BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF HAWAII

| | |
|---|---|
| In the Matter of the Requests of )<br>)<br>HAWAIIAN ELECTRIC COMPANY, INC., )<br>HAWAII ELECTRIC LIGHT COMPANY, INC.,)<br>AND MAUI ELECTRIC COMPANY, LIMITED )<br>)<br>To Institute a Proceeding Relating )<br>To a Competitive Bidding Process )<br>To Acquire Dispatchable and )<br>Renewable Generation. )<br>) | DOCKET NO. 2017-0352 |

ORDER NO. 35405

ESTABLISHING A PERFORMANCE INCENTIVE MECHANISM FOR PROCUREMENT
IN PHASE 1 OF THE HAWAIIAN ELECTRIC COMPANIES'
FINAL VARIABLE REQUESTS FOR PROPOSALS

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF HAWAII

| | | |
|---|---|---|
| In the Matter of the Requests of<br><br>HAWAIIAN ELECTRIC COMPANY, INC.,<br>HAWAII ELECTRIC LIGHT COMPANY, INC.,<br>AND MAUI ELECTRIC COMPANY, LIMITED<br><br>To Institute a Proceeding Relating<br>To Competitive Procurement<br>Of Dispatchable and<br>Renewable Generation. | ) | Docket No. 2017-0352<br><br>Order No. 35405 |

SETTING FORTH A PERFORMANCE INCENTIVE MECHANISM FOR PROCUREMENT IN PHASE 1 OF THE HAWAIIAN ELECTRIC COMPANIES' FINAL VARIABLE REQUESTS FOR PROPOSALS

The Public Utilities Commission ("commission"), by this Order, sets forth a performance incentive mechanism ("PIM") for Phase 1 of the HAWAIIAN ELECTRIC COMPANIES'[1] ("the HECO Companies"

[1]The 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). As the commission previously noted in Order No. 34856, "Opening the Docket" ("Order No. 34856"), "[a]s a repository docket, the commission specifically excludes from this Order any language which invites interested persons to move to intervene or participate in said docket. Instead, the subject repository docket, by design, provides interested persons with the opportunity to participate in

or "the Companies") procurement effort pursuant to the Final Variable Requests for Proposals ("Final Variable RFPs"), filed in this docket on February 27, 2018.

I.

## Background

In Order No. 35224, the commission stated its intent to establish a performance incentive to reward exceptional performance and encourage the Companies to successfully execute the procurement process, resulting in low-cost renewable energy project proposals submitted to the commission by the end of 2018.[2] The commission further stated that "[t]hese incentives could include shared savings incentives or bonus payments for projects that beat certain price thresholds and achieve commercial operations on accelerated timeframes. The commission . . . encourages any stakeholders with innovative proposals to file comments with the commission. . . ."[3]

Pursuant to Order No. 35224, several stakeholders filed comments proposing a variety of mechanisms to serve as incentives

---

the process set forth in the Framework without the need to formally intervene in the docket." Order No. 34856 at 6.

[2]Order No. 35224, "Providing Guidance on the Hawaiian Electric Companies' Proposed Requests for Proposals for Dispatchable and Renewable Generation," filed on January 12, 2018, at 37.

[3]Order No. 35224 at 37.

for exceptional performance by the HECO Companies in procuring low-cost renewable energy projects. As such, after review of stakeholder comments, the commission sets forth a PIM for Phase 1 of this procurement, below.

## II.

## Discussion

### A.

### Stakeholder Comments

On January 29, 2017, pursuant to Order No. 35224, the following stakeholders provided comments on the PIM design for the Phase 1 procurement effort: (1) the Consumer Advocate, (2) Ulupono Initiative LLC ("Ulupono"), and (3) NRG Renew LLC ("NRG"). The commission is appreciative of the thoughtful comments submitted by these stakeholders.

#### 1.

#### Consumer Advocate

The Consumer Advocate acknowledges that as Hawaii continues to move forward with its clean energy initiatives, there is a need to update and improve the regulatory process to allow the utility companies and third-party providers to explore innovations in that field.[4] Ultimately, the Consumer Advocate states that the objective of any performance mechanism should be to provide customers with affordable, quality services that are safe, reliable, and resilient.[5] As such, the Consumer Advocate requests that the commission exercise the appropriate diligence and consideration when establishing a PIM to avoid unintentional, undesirable outcomes.[6]

Generally, the Consumer Advocate asserts: (1) piecemeal performance should not be rewarded, (2) the metrics and benchmarks should be objective and easy to measure, (3) reporting and modification processes should be clear and data should be reported regularly, and (4) there should be a reasonable balance established between performance awards and penalties.

With regard to piecemeal performance, the Consumer Advocate recommends that the commission ensure that any and all PIMs be evaluated and considered as a whole, so there is less risk to maximize incentives to the detriment of the overall

---

[4]"Division of Consumer Advocacy's Comments on Potential Incentive Mechanisms for the Procurement of Renewable Energy Projects through the Request for Proposals Process; and Certificate of Service," filed January 29, 2018 ("Consumer Advocate Comments"), at 3.

[5]Consumer Advocate Comments at 3.

[6]Consumer Advocate Comments at 10.

public interest.[7] With regard to metrics and benchmarks, the Consumer Advocate urges the commission to adopt clear standards to evaluate the Companies' performance.[8] Therefore, the Consumer Advocate recommends that the PIM for the upcoming procurement effort should include metrics that relate to pricing, expedited commercial in-service dates, and project performance (i.e., reliability, flexibility, and resilience).[9] For pricing and in-service dates, the Consumer Advocate suggests that the commission consider using an average of recent projects that have been completed within the United States. The Consumer Advocate also recommends that the commission assume that it is necessary to create separate benchmarks depending on the technology, as the expected pricing will vary with technology.[10] The Consumer Advocate believes these separate benchmarks should be established prior to submission of bids to avoid the appearance of gaming the selection process.[11]

The Consumer Advocate also notes that data collection and reporting are an important piece of implementing PIMs, and that

---

[7]Consumer Advocate Comments at 4.

[8]Consumer Advocate Comments at 5.

[9]Consumer Advocate Comments at 6.

[10]Consumer Advocate Comments at 6.

[11]Consumer Advocate Comments at 6.

there needs to be clarity around the type of information necessary to determine whether benchmarks have been met, and/or exceeded, to facilitate further actions that the commission may consider as it relates to future RFPs and renewable energy integration.[12]

2.

Ulupono

Ulupono offered two PIM designs for commission consideration - (i) Shared Savings Incentives and (ii) Timeliness Incentives.[13] Under the proposed Shared Savings Incentive PIM, Ulupono recommends that the commission update the avoided cost methodology to account for the long-term cost of fossil fuels.[14] Ulupono states that government forecasts of fuel prices delivered to Hawaii are averages that ignore volatility,[15] and therefore contends that the forecasted prices systematically underestimate the value created by using renewable energy for the utilities' customers. Ulupono states that if the commission decides to retain the system avoided cost approach, the commission should require

---

[12]Consumer Advocate Comments at 8.

[13]See "Comments by Ulupono Initiative LLC on the Potential Incentive Mechanisms for Hawaiian Electric Companies," filed January 29, 2018 ("Ulupono Comments").

[14]Ulupono Comments at 3.

[15]Ulupono Comments at 3.

that the cost of hedging the cost of fossil fuels for at least ten years should be included in the application of such approach.[16]

Ulupono "believes that the most recent PSIP exercise can provide important insights and a viable methodology for calculating the savings to the utilities' customers[,]" in terms of determining the cost difference between the procurement of the 400 MW of renewable energy and the "cost of the next best option."[17] This comparative approach has the advantage of "taking into account not only avoided fuel costs, but also renewable integration costs, and, in the case of firm renewable generation, avoided capacity costs."[18] Ulupono recommends that once the savings are determined, the commission must establish the percentage of the savings that should be shared with the utility.[19] Ulupono states that it "believes that sharing 10% of the risk adjusted savings for the utility, if they can achieve the benchmark set by the Commission, and a 5% share if they do not, would be sufficient to reward the utility for enhancing, facilitating, simplifying and expediting

[16]Ulupono Comments at 3.

[17]Ulupono Comments at 4.

[18]Ulupono Comments at 5.

[19]Ulupono Comments at 5.

the procurement process, and provide a reasonable level of shareholder earnings.incentives."[20]

With regard to the Timeliness PIM, Ulupono recommends that the commission determine a benchmark date for the Companies' timely submission of applications for approval of power purchase agreements ("PPAs").[21] If the Companies achieve the target deadline, then the Companies would receive the shared savings. If the Companies fail to submit PPA(s) by the target deadline, then the shared savings percentage would decrease and the Companies would be penalized $0.001/kWh for every thirty days of delay in submitting a PPA for commission approval.[22] Conversely, the utility would receive an incentive of $0.001/kWh for every thirty days in which it submits a PPA for approval in advance of the target deadline. Ulupono states that these incentives or penalties should be cumulative – for instance, a filing that is ninety days late would result in a $0.003/kWh cost over the term of the PPA.[23]

---

[20] Ulupono Comments at 6-7.

[21] Ulupono Comments at 7.

[22] Ulupono Comments at 7.

[23] Ulupono Comments at 8.

3.

NRG

NRG provided conceptual ideas rather than offering prescriptive suggestions on how to best administer incentives for the procurement effort.[24] NRG states that the commission should establish incentives in a rate case rather than trying to incorporate them into a PPA pass-through to ratepayers, as this approach could distort the effective rate of the contract in comparison to other contracted rates.[25] NRG suggests the commission offer a tiered incentive paid at the Commercial Operations Date ("COD") based on the total capacity that is procured through HECO's RFP and successfully brought into commercial operation.[26] NRG states that incentives payable would increase by tier, and, could also increase for each tier on a per-MW basis.[27]

Additionally, NRG suggests that the commission consider a shared savings incentive for a reduction on utility interconnection costs. NRG states that any reductions in cost

---

[24]See "Public Comments of NRG Renew LLC," filed January 29, 2018 ("NRG Comments").

[25]See NRG Comments at 1.

[26]See NRG Comments at 1.

[27]See NRG Comments at 2.

below the Total Estimated Interconnection Costs included in Attachment G of the PPA are for the benefit of the developer, who must also take the full risk if the actual costs come in higher than the utility's estimate.[28] NRG recommends for reductions in cost below the Total Estimated Interconnection Costs, the developer would share 40% of the benefit with the Companies. For any costs above the Total Estimated Interconnection Costs, the Companies would accept 20% of the risk.[29]

NRG also recommends that the commission institute a Tiered Bonus Incentive for Alignment of Commercial Operation Dates. This incentive would reward the Companies if they achieve an earlier COD than the Guaranteed Commercial Operation Date ("GCOD") in the PPA.[30] NRG believes this incentive would foster the parties' cooperation towards finding a mutually beneficial delivery date that is earlier than the GCOD in the PPA, whenever possible.[31]

---

[28]NRG Comments at 2.

[29]NRG Comments at 2.

[30]NRG Comments at 3.

[31]NRG Comments at 3.

B.

Performance Incentive Design

After review of stakeholder comments and further consideration of the Companies' procurement effort, the commission establishes a shared-savings performance incentive for Phase 1 of the Companies' procurement effort. The shared-savings incentive will be based on an 80% customer / 20% utility split of the savings from each PPA, compared to benchmarks established by considering recent low-cost renewable energy projects, up to a cap of $3,500,000. The performance incentive design does not include a penalty for failure to successfully execute the procurement process, at this time.

In establishing the benchmarks against which approved PPAs will be compared, the commission reviewed both renewable-only and renewable plus storage projects developed in Hawaii in the last several years, including the solar PV and storage projects on Kauai (see Docket Nos. 2015-0331, 2017-0018, and 2017-0443), as well as several recent renewable projects on other islands throughout the State (see Docket Nos. 2015-0224, 2015-0225, 2016-0342, and 2017-0108).

After consideration of these projects, the commission determines that a reasonable benchmark for renewable energy projects paired with storage is 11.5 cents per kilowatt-hour ("kWh"). For renewable energy-only projects, the commission determines that a reasonable benchmark is 9.5 cents per kWh.

Thus, for PPAs submitted by the end of 2018,[32] and subsequently approved by the commission, the Companies shall receive a performance incentive equivalent to 20 percent of the estimated first-year savings compared to the applicable benchmark, up to a cap of $3,500,000. The estimated first-year savings will be calculated by multiplying the forecasted first-year energy production (in kWh) of the project by the difference between the applicable benchmark price and the equivalent PPA price (in cents per kWh).

The equivalent PPA price will be established by the levelized cost of the project computed by the Companies during the evaluation and selection process in the Phase 1 procurement effort.[33] Similarly, the forecasted first-year energy production will be determined by using the energy production estimated in the evaluation and selection process. The Independent Observers will verify both the equivalent PPA price and the forecasted first-year energy production as part of the evaluation and selection process.

---

[32]See Order No. 35224 at 36.

[33]See Final Variable Requests for Proposals, Exhibit 1 at 33, filed February 27, 2018.

For example, if the Companies successfully procure the total amount of energy requested in all of the Variable RFPs, the forecasted first-year energy production could be as high as 850,000,000 kWh.[34] If the equivalent PPA prices of these projects are, on average, 1 cent per kWh below the applicable benchmarks, then the first-year savings compared to the benchmarks would be $8,500,000. An 20% utility / 80% customer share of the savings would offer the Companies a $1,700,000 incentive. If the equivalent PPA prices are lower, the potential incentive could be greater, up to the $3,500,000 cap. The incentive cap is approximately equal to 3% of the HECO Companies' net income in 2017.[35] The incentive cap is intended to ensure that the performance incentive does not result in an unreasonable windfall to the Companies, while the 80% customer / 20% utility shared-savings design seeks to ensure that the vast majority of the savings compared to the benchmark accrue to customers.

---

[34]The total amount of annual energy to be procured for all three RFPs is 850,000,000 kWh. See Final Variable Requests for Proposals, Exhibit 1 at 5, Exhibit 2 at 5, and Exhibit 3 at 5, filed February 27, 2018.

[35]See Hawaiian Electric Industries' 8K Form at 3, filed February 14, 2018, available at: http://www.hei.com/Cache/392192505.pdf

The PIM described above is designed to establish a simple, yet meaningful, incentive to successfully execute the procurement process and bring additional value to customers.

C.

## Timing of Incentive Award

The commission intends to stagger the allocation of the total amount of the PIM to the Companies over two (2) allocation periods. The first allocation of the PIM will be shortly after the approval of the PPAs.[36] At that time, the commission will allocate the first 50% of the total PIM to the Companies, based on the equivalent PPA prices and the forecasted first-year energy production, as described above.

The second allocation of the PIM will be made following the first year of commercial operations for each project. Prior to making the second PIM allocation, the Companies shall submit a report of the actual energy utilized by the Companies for each of the PPAs approved by the commission. At that time, the commission will provide the Companies with a portion, or all, of the remaining 50% of the PIM, dependent upon the actual amount of energy output utilized by the Companies. If the Companies do not utilize

[36]The commission intends that any applicable performance incentive would be awarded to the Companies through their respective Revenue Balancing Account Provision tariffs.

the full amount of energy forecasted, then the second incentive award will be prorated in proportion to the actual amount of energy utilized by the Companies.

To continue with the example provided above, if the Companies are eligible for a $1,700,000 incentive, then $850,000 (50%) would be awarded after the PPAs are approved. After the first year of commercial operations, if the Companies utilize 70% of forecasted first-year energy (i.e., 595,000,000 kWh out of the forecasted 850,000,000 kWh), then the second incentive allocation will be prorated by 70%, resulting in a second incentive award of $595,000.

## III.

## Order

THE COMMISSION ORDERS:

The commission establishes a performance incentive mechanism, as set forth above, for Phase 1 of the HECO Companies' procurement effort under the Companies' Final Variable Requests for Proposals, filed in this docket on February 27, 2018.

DONE at Honolulu, Hawaii APR - 6 2018.

PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

By
Randall Y. Iwase, Chair

By
Lorraine H. Akiba, Commissioner

By
James P. Griffin, Commissioner

APPROVED AS TO FORM:

Caroline C. Ishida
Commission Counsel

2017-0352.ljk

## CERTIFICATE OF SERVICE

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

DEAN NISHINA
EXECUTIVE DIRECTOR
DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS
DIVISION OF CONSUMER ADVOCACY
P.O. Box 541
Honolulu, HI 96809

JOSEPH P. VIOLA, ESQ.
VICE PRESIDENT
REGULATORY AFFAIRS
HAWAIIAN ELECTRIC COMPANY, INC.
P.O. Box 2750
Honolulu, HI 96840-0001