

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Application of)
)
HAWAII ELECTRIC LIGHT COMPANY, INC.) DOCKET NO. 2022-0012
)
To Institute a Proceeding Relating)
To Competitive Procurement to)
Acquire a Battery Energy Storage)
System in North Kohala.)
_____)

ORDER NO. 38855

APPROVING HAWAII ELECTRIC LIGHT COMPANY INC.'S
PROPOSED DRAFT REQUEST FOR PROPOSALS FOR ENERGY STORAGE FOR
NORTH KOHALA, HAWAII ISLAND, WITH MODIFICATIONS

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In the Matter of the Application of)
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HAWAII ELECTRIC LIGHT COMPANY, INC.) DOCKET NO. 2022-0012
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To Institute a Proceeding Relating) ORDER NO. **38855**
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APPROVING HAWAII ELECTRIC LIGHT COMPANY INC.'S
PROPOSED DRAFT REQUEST FOR PROPOSALS FOR ENERGY STORAGE FOR
NORTH KOHALA, HAWAII ISLAND, WITH MODIFICATIONS

By this Order,¹ the Public Utilities Commission ("Commission") approves, with modifications, HELCO's proposed plans to proceed with competitive procurement of energy storage for North Kohala on Hawaii Island.² The Company shall file its

¹The Parties are HAWAII ELECTRIC LIGHT COMPANY, INC. ("HELCO" or "Company") and the DIVISION OF CONSUMER ADVOCACY ("Consumer Advocate"), an ex officio party pursuant to Hawaii Revised Statutes § 269-51 and Hawaii Administrative Rules § 16-601-62(a).

²The Commission expects that the procurement of energy storage related to this docket 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 this solicitation. See Docket No. 2003-0372, Decision and Order No. 23121, Exhibit A - Framework for Competitive Bidding ("Framework"), filed on December 8, 2006.

Final Request for Proposals ("RFP") for North Kohala, in accordance with the Company's proposed RFP schedule³ and consistent with the Commission's direction set forth herein, by February 28, 2023.⁴ The Final North Kohala BESS RFP for Hawaii Island shall be approved for issuance automatically on March 24, 2023, unless the Commission orders otherwise.⁵

I.

BACKGROUND

A.

Relevant Procedural History

By letter dated October 29, 2021, HELCO requested that the Commission: (1) open a docket for the purpose of receiving filings, reviewing approval requests, and resolving disputes relating to HELCO's plan to acquire a 5 megawatt ("MW")/22 megawatt hour ("MWh") battery energy storage system ("BESS") that will integrate with a microgrid controller

³Revised RFP and Cost Estimate at Exhibit 2.

⁴"Hawaiian Electric Companies' Revised North Kohala Energy Storage RFP and Updated Cost Estimate; Books 1 and 2; Filed January 13, 2023," filed on January 13, 2023 ("Revised RFP and Cost Estimate"), at Exhibit 2.

⁵See Revised RFP and Cost Estimate at Exhibit 2 (noting the Company's proposed timeline for the Final RFP to be issued on March 28, 2023, and reflecting the Prince Jonah Kuhio Kalaniana'ole Day holiday that will be observed on March 27, 2023).

system and be located in and serve North Kohala on the island of Hawaii ("Microgrid + BESS Project"); and (2) either hire, or allow HELCO to hire, an independent observer ("IO") to oversee the RFP process.⁶ HELCO also submitted a proposed draft RFP and supporting documentation for the North Kohala BESS.⁷

Accordingly, on January 25, 2022, the Commission opened this docket to receive filings, review approval requests, and resolve disputes, if necessary, related to HELCO's plan to proceed with a competitive bidding process to acquire a BESS that will integrate with a microgrid controller system and be located in and serve North Kohala on Hawaii Island.⁸ At that time, the Commission indicated that it would appoint an IO to monitor the competitive bidding process and report on the progress and results thereto to the Commission.⁹ Finally, the Commission solicited comments from interested stakeholders on the draft RFP, supporting documentation, and/or detailed description of how HELCO proposes to successfully execute the competitive bidding process,

⁶Order No. 38195 at 9.

⁷Order No. 38195 at Exhibits 1 through 5.

⁸Order No. 38195, "Opening the Docket," filed on January 25, 2022 ("Order No. 38195").

⁹Order No. 38195 at 8.

and directed that all comments be submitted to the Commission by February 25, 2022.¹⁰

Neither the Consumer Advocate, nor any other stakeholder, filed comments on the draft RFP, supporting documentation and/or HELCO's proposal for executing the competitive bidding process.

Thereafter, between May and October 2023, the Commission issued information requests ("IRs") to HELCO regarding its draft RFP and supporting documentation,¹¹ to which the Company submitted timely responses.¹²

¹⁰Order No. 38195 at 8.

¹¹See Letter From: Commission To: R. Matsushima Re: Docket No. 2022-0012 - To Institute a Proceeding Relating to a Competitive Procurement to Acquire a Battery Energy Storage System in North Kohala, filed on May 23, 2022; Letter From: Commission To: R. Matsushima Re: Docket No. 2022-0012 - To Institute a Proceeding Relating to a Competitive Procurement to Acquire a Battery Energy Storage System in North Kohala, filed on July 26, 2022; and Letter From: Commission To: R. Matsushima Re: Docket No. 2022-0012 - To Institute a Proceeding Relating to a Competitive Procurement to Acquire a Battery Energy Storage System in North Kohala, filed on September 12, 2022; and Letter From: Commission To: R. Matsushima Re: Docket No. 2022-0012 - to Institute a Proceeding to a Competitive Procurement to Acquire a Battery Energy Storage System in North Kahala, filed on October 13, 2022.

¹²Letter From: K. Katsura To: Commission Re: Docket No. 2022-0012 - Competitive Bidding Process to Acquire Energy Storage; "Development of North Kohala Energy Storage RFP; Company Responses to PUC-HELCO-IR-1 through -14," filed on June 6, 2022; Letter From: K. Katsura To: Commission Re: Docket No. 2022-0012 - Competitive Bidding Process to Acquire Energy Storage Development of North Kohala Energy Storage RFP; "Company Responses to PUC-HELCO-IR-15 through -27," filed on

Based on HELCO's IR responses that indicated the need for a restudy on the appropriate-sized BESS to be procured for the Microgrid + BESS Project,¹³ on November 10, 2022, the Commission issued Order No. 38699, which suspended the docket until such time as HELCO filed the results of its restudy and updated pricing information for the Microgrid + BESS Project.¹⁴

On December 30, 2022, the Company filed its updated restudy results for the Microgrid + BESS Project, which included a revised request to acquire a 5 MW/30 MWh BESS.¹⁵ HELCO also advised that the updated cost estimates were not yet available, but would be forthcoming.¹⁶ Thereafter, on January 13, 2023,

August 12, 2022; Letter From: K. Katsura To: Commission Re: Docket No. 2022-0012 - Competitive Bidding Process to Acquire Energy Storage Development of North Kohala Energy Storage RFP; "Company Responses to PUC-HELCO-IR-28 through -40," filed on September 26, 2022; and Letter From: K. Katsura To: Commission Re: Docket No. 2022-0012 - Competitive Bidding Process to Acquire Energy Storage Development of North Kohala Energy Storage RFP; "Company Responses to PUC-HELCO-IR-41 through -45," filed on October 27, 2022. Responses to the Commission's IRs are referenced in this Order as follows: "HELCO Response to PUC-HELCO-IR-__."

¹³HELCO Response to PUC-HELCO-IR-43.

¹⁴Order No. 38699, filed on November 10, 2022 ("Order No. 38699").

¹⁵Letter From: K. Aramaki To: Commission Re: Docket No. 2022-0012 - Competitive Bidding Process to Acquire Energy Storage Development of North Kohala Energy Storage RFP; "Updated Re-study Results to the North Kohala Microgrid + BESS Project," filed on December 30, 2022 ("Updated Restudy"), at 1.

¹⁶Updated Restudy at 1.

HELCO filed its Revised North Kohala Energy Storage RFP and updated cost estimate.¹⁷

B.

Framework for Competitive Bidding

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.¹⁸ 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.¹⁹ The process of acquiring future generation resources through a competitive bidding process is described in the Framework.

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 Power Supply Improvement Plans ("PSIPs") or other current planning

¹⁷Revised RFP and Cost Estimate.

¹⁸See Framework.

¹⁹Framework, Part II.A.3, at 3-4.

documents; 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.²⁰

To assist the Commission, the Framework contemplates the use of an IO in a variety of situations, as the Commission deems beneficial and necessary.²¹ The Commission has appointed Bates White as the IO for the Company's North Kohala BESS RFP. 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 Commission on its monitoring results during each stage of the process.²² Due to its prior experience and consultation in the Stage 2 and 3 RFPs and subject matter expertise, the IO also served in consultation to the

²⁰Framework, Part III.B.1, at 12. The original Framework language made reference to the utilities' "Approved [Integrated Resource Plan]," rather than to the PSIPs.

²¹Framework, Part III.C.1, at 13.

²²3Framework, Part III.C.2, at 13-15.

Commission in its review of the North Kohala BESS RFP for Hawaii Island.

While this procurement will generally adhere to the Framework, the Commission may exercise its discretion to expedite and/or amend certain parts of the Framework to improve the efficiency of the process.

II.

DISCUSSION

As previously stated in Order No. 38195:²³

1. This docket is intended to receive filings, review approval requests, and resolve disputes, if necessary, related to the Company's plan to acquire a BESS that will integrate with a microgrid controller system for North Kohala on Hawaii Island.

2. The subject docket is a repository for the requisite filings and a forum for resolving approval requests and disputes, and any amendments for this proceeding adopted by the Commission, if necessary.

3. The Commission does not consider the subject docket to be a contested case proceeding.

²³Order No. 38195 at 3-4.

4. All matters that may require Commission approval related to the resulting RFP, with the exception of the Commission's review and adjudication of any energy storage services agreement ("ESSA") that may arise from the resulting RFP, will be resolved in this docket.²⁴

5. The Commission has appointed an IO to serve as the monitor of the North Kohala BESS RFP competitive bidding process and to report on the progress and results thereto to the Commission.

The Company notes that, in preparing the draft RFP, it adhered to the following guiding principles it uses for all RFPs developed pursuant to the Framework: (1) transparency, predictability, and streamlining lowers costs to customers to foster trust in the process; (2) community engagement is critical to near-term and long-term project success; (3) coordination and collaboration of all parties involved is necessary to achieve a successful and timely procurement; and (4) there is no perfect answer, tradeoffs must be considered.²⁵

²⁴Because the RFP seeks to acquire energy storage only, the Commission's review and adjudication would instead involve an energy storage services agreement, rather than a power purchase agreement. See Order No. 38195 at 4.

²⁵Order No. 38195, Exhibit 1 at 2-3.

A.

Commission Direction Regarding Issuance of the Final RFP

The Commission is mindful that the analysis as to whether to pursue a non-wires alternative and the evaluation of other alternatives cannot be fully explored until the specific details and costs are developed for this Microgrid + BESS Project, which will not occur until the Project is fully addressed in a separate application for approval provided by the Company. At that time, there should be sufficient information gathered and provided to the Commission to clearly evaluate the wires and non-wires alternatives, taking into consideration all of the costs, as well as the system and customer benefits resulting from each alternative, regardless of the intended targeted need.

The Commission also emphasizes that, although the BESS will be a product of the competitive bidding process, the combined Project (BESS with the Microgrid controller) will be evaluated separately under the appropriate standard of review, and that HELCO will be expected to provide a robust application, including information and documentation to justify approval of the Project as a whole, as well as other related requests.²⁶

²⁶Because the Microgrid + BESS Project is the combination of two components, one of which is competitively bid, the Commission stresses that this does not mean that the Company's proposal for the BESS or the microgrid controller will be automatically approved by virtue of the BESS' procurement through the RFP process.

That being said, based on its review of the Revised Draft North Kohala BESS RFP,²⁷ as well as the responses to the Commission's IRs, and in consultation with the IO, the Commission approves the Company's Draft North Kohala BESS RFP, subject to the modifications and clarifications required herein, as discussed further below.

1.

BESS Sizing Restudy

HELCO has revised the size of the BESS it is seeking to acquire through the North Kohala BESS RFP from the 5 MW/22 MWh, originally selected based on the Final Report of the Microgrid Feasibility Study performed by S&C Electric Company ("S&C") dated March 25, 2019,²⁸ to a 5 MW/30 MWh BESS²⁹

Instead, the Proposer, in conjunction with the Company, shall be responsible for obtaining approval of the ESSA, and the Company will be responsible for meeting its burden of establishing the overall project's need and/or justification, as well as analysis of the available alternatives and reasonableness of costs. See generally, Docket No. 2020-0127. While not the same situation, in Docket No. 2020-0127 the Keahole BESS project was subject to separate and distinct review by the Commission in addition to its vetting through the RFP process under Docket No. 2017-0352.

²⁷Revised RFP and Cost Estimate at Exhibit 4 ("Revised Draft North Kohala BESS RFP").

²⁸See HELCO Response to PUC-HELCO-IR-4.c, Attachment 1 ("Original Feasibility Study").

²⁹See Revised RFP and Cost Estimate, Exhibit 1 at 1-2; Revised Draft North Kohala BESS RFP at 6.

based on the results of the Updated Restudy. HELCO states that the Updated Restudy included revisions to the following major assumption from the Original Feasibility Study:

- Removal of the 15% load deduction
- Removal of reliance on the use of a 500 kilowatt ("kW") generator; and
- Updating of the North Kohala area net load.³⁰

HELCO also requested that the Updated Restudy include additional analyses without considering the BESS's minimum State of Charge ("SOC") and the BESS's degradation limit.³¹

HELCO indicates that "the initial use of a 15% load deduction for voluntary calls of conservation was speculative[,] and that, since the Original Feasibility Study was conducted, "there have been several calls for conservation on Hawaii Island, which did not result in an actual reduction in demand from the forecasted peak."³² HELCO also notes that, while there is a 500 kW generator on Hawaii Island, there is no existing setup to allow for its interconnection in the North Kohala area.³³

³⁰Updated Restudy at 1-2.

³¹Updated Restudy, Exhibit 1 at 4 and 13.

³²Updated Restudy, at 1.

³³Updated Restudy, at 2. The Commission finds that, despite this statement by HELCO, it should be noted that the Updated Restudy did include a case that considered, among other things, use of a 500 kW generator but that the case upon which the sizing of the BESS was based, did not include use of a 500 kW generator. See id. at 15-16.

Lastly, HELCO states that the updated analysis uses a time period between October 1, 2021, and October 1, 2022, and that this net load includes contributions from existing customer-sited photovoltaic ("PV") generation.³⁴ The Company clarifies that the Original Feasibility Study included net load and a PV adjustment, which effectively included too much contribution from customer-sited PV generation.³⁵

Additionally, the Commission notes that the Updated Restudy examined three cases: (1) the first case, which was the most stringent in terms of BESS sizing, did not include load deduction or supplemental generation that was contemplated in the other two cases; (2) the second case included a 5% load deduction; and (3) the third case included a 5% load deduction along with the use of a 500 kW generator.³⁶ For these three cases, a minimum SOC of 20% and 20% degradation limit was utilized.³⁷ Although the results of the analyses of these three cases demonstrate that a minimum 5 MW/40 MWh BESS would be needed for the first case, when a 0% SOC and a degradation of 1% are

³⁴Updated Restudy at 2.

³⁵Updated Restudy at 2. The net load used in the Original Feasibility Study was based on historical data from 2016. Original Feasibility Study at 5.

³⁶Updated Restudy, Exhibit 1 at 7-13.

³⁷Updated Restudy, Exhibit 1 at 14.

used,³⁸ the required minimum size was reduced for all three cases, with the minimum size BESS of the first case lowered to 5 MW/30 MWh, the new proposed size of the BESS.³⁹

Therefore, based on the Updated Restudy, the Commission finds that the modification from a 5 MW/22 MWh BESS to a 5 MW/30 MWh BESS is reasonable. Unlike the Original Feasibility Study, the Updated Restudy utilizes current load data, eliminates unrealistic expectations for load deductions and use of a 500 kW generator, and takes full advantage of the storage energy in the BESS. The Commission determines that these changes have resulted in a more appropriately sized BESS for its intended use, i.e., during the rebuild of the 3300 line.

Notwithstanding the above findings, the Commission requests clarification on the prescriptiveness of the BESS sizing for bids in light of certain provisions in the RFP and assumptions used in the Updated Restudy. The RFP states that proposers must ensure that no degradation in storage capacity or efficiency occurs over the term of the ESSA, which could be achieved by "overbuilding

³⁸Updated Restudy, Exhibit 1 at 15 (noting that S&C states that in Homer Pro, which was used to develop the analysis model of the North Kohala microgrid, the BESS's degradation limit value must be greater than 0%; therefore, S&C considered this value at 1%, which it determined was quite negligible).

³⁹Updated Restudy, Exhibit 1 at 15.

or pricing in replacement components.”⁴⁰ The Commission requests clarification on whether bidders are restricted to a six-hour duration battery, or whether “overbuilding” could entail a longer duration battery at an appropriate size to meet the performance standards required in the ESSA. Additionally, the Commission observes that the Updated Restudy modeled the BESS with a 95% round-trip efficiency (“RTE”),⁴¹ or the percentage of electricity put into the battery that is later discharged; however, the ESSA states that the expected RTE, or “Performance Level RTE,” is 85%.⁴² The Commission directs Hawaiian Electric to provide clarification on whether bidders are expected to maintain the minimum RTE assumed in the Updated Restudy to comply with the scope of the RFP or if meeting the Performance Level RTE will satisfy the bidder’s eligibility requirements.

⁴⁰Revised Draft North Kohala BESS RFP at 18. The Commission notes that, in Section 2.1, at page 18, the term “PPA” is used but should be changed to “ESSA.” The Commission further directs the Company to conduct a global search of all Exhibits provided in the Revised RFP and Cost Estimate to ensure any similarly erroneous references are corrected.

⁴¹Updated Restudy, Exhibit 1 at 6.

⁴²Revised RFP and Cost Estimate, Book 2, Exhibit 5 - Draft Model Energy Storage Service Agreement (“ESSA”), at 12, Section 4.2.

2.

Stage 3 RFP Modifications

a.

State of Project Development and Schedule Evaluation Criterion

The Company states that additional revisions were made to the State of Project Development and Schedule non-price criterion, consistent with the revisions made in the Stage 3 RFPs, in response to the Commission's guidance in Order Nos. 38479 and 38735.⁴³ Such revisions should include: (1) prohibiting the deduction of points from a proposal based on interconnection-related cost estimates if they find the interconnection costs to be inaccurate; (2) allowing the deduction of points if a proposal does not include any interconnection cost estimates; (3) requiring HELCO's engagement with Proposers throughout the RFP process to answer questions related to interconnection cost estimates, review interconnection cost studies conducted by Proposers, and prioritize the sharing of information to improve the accuracy of the interconnection cost

⁴³See Order No. 38479, "Approving the Hawaiian Electric Companies' Final Stage 3 Request for Proposals for Hawaii Island with Modifications and Issuing Guidance on the Proposed Stage 3 Requests for Proposals for Oahu and Maui," filed on June 30, 2022 ("Order No. 38749"); Order No. 38735, "Approving the Hawaiian Electric Companies' Final Stage 3 Requests for Proposals for Oahu and Maui, with Modifications," filed on December 1, 2022 ("Order No. 38735").

estimates; and (4) allowing HELCO to require a Proposer who has not provided accurate interconnection costs with their bid to submit an attestation confirming the Proposer understands that, "should the Proposer continue and [be] selected that the Proposer shall be responsible for the final determination of interconnection costs whether or not it is higher than what the Proposer has included in its Proposal."⁴⁴ The Commission finds this approach to be reasonable and supports the inclusion of such revisions in the Revised Draft North Kohala BESS RFP.

b.

Carbon Emissions Analysis

The Company has added a Carbon Emissions analysis to the North Kohala Energy Storage RFP.⁴⁵ This addition incorporates the Carbon Emissions criterion and Carbon Emissions Questionnaire, consistent with the guidance provided by the Commission for the Stage 3 RFPs for Hawaii Island, Oahu, and Maui.⁴⁶ HELCO further explains that the information obtained from Proposers through the Carbon Emissions Questionnaire in Section 2.15 of Appendix B will

⁴⁴Revised Draft North Kohala BESS RFP at 38, Section 4.4.2.1.

⁴⁵Revised Draft North Kohala BESS RFP at 37-38, Section 4.4.2.1, and Exhibit B at B-20 - B-26, Section 2.15.

⁴⁶See Revised RFP and Cost Estimate, Exhibit 1 at 3; (citing Order Nos. 38479 and 38735).

be assessed in the manner discussed in Exhibit 1 of the Stage 3 RFPs.⁴⁷ The Commission supports the inclusion of this analysis.

c.

Previous Performance Evaluation

The Revised Draft North Kohala BESS RFP proposes a new Previous Performance scoring criterion, which would reduce points for infractions by Proposers in the past five years.⁴⁸ Unlike the eight non-price criteria, which generally score projects on a scale of one to five, this criterion would deduct points, ranging from zero to 20 points, from the total non-price score.⁴⁹

In the Revised Draft North Kohala BESS RFP, after evaluating Proposers for any past underperforming infractions, excluding infractions caused by force majeure, a maximum of ten points may be deducted from the non-price score, which the Commission finds as reasonable and acceptable. Further, the Commission observes that the eligibility requirements also include an evaluation of previous performance on prior approved projects but carry a greater penalty insofar as a Proposer may be subject to a maximum ten-point deduction, if the Proposer is

⁴⁷Revised Draft North Kohala BESS RFP at 38.

⁴⁸Revised Draft North Kohala BESS RFP at 38.

⁴⁹Revised Draft North Kohala BESS RFP at 38.

involved in pending litigation with the Company.⁵⁰ The Company further clarifies that “the ten-point deduction for involvement in pending litigation is not subject to the maximum ten (10) points that may be deducted for other Previous Performance scoring criterion[,]” which would allow for a total of 20 points to be deducted for infractions of the Previous Performance scoring criterion.⁵¹

The Commission finds that this mechanism may be helpful in ensuring that selected Proposers are equipped and motivated to deliver on proposal commitments.

The Company also established a case-by-case review process for the Previous Performance of Proposers, which includes: (1) notifying Proposers of any potential deductions and providing them with the opportunity to respond with a written explanation within five business days; (2) the Company, in consultation with the IO, reviewing and considering the written responses in determining the instances that were outside of the Proposer’s control or otherwise excusable; and (3) finalizing deductions with the express objective of determining the risk of future under- or non-performance based on past performance.⁵²

⁵⁰Revised Draft North Kohala BESS RFP at 39.

⁵¹Revised Draft North Kohala BESS RFP at 39.

⁵²Revised Draft North Kohala BESS RFP at 39.

The Commission recognizes that there are sometimes legitimate reasons for infractions that are outside of the control of the Proposer and appreciates the inclusion of a process that would allow Proposers to be provided with an opportunity to review identified infractions. In view of that, the Commission finds that the case-by-case review process will add to the fairness, consistency, and transparency of this evaluation criterion.

Accordingly, the Commission instructs the Company that, with confirmation from the IO, the Company shall avoid penalizing bidders for negative past performance that was beyond their reasonable control. Throughout the process, the IO will ensure that any subjective judgments are conducted reasonably and are applied fairly, transparently, and consistently across proposals. In addition, the IO will review each determination with the Company and ensure that the Company informs Proposers of specific infractions and provides an adequate opportunity to respond.

d.

Federal and State Tax Credits

The Commission notes that the Revised Draft North Kohala BESS RFP includes a provision to require Proposers to pursue all federal or state tax credits "(including, without limitation, all available applicable federal and state tax credits

from the Inflation Reduction Act).”⁵³ The Commission welcomes the clarification provided by this additional language.

e.

Modeling Requirements and Interconnection Requirements Study

Highlighting the importance of the development of accurate and functional facility technical models to successful completion of the Interconnection Requirements Study (“IRS”) process, the Company has incorporated the Project Interconnection Process, which specifies that, “Proposers should have developed, executed, tested, and documented results of their models prior to submitting a proposal.”⁵⁴ The Company further details what shall be included when a Proposal is submitted to qualify as a complete package of Project Interconnection Requirement Data Request worksheets.⁵⁵ Additionally, the Company advises Proposers to assume that completion of the IRS process, execution, and filing of the ESSA for approval will be, at a minimum, a 12-month process, which will be dependent on several factors.⁵⁶ The Commission

⁵³Revised Draft North Kohala BESS RFP at 9.

⁵⁴Revised Draft North Kohala BESS RFP at 41.

⁵⁵Revised Draft North Kohala BESS RFP at 41.

⁵⁶Revised Draft North Kohala BESS RFP at 42.

appreciates the inclusion of these modifications, which also conform to the provisions of the Stage 3 RFPs.

f.

Other Conforming Revisions

The Company has made additional revisions and clarifications necessary to align language with the Stage 3 RFPs, as well as other technical clarifications to reflect updated information.⁵⁷ The Commission finds these revisions to be reasonable.

g.

Conforming Revisions to the ESSA

The Company further explains that it has made numerous conforming and clarifying amendments to the ESSA, as a result of the revisions made in the Revised Draft North Kohala BESS RFP, including commercial terms relating to the provision of a substitute letter of credit, and subcontractor insurance requirements; technical terms relating to Performance Standard requirements; incorporating the tax credit pass through provisions similar to those in the other Model Contracts; adding a termination right for Company if Seller fails to demonstrate satisfaction of

⁵⁷Revised RFP and Cost Estimate, Exhibit 1 at 4.

the BESS Equivalent Forced Outage Factor Performance Metric at the expiration of the applicable cure period; and adding an exception to the force majeure exclusion regarding Seller's inability to obtain government approvals.⁵⁸

The Commission finds these changes to be necessary and appropriate and approves of their inclusion in the Revised Draft North Kohala BESS RFP.

3.

Additional Company Clarifications

a.

RFP Timeline and Guaranteed Commercial Operations Date

The Company indicates that the Revised Draft North Kohala BESS RFP includes an updated proposed RFP timeline,⁵⁹ which reflects the timing assumptions the Company provided in its response to PUC-HELCO-IR-22.⁶⁰ The Commission finds that such schedule generally reflects the same time intervals as those provided in the Company's response for the milestone periods beginning with the Proposed Final RFP filing milestone and beyond. The Commission determines that this timeline, which results in a

⁵⁸Revised RFP and Cost Estimate, Exhibit 1 at 4.

⁵⁹Revised RFP and Cost Estimate, Exhibit 2 and Revised Draft North Kohala BESS RFP at 19-20, Section 3.1, Table 1.

⁶⁰HELCO Response to PUC-HELCO-IR-22(c).

revised guaranteed commercial operations date of no later than September 19, 2025, is reasonable.

b.

Site Visits

The Company has revised the draft RFP to allow for potential in-person site visits, which were previously prohibited due to the COVID-19 pandemic, indicating that such information will be made available on its website.⁶¹ The Commission appreciates HELCO's efforts to make the Project Site available for site visits by all prospective proposers to the greatest extent possible, provided there are no legal or other restrictions that would otherwise prevent such access.

c.

Fatal Flaw Analysis

As part of the non-price criteria evaluation, the RFP provides for a fatal flaw analysis to be conducted, which will disqualify any proposal that has failed to meet the minimum standards level for the required number of non-price factors.⁶² Previously, the fatal flaw analysis specified that

⁶¹Revised RFP and Cost Estimate, Exhibit 1 at 5.

⁶²Order No. 38195, Exhibit 4 at 31, Section 4.4.2.

disqualification would occur if the proposal did not meet the minimum standards level for two or more non-price criteria.⁶³ Due to the addition of two non-price criteria, i.e., the Carbon Emissions and Technical Model criteria, the Company indicates that the fatal flaw analysis was revised to increase from two to three the minimum standards level for disqualification under the non-price criteria.⁶⁴ The Commission finds this change to be reasonable, in light of the increased number of criteria for the non-price evaluation.

4.

Commission Modifications and Clarifications

a.

Criteria Scoring

The Company proposes a 60% non-price score and 40% price score, reasoning that “[t]he heavier weighting of the non-price criteria largely reflects the critical importance of a project demonstrating the technical ability of the BESS to provide the microgrid services necessary to ensure that acceptable power quality and reliable service are provided to customers while the

⁶³Order No. 38195, Exhibit 4 at 31, Section 4.4.2.

⁶⁴Revised RFP and Cost Estimate, Exhibit 1 at 5.

BESS is supporting the microgrid operation.”⁶⁵ The Commission, however, notes that the Revised Draft North Kohala BESS RFP already contains stringent threshold criteria, including a demonstration of relevant experience with a similar project, which should adequately address HELCO’s concerns.⁶⁶ Accordingly, the Commission finds that HELCO should modify the criteria scoring to reflect a 50% price and 50% non-price, even split between the non-price and price scoring criteria, as well as any necessary changes to related provisions, including but not limited to the Evaluation of the Price and Non-Price Related Criteria sections. This ratio will also provide potential bidders additional incentive to keep their bid prices reasonable and more accurately reflect the importance of the cost of the BESS on the aggregated cost of, and ultimately the Company’s ability to move forward with, the Microgrid + BESS Project.

b.

Community Engagement Website

The Revised Draft North Kohala BESS RFP requires that Proposers provide the Company with a link to their

⁶⁵HELCO Response to PUC-HELCO-IR-28.

⁶⁶See Revised Draft North Kohala BESS RFP at 36-37, Section 4.4.2.1 (describing each of the non-price criteria, including the Experience and Qualifications non-price criterion).

project website on the next business day after the Proposer is notified of selection.⁶⁷ The website would be required to be publicly-viewable on the day that the Company announces the Final Award Group selection.⁶⁸

The Commission seeks clarification from HELCO on whether a separate website for the BESS is actually necessary, as it represents only one component of the overall Microgrid + BESS Project, particularly without first obtaining approval of the Microgrid controller portion of the Project. The Commission also inquires as to how the Company envisions such a website will be managed, in conjunction with the overall Microgrid + BESS Project, and whether separate websites will be established for the Microgrid controller project and/or the overall Microgrid + BESS Project.

Nonetheless, in the event the Company believes a separate website for the BESS is necessary, the Commission finds that such a timeframe for launching the BESS project website would be overly restrictive. Instead, the Commission finds it reasonable to provide five business days after notification of selection to the Final Award Group for the Proposer to launch the BESS project website and directs the Company to modify the RFP accordingly.

⁶⁷Revised Draft North Kohala BESS RFP at 42, Section 5.3.1.

⁶⁸Revised Draft North Kohala BESS RFP at 42, Section 5.3.1.

c.

Exceeding the Estimated Cost of the Wires Alternative

HELCO explains that the aggregated cost for the entire Microgrid + BESS Project will be compared to and must not exceed the estimated cost of the wires option.⁶⁹ Further, HELCO states that, should the BESS bids not outweigh the benefits of the wires alternative, "the Company will need to re-assess next steps, including whether to make adjustments to the non-wires alternative or pursuing a wires solution, as the current project plan was developed with community outreach and feedback."⁷⁰

Accordingly, the Commission directs HELCO to more clearly specify at what point this determination will be made, e.g., prior to any Final Award being made, and more clearly delineate the specific ramifications to potential bidders, should the bids indicate the Microgrid + BESS Project costs will exceed the cost of the wires alternative.

⁶⁹Revised Draft North Kohala BESS RFP at 6 and 31, Section 4.1 (including in the Eligibility Requirements Assessment, a determination that the aggregated cost of the bid and microgrid controller must not exceed the estimated cost of the wires alternative).

⁷⁰HELCO Response to PUC-HELCO-IR-06(c).

d.

Redlined Changes and References

The Commission requests clarification on the redlined update for the typical duration for construction of Company-Owned Interconnection Facilities from "9-12 months" to "12-18 months."⁷¹ Additionally, the document entitled "Hawaiian Electric Facility Technical Model Requirements and Review Process" is referred to in various sections of the RFP as Appendix B, Attachment 3;⁷² however, the Commission finds that this document is not appropriately labeled, by footer or elsewhere, as is the case in the adjacent attachments. The Commission directs Hawaiian Electric to correct this labeling to aid in cross referencing this attachment.

e.

Institute of Electrical Electronics Engineers Standard for Interconnection and Interoperability of Inverter-Based Resources

The Company has also included revised language referencing the Institute of Electrical Electronics Engineers Standard for Interconnection and Interoperability of Inverter-Based Resources ("IEEE 2800-2022"), which specifies that,

⁷¹Revised RFP and Cost Estimate, Exhibit 4A, Redlined Draft RFP, at 186.

⁷²Revised Draft North Kohala BESS RFP at 33, 38, and 41, Sections 4.3, 4.4.2.1, and 5.1, respectively.

although not yet fully adopted by HELCO, “inverters being procured in this RFP may need to conform to certain functions of IEEE 2800-2022 as identified in [studies] completed within this RFP, or in the future operations of the project. The interconnection study will incorporate IEEE 2800 to the extent applicable to our island systems.”⁷³

The Commission requests further details and/or clarification on this requirement, which the Company shall provide separately and/or incorporate into the Final RFP:

1. A detailed description of the known incremental changes and/or benefits of procuring IEEE 2800-0022 compliant resources in the North Kohala BESS RFP.

2. A detailed explanation on whether HELCO can formally adopt IEEE 2800, in full or in part, and, if so, identification of those aspects of the standard that are established, as well as those that have yet to be established, that may be adopted at a later date. The Company should also describe whether there are any new aspects that may emerge in the future, and how the ESSA would potentially address these three categories of IEEE 2800 aspects.

3. An explanation as to why HELCO waited until now to address this standard, which was published in April 2022.

⁷³Revised Draft North Kohala BESS RFP at 17.

4. A description of what impact, if any, this change will this have on potential bidders.

5. An explanation as to how HELCO will consider preferences, if any, for IEEE 2800-compliant bidders.

III.

ORDERS

THE COMMISSION ORDERS:

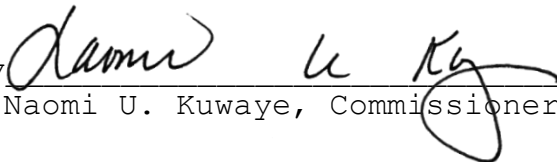
1. The Revised Draft North Kohala BESS RFP is hereby approved, subject to the modifications set forth above.

2. The Company shall file the Final North Kohala BESS RFP by February 28, 2023. The Final North Kohala BESS RFP shall be considered approved for issuance automatically on March 24, 2023, unless the Commission orders otherwise.


DONE at Honolulu, Hawaii FEBRUARY 13, 2023.

PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

By 
Leodoloff R. Asuncion, Jr., Chair

By 
Naomi U. Kuwaye, Commissioner

APPROVED AS TO FORM:


Keira Y. Kamiya
Commission Counsel

By 
Colin A. Yost, Commissioner

CERTIFICATE OF SERVICE

The foregoing Order was served on the date it was uploaded to the Public Utilities Commission's Document Management System and served through the Document Management System's electronic Distribution List.

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COMMISSION

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