reconciliation of Hawaiian Electric Industries Inc. Reported Amounts with S&P Global Ratings’ Adjusted Amounts (Mil. \$),” which shows that S&P calculates a debt equivalence of \$428.3 million for the Companies’ PPAs.

⁷² Testimony of Tanye S. Sekimura, Senior Vice President and Chief Financial Officer Hawaiian Electric Company, Inc., HECO T-29, Docket No. 2016-0328, page 44, lines 1 to 7.

⁷³ Moody’s Investor Service, “Regulated Electric and Gas Utilities,” June 23, 2017, page 47.

of their investment in self-build projects. We note, for example, that S&P, in its February 5, 2018 ratings analysis of the Companies, states:

“We could lower the ratings on HECO over the next 12 to 24 months if the company’s business risk increases due to regulatory developments that complicate the company’s ability to fully recover its invested capital or due to an inability to deliver timely and on-budget performance for large projects.”⁷⁴

Thus, the risk of full cost recovery of a self-build project is not, according to S&P, zero. Going forward into Stage 2, we would encourage the Commission to look more at this issue and allow the Companies to provide a complete argument and support in favor of the use of imputed debt as an evaluation factor.

C. Assessment of the PPAs and Resulting Changes

Our last section examines the PPAs and changes made by the Companies. The Commission began its guidance on the draft PPAs by noting that it “declines to pre-approve any form or version of a PPA prior to a filed PPA application, to avoid any potential restrictions on developer participation, and directs the Companies to allow bidders to propose modifications to either form of PPA as part of their bids.”⁷⁵ The Commission further directed the Companies “to remove any overly restrictive and onerous language in the model RDG and RAP PPAs, including non-negotiable provisions and sections that are outdated or would unnecessarily belabor the PPA negotiation process.”⁷⁶ Several stakeholders files comments regarding the PPAs.⁷⁷

1. Eliminating “non-negotiable” status of PPA provisions

As noted above, one of the biggest changes made by the Companies was to eliminate the concept of “non-negotiable” terms of the PPA(s). This will allow bidders more flexibility in negotiating a reasonable PPA and will prevent the potential for an accumulation of onerous, non-negotiable PPA provisions from having a negative impact on participation in the RFPs. This change also appears to address the Commission’s clear directive regarding this issue in its January 12 Order.

While the PPAs are now fully negotiable, that is not to say that bidders would be wise in treating the draft PPAs as blank slates. The Companies have put forth the RDG PPA as the preferred form of PPA for these RFPs, and they have provided what we believe to be a reasonable justification for doing so. The Companies offer a third-party study of the issue of curtailment risk and PPA structure – the December 2016 whitepaper by SEPA and ScottMadden – which provided support to the Companies’ concern regarding curtailment risk in Hawaii and the increasingly limited benefits of must-take or as-available PPA structures. Therefore, significant changes to the PPA that would change the nature of the product offered to the Companies in the RFP will result in a less favorable Non-Price Score.

⁷⁴ S&P Global Ratings, Hawaiian Electric Industries, Inc., February 5, 2018, at page 3.

⁷⁵ January 12 Order, page 36.

⁷⁶ January 12 Order, page 37.

⁷⁷ See, for example, AES, pages 1 to 3; Consumer Advocate, pages 6 to 7; Coeus, Appendix I; Joint Commenters, pages 22 to 24.

2. Removing “overly restrictive and onerous language” from the PPAs

The Companies have made several changes to the PPAs that reduce overly restrictive and/or onerous language. In lieu of an exhaustive list, we provide a few examples.

- The Companies have revised section 13.4 of the PPAs to remove a provision that would allow the Companies to terminate the PPA if the seller failed to meet a project milestone date. That feature has been replaced by less onerous language that allows for a cure period and includes liquidated damages clauses to protect the Companies and ratepayers from underperformance and/or delays by the seller.
- While largely retained, we viewed the provisions regarding the Availability Factor (section 2.5 of the solar RDG PPA) and the Measurement Performance Ratio (section 2.6 of the RDG PPA) were important clauses that protect ratepayers from paying a fixed price for an underperforming asset. It is worth noting that the RDG PPA offered in these RFPs allows variable energy resources to enjoy fixed payments; that benefit must come with an obligation that keeps the seller invested in maintaining its facility’s availability and performance.
- Section 15.1(g) of the solar RDG PPA has been revised to address and clarify that a lender may, in some circumstances, take possession of the seller’s project after a default event declared by the lender.
- Section 19.2 has been revised to remove potentially restrictive language that would have prevented the seller from assigning its interest in the project to a wholly-owned subsidiary or to an affiliate. Importantly, the provision clarifies that the assignment must not “impair the ability of the seller to perform its obligations” under the PPA.
- The Companies have made substantial edits to the provisions in the PPAs related to consolidation and capital lease treatment of the PPAs.⁷⁸ These edits clarify both parties’ rights and obligations under the provision, which should help clarify for bidders the potential impact of such financial consolidation and/or capital lease treatment.

⁷⁸ See, for example, section 24.5 of the solar RDG PPA.

IV. MAJOR FINDINGS

Our major findings include:

1. Our overall finding to the Commission is that the revised documents, as filed and as a whole package, are reasonable. There are no fatal flaws, in our view, that should prevent the Commission from going forward with the Stage 1 RFPs.
2. Many of our findings rest on the premise that the Stage 1 RFPs are driven largely by the desire to capture the full value of tax credits, which makes time of the essence and justifies certain restrictions imposed in Stage 1, such as the prohibition of self-build/affiliate bids and limitations on the total number of projects that can be selected.
3. Because time is of the essence, and because the Stage 2 RFPs will procure all remaining Companies' needs, it is important that the Companies act in good faith to effectively complete the Stage 1 RFP process both successfully and in a timely fashion. As an IO, we will monitor the Oahu and Hawaii Island RFPs with this in mind, noting the Commission's January 12 Order warning against self-serving actions by the Companies to delay, discourage, or impede competition.
4. We recommend that Stage 2 RFPs allow for self-build and/or affiliate bids. However, before Stage 2, the Companies should address (a) their Code of Conduct and (b) the use of imputed debt in the evaluation process, as explained in the body of our report.

CERTIFICATE OF SERVICE

The foregoing order was served on the date of filing by mail, postage prepaid, and properly addressed to the following parties:

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