BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Application of)

HAWAIIAN ELECTRIC COMPANY, INC. ) DOCKET NO. 2018-0435

For Approval of Power Purchase )
Agreement for Renewable )
Dispatchable Generation with )
Waiawa Solar Power LLC. )

DECISION AND ORDER NO. 36231
# TABLE OF CONTENTS

I. BACKGROUND .................................................................................................................. 2  
   A. Procedural History ........................................................................................................ 2  
   B. Parties To The PPA ...................................................................................................... 7  
   C. The Project .................................................................................................................. 8  
   D. Material Terms Of The PPA ...................................................................................... 10  

II. PARTIES' AND PARTICIPANT'S POSITIONS .............................................................. 21  
   A. HECO .......................................................................................................................... 21  
   B. The Consumer Advocate ............................................................................................ 28  
   C. Waiawa Solar ............................................................................................................. 36  
   D. HECO Reply ............................................................................................................... 43  

III. DISCUSSION .................................................................................................................. 45  
   A. Legal Authorities .......................................................................................................... 45  
   B. Procurement Of The PPA ............................................................................................ 48  
   C. Approving The PPA ..................................................................................................... 54  
      1. PPA Terms And Conditions .................................................................................... 54  
         a. Pricing Provisions ................................................................................................. 54  
         b. Nature Of The PPA ............................................................................................... 59  
         c. PPA Duration .......................................................................................................... 65  
         d. Curtailment ............................................................................................................. 67  
         e. Land Use ................................................................................................................. 70  
      2. Community Outreach ............................................................................................... 75  
      3. Conditions To Approval ........................................................................................... 77  
   D. Recovery Of PPA-Related Non-Energy Payments Through The PPAC ..................... 83  
   E. Hawaii's Energy Policy Statutes ................................................................................... 84  
   F. Remainder Of The Proceeding .................................................................................... 88  

IV. SUMMARY OF FINDINGS OF FACT AND CONCLUSIONS OF LAW ............... 89  

V. ORDERS ......................................................................................................................... 90
BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Application of)
HAWAIIAN ELECTRIC COMPANY, INC.)
For Approval of Power Purchase) Docket No. 2018-0435
Agreement for Renewable) )
Dispatchable Generation with) )
Waiawa Solar Power LLC. )

DECISION AND ORDER

By this Decision and Order,¹ the Public Utilities
Commission ("commission") approves, subject to the conditions set
forth herein: (A) the Power Purchase Agreement ("PPA") between
HECO and Waiawa Solar, dated December 29, 2018, for a 36-megawatt
("MW") photovoltaic ("PV") project paired with a
36 MW/144 megawatt-hour ("MWh") battery energy storage system
("BESS") to be located in Pearl City on the island of Oahu (the
"Project"); and (B) HECO’s request to include all non-energy

¹The Parties to this proceeding are HAWAIIAN ELECTRIC
COMPANY, INC. ("HECO" or the "Company") 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 ("HRS") § 269-51 and Hawaii
Administrative Rules ("HAR") § 16-601-62(a). In addition, the
commission has granted WAIAWA SOLAR POWER LLC ("Waiawa Solar" or
"Seller") participant status. See Order No. 36129, “Granting
Waiawa Solar Power LLC’s Motion to Participate and Amending the
Procedural Schedule,” filed January 25, 2019 ("Order No. 36129").
payments under the PPA, including the Lump Sum Payments (as defined in the PPA) and related revenue taxes, through the Purchased Power Adjustment Clause ("PPAC"), to the extent such costs are not included in base rates. The commission's rulings and conditions are discussed herein.

I.

BACKGROUND

A.

Procedural History

On December 31, 2018, HECO filed its Application requesting approval of, among other things, the subject PPA.\(^2\)

On January 14, 2019, consistent with its intent to review the PPAs resulting from the Hawaiian Electric Companies'\(^3\) Phase 1 competitive procurement on an accelerated timeline, the commission filed Order No. 36072, "(1) Approving [HECO's] Request to Bifurcate its [PPA]-Related Requests from its Above-ground 46 Kilovolt Line Extension-related Requests; and (2) Adopting a Procedural Order to Govern the PPA-Related Requests," which set forth a statement of issues for this proceeding, as follows:

\(^2\)"Hawaiian Electric Company, Inc.'s Application; Exhibits 1-10; Verification; and Certificate of Service," filed December 31, 2018 ("Application").

\(^3\)The "Hawaiian Electric Companies" are HECO, Maui Electric Company, Limited, and Hawaii Electric Light Company, Inc.
1. Whether HECO has met its burden of proof in support of its request for approval of the PPA between HECO and Waiawa Solar, dated December 29, 2018, for a 36 MW photovoltaic project coupled with a 144 MWh BESS, proposed to be located in Pearl City, on the island of Oahu.

   a. Whether HECO's purchased power arrangements under the PPA, pursuant to which HECO will dispatch energy on an availability basis from Waiawa Solar, including the Lump Sum Payments to be paid to Waiawa Solar, are prudent and in the public interest with explicit consideration, if required by law under HRS § 269-6, of the effect of the State’s reliance on fossil fuels on price volatility, export of funds for fuel imports, fuel supply reliability risk, and greenhouse gas emissions.

2. Whether HECO has met its burden of proof in support of its request to include all non-energy payments under the PPA, including the Lump Sum Payment (as defined in the PPA), and related revenue taxes, through the PPAC, to the extent such costs are not included in base rates.

3. Whether it is in the public interest for the 46 kV line extension, required to interconnect the Project to HECO's system, to be constructed above the surface of the ground pursuant to HRS § 269-27.6(a).

Order No. 36072 also bifurcated HECO's PPA-related requests (Issues 1 and 2) from its above-ground 46 kilovolt ("kV")

---

4Order No. 36072, "(1) Approving Hawaiian Electric Company, Inc.'s Request to Bifurcate its Power Purchase Agreement-Related Requests from its Above-Ground 46 Kilovolt Line Extension-Related Requests; and (2) Adopting a Procedural Order to Govern the PPA-Related Requests," filed January 14, 2019 ("Order No. 36072").
line extension-related requests (Issue 3) and established a procedural schedule governing HECO's PPA-related requests.⁵

On January 22, 2019, Waiawa Solar submitted a motion to participate in this proceeding.⁶

On January 25, 2019, the commission issued Protective Order No. 36125 to govern the production and exchange of confidential information in this docket. Also on January 25, 2019, the commission issued Order No. 36129, granting Waiawa Solar's motion to participate and amending the procedural schedule.

Between January 25, 2019, and February 6, 2019, pursuant to Order No. 36129, the Consumer Advocate issued information requests ("IRs") to HECO and Waiawa Solar. The commission also issued its own IRs to HECO and Waiawa Solar on February 12, 2019, and February 19, 2019.

On February 20, 2019, the commission issued Order No. 36169, compelling Waiawa Solar to respond to certain IRs issued

⁵Order No. 36072 at 6, 8-9. As mentioned in Order No. 36072, the commission intends to issue a separate procedural order to govern HECO's above-ground 46 kV line extension-related requests. Id. at 8.

⁶"Waiawa Solar Power LLC's Motion to Participate; Affidavit of Craig Cornelius; and Certificate of Service," filed January 22, 2019, as supplemented on January 24, 2019, by Waiawa Solar's Submittal of Original Affidavit of Craig Cornelius (collectively, "Motion to Participate").
by the Consumer Advocate to which Waiawa Solar had objected as irrelevant.\(^7\)

On February 25, 2019, the Consumer Advocate submitted a motion for enlargement of time, seeking an extension of time for it and Waiawa Solar to file their Statements of Position and for HECO to file its Reply Statement of Position.\(^8\) In support of its Motion, the Consumer Advocate referred to Order No. 36169 and noted that the deadline by which Waiawa Solar was required to respond to the Consumer Advocate’s IRs was February 27, 2019, the same date the Consumer Advocate’s Statement of Position was due pursuant to the procedural schedule set forth in Order No. 36129, which would not allow the Consumer Advocate an opportunity to review the IR responses and incorporate them into its Statement of Position.\(^9\)

Also on February 25, 2019, Waiawa Solar submitted a letter request stating that it understood that the Consumer Advocate “has filed or intends to file” a request for extensions to the deadlines for the Consumer Advocate’s Statement

\(^7\)Order No. 36169, “Compelling Waiawa Solar Power LLC to Respond to the Consumer Advocate’s Information Requests,” filed February 20, 2019 ("Order No. 36169").

\(^8\)“Division of Consumer Advocacy’s Motion for Enlargement of Time; and Certificate of Service,” filed February 25, 2019 ("CA Motion").

\(^9\)CA Motion at 2.
of Position and HECO's Reply Statement of Position. Waiawa Solar stated that it believed that its Statement of Position, "to the extent necessary, would be more useful to the Commission if filed after the Consumer Advocate's [Statement of Position]." Accordingly, Waiawa Solar requested that "if changes are made to the procedural schedule, the Commission adjust [the] deadline for [Waiawa Solar's Statement of Position] to [a] date[] midway between the deadlines for the Consumer Advocate's Statement of Position and the deadline[] for [HECO's Reply Statement of Position]."

On February 28, 2019, the commission issued Order No. 36195, in which the commission granted the Consumer Advocate's Motion and amended the procedural schedule.

---


12Waiawa Solar Letter at 1.

13Order No. 36195, "(1) Granting, In Part, the Division of Consumer Advocacy's Motion for Enlargement of Time, Filed on February 25, 2019, and (2) Amending Procedural Schedule," filed February 28, 2019 ("Order No. 36195").
On March 6, 2019, the Consumer Advocate filed its Statement of Position, consistent with Order No. 36195.\textsuperscript{14}

On March 8, 2019, Waiawa Solar filed its Statement of Position, consistent with Order No. 36195.\textsuperscript{15}

On March 13, 2019, HECO filed its Reply Statement of Position, consistent with Order No. 36195.\textsuperscript{16}

Pursuant to the amended deadlines set forth in Order No. 36195, no further briefing is contemplated and the PPA-related requests are ready for decision-making.\textsuperscript{17}

B.

Parties To The PPA

HECO is an operating public utility engaged in the production, transmission, distribution, purchase and sale of electricity on the island of Oahu.\textsuperscript{18}

\textsuperscript{14}"Division of Consumer Advocacy's Statement of Position," filed March 6, 2019 ("Consumer Advocate SOP").

\textsuperscript{15}"Waiawa Solar Power LLC's Statement of Position; Affidavit of Patrick Sullivan; Affidavit of Dean T. Yamamoto; and Certificate of Service," filed March 8, 2019 ("Waiawa Solar SOP").

\textsuperscript{16}"Hawaiian Electric Company, Inc.'s Reply Statement of Position; and Certificate of Service," filed March 13, 2019 ("HECO Reply SOP").

\textsuperscript{17}See Order No. 36195 at 10.

\textsuperscript{18}Application at 6.
Waiawa Solar "was organized for the purposes of developing, financing, constructing, owning, and operating the Project[,]" and is a wholly-owned indirect subsidiary of Clearway Energy Group LLC ("Clearway")."19 Clearway "is one of the largest clean energy companies in the United States[,]" and is headquartered in San Francisco.20 "In Hawaii, Clearway is currently constructing three utility-scale solar projects totaling approximately 110 MW of generating capacity, including Kawaiola Solar (49 MW), Waipio Solar (45.6 MW), and Mililani II Solar (14.7 MW)."21 Clearway is also the developer behind Mililani Solar I, LLC, which also has a similar PV plus BESS PPA with HECO pending before the commission in Docket No. 2018-0434.

C.

The Project

The Project will be located at 96-1110 Waihona Street on "vacant Urban zoned land owned by Kamehameha Schools Bishop Estate" in Pearl City on the island of Oahu and identified by Tax Map Key No. ("TMK") 9-4-004:02422 (the commission notes that searches for

19 Motion to Participate at 3-4; see also, Application, Exhibit 1 at 186 ("Exhibit A-2 Ownership Structure").

20 Application at 12.

21 Application at 13.

22 Application at 13. See also, id. at Exhibit 7.
parcels identified by TMK No. 9-4-004:024 did not return any results; however, searches for parcels identified by TMK No. 9-6-004:024 appear to be in the area described in the Application and correlate with the address "96-1110 Waihona Street"). Pursuant to the PPA, Waiawa Solar will construct, own, and operate the Project, which "will consist of a solar [PV] system with single-axis tracking design consisting of solar [PV] panels and eleven (11) central inverters rated at 3,430 [kilovolt-amperes] each, for a total of 36 MW [(alternating current)] [,] paired with "a 36 MW/144 [MWh BESS] that consists of approximately forty (40) 40-foot ISO containers with approximately 6 MWh of storage capacity per container."^^23

The BESS will connect directly to the PV component of the Project and will charge energy collected from the PV component for dispatch onto HECO's system through HECO's 46 kV sub-transmission system on the Waiau-Mililani line fed out of HECO's Waiau Substation.^^24

Waiawa Solar "represents and warrants that, as of the Commercial Operations Date ('COD') of the [Project],^^25 the

---

^^23Application at 13.

^^24Application at 13-14.

^^25The "Commercial Operations Date" is defined by the PPA as the "date on which the Facility first achieves Commercial Operations." Application, Exhibit 1 at 150. "Commercial Operations" is further defined by the PPA as HECO’s "satisfaction"
[Project] will be a qualified renewable resource under the
[Renewable Portfolio Standards ("RPS")26] in effect as of the
effective date of the PPA ("Effective Date")."27 Accordingly,
based on Seller's representation and warranty, any and all energy
delivered by Seller to [HECO] from or through the [Project]
throughout the term of the PPA will meet the definition of
'renewable electrical energy' or 'renewable energy' as defined
under HRS §§ 269-91 as of the Effective Date."28

D.

Material Terms Of The PPA

The salient terms of the PPA are summarized below.29 In
general, HECO states that "[t]he PPA contains commercial and

26See HRS §§ 269-91, -92, -93, -94, -95, and -96.

27Application at 14. The "Effective Date" is defined by the
PPA as "the last to occur of (i) the Non-appealable PUC Approval
Order Date and (ii) the date that the Interconnection Requirements
Amendment . . . is executed and delivered as such date is set forth
in the Interconnection Requirements Amendment." Id., Exhibit 1
at 153.

28Application at 14.

29The terms and conditions of the PPA are also summarized in
Exhibit 4 to the Application. In addition, the complete PPA is
attached as Exhibit 1 to the Application. Citations to the PPA
technical terms that are fair to both parties while also serving to protect [HECO] and its customers from certain risks associated with the Seller's development, interconnection and operation of the [Project]."\textsuperscript{30}

**Term:** The initial term ("Term") of the PPA is twenty (20) years following the Commercial Operations Date.\textsuperscript{31} Upon expiration of the Term, HECO and Waiawa Solar "may negotiate terms and conditions of an extension term as provided for in the PPA . . . , including reduced Contract Pricing in light of the circumstances, subject to the Commission's approval of any new or amended PPA."\textsuperscript{32}

**Commission Approval and Associated Termination Rights:**

HECO and Waiawa Solar are required to use "good faith efforts to obtain, as soon as practicable," a satisfactory commission order approving the PPA within twelve (12) months of the execution date of the PPA.\textsuperscript{33} If a satisfactory commission order is not issued within twelve (12) months, or within a longer period as agreed to will be by the Application's "Exhibit 1" numbers, rather than the PPAs' internal page numbering.

\textsuperscript{30}Application at 17.

\textsuperscript{31}Application, Exhibit 4 at 2.

\textsuperscript{32}Application, Exhibit 4 at 2 (citing Exhibit 1 at 70, § 12.1).

\textsuperscript{33}Application, Exhibit 4 at 2-3 (citing Exhibit 1 at 70-72, § 12.3).
by HECO and Waiawa Solar, either HECO or Waiawa Solar may, within one hundred eighty (180) days of such date, issue written notice declaring the PPA null and void.\textsuperscript{34} Similarly, if a commission approval order is issued within twelve (12) months but is appealed, and a non-appealable commission order approving the PPA is not obtained within twenty-four (24) months from the date the Application was filed, either HECO or Waiawa Solar may, within ninety (90) days of such date, by written notice declare the PPA null and void.\textsuperscript{35}

HECO clarifies that "[t]imeframes for [commission] approval were set based on the Project's need to move forward as expeditiously as possible to safe harbor the federal Business Energy Investment Tax Credit ('ITC') at 18% for 2019."\textsuperscript{36} However, HECO also clarifies that "in the event Seller is unable to safe harbor the ITC and the PPA is not declared null and void pursuant to the terms of the PPA, the contract price negotiated in the PPA will not be increased or subject to adjustment."\textsuperscript{37}

\textsuperscript{34}Application, Exhibit 4 at 3 (citing Exhibit 1 at 74, § 12.6(b))

\textsuperscript{35}Application, Exhibit 4 at 3.

\textsuperscript{36}Application, Exhibit 4 at 3.

\textsuperscript{37}Application, Exhibit 4 at 3.
Company Right to Declare PPA Null and Void Prior to Effective Date: HECO may declare the PPA null and void prior to the Effective Date for the following reasons:

(A) Seller makes material changes in the type of, or performance specifications of, the equipment that affects the results of the IRS or Project schedule;

(B) Seller is in material breach of any of its representations, warranties and covenants under the PPA, including, but not limited to, Seller's responsibility to obtain certain Land Rights and Governmental Approvals and Seller's payment requirements to HECO for interconnection facilities;

(C) Seller, after making payment for the interconnection facilities, requests in writing that [HECO] stop or otherwise delay the performance of work for which [HECO] received such payment; and

(D) Seller notifies [HECO] in writing that it desires to modify the PPA and/or the [Project], except as expressly provided for in sections 12.4 of the PPA or section 5(f) of Attachment A of the PPA.  

Pricing - Lump Sum Payment: In general, this PPA is "a new model PPA" that was developed in response to the Hawaiian Electric Companies' "Stage 1 Request for Proposals for Variable Renewable Dispatchable Generation ('RFP')." This new

38Application, Exhibit 4 at 3-4 (citing Exhibit 1 at 73, § 12.5).

PPA model "provides a contractual vehicle to integrate more renewable energy, provide flexibility on the [HECO] Companies' grids, and address financing risks previously associated with curtailment[,]" particularly by "giv[ing] the Companies the contractual flexibility to dispatch renewable energy facilities" in exchange for providing developers with a fixed monthly payment based on the availability of the renewable facility ("Lump Sum Payment"). 40

Consequently, the PPA does not provide for any energy payment; rather, "the Lump Sum Payment is made in exchange for the right to dispatch the [Project's] energy production." 41 The Project's energy projection is valued based on an estimated Net Energy Potential ("NEP") for the Project, which "represents the theoretical annual energy delivery of the [Project's] [PV] system to the Point of Interconnection [with HECO] assuming 'typical' availability and 'representative' meteorological conditions at the [Project] site, with a probability of exceedance of 95%." 42 The Lump Sum Payment amount will be adjusted "from time to time as the MWh value assigned to the [Project's] NEP is reassessed as provided in the PPA[,]" but which will be "made on

40 Application, Exhibit 4 at 1.
41 Application, Exhibit 4 at 6.
42 Application, Exhibit 4 at 6.
the basis of the 'Unit Price' of $0.095925727 per kilowatt-hour ("kWh") of NEP, as specified in the PPA."  

**Pricing - Liquidated Damages:** Liquidated damages ("Liquidated Damages") are assessed when/if Waiawa Solar fails to achieve certain Performance Metrics that indicate that HECO "is not receiving the benefit of its dispatch rights over the [Project’s] energy production." Liquidated Damages are assessed based on the full Lump Sum Payment amount and "have the potential to reduce the Lump Sum Payment down to zero if the [Project] is completely unavailable or if the [Project] is available but underperforming in other aspects as measured by the Performance Metrics." The Performance Metrics include:

1. The Equivalent Availability Factor ("EAF") Performance Metric, which is used to evaluate the availability of the PV System for dispatch by HECO;

2. The Guaranteed Performance Ratio ("GPR") Performance Metric, which is used to evaluate the efficiency of the PV system;

---

43Application, Exhibit 4 at 6. HECO states that the Unit Price was calculated based on the Lump Sum Payment and MWh value of the Project's NEP as provided by Waiawa Solar in its RFP Response. Id. at 7.

44Application, Exhibit 4 at 7.

45Application at 15.
3. The BESS Capacity Performance Metric, which is used to confirm the capability of the BESS to discharge as required by the terms of the PPA;

4. The BESS EAF Performance Metric, which is used to determine whether the BESS is meeting its expected availability; and

5. The BESS Equivalent Forced Outage Factor ("EFOF") Performance Metric, which is used to evaluate whether the BESS is experiencing excessive unplanned outages.\(^46\)

In the event that Waiawa Solar fails to achieve one or more of the Performance Metrics, there is a Liquidated Damages amount that is associated with such failure.\(^47\) Liquidated Damages relating to the PV system are calculated on the basis of the full Lump Sum Payment.\(^48\) Liquidated Damages relating to the BESS are calculated on the basis of the BESS Allocated Portion of the Lump Sum Payment for an applicable three-month period (which is referred to in the PPA as a "BESS Measurement Period").\(^49\)

**Pricing - Other Adjustments:** The Lump Sum Payment may also be adjusted based on the report of the Project's NEP by an

\(^{46}\)Application, Exhibit 4 at 5.

\(^{47}\)Application, Exhibit 4 at 5.

\(^{48}\)Application at 15, and Exhibit 4 at 5.

\(^{49}\)Application, Exhibit 4 at 5.
independent engineer ("IE") at the close of Seller’s construction financing, but before commercial operation of the Facility. If the IE finds that the Project’s NEP is equal or greater to the NEP estimate provided in Seller’s RFP Response, the Lump Sum Payment specified in the Application will apply for the first fifteen (15) months following commercial operation of the Project. However, if the IE determines that the Project’s NEP is less than the NEP estimate in Seller’s RFP Response, Seller may either: (1) declare the PPA null and void; or (2) use the IE’s NEP estimate to reduce the Lump Sum Payment used during the first fifteen (15) months following commercial operation of the Project as well as pay a one-time Liquidated Damages calculated on the basis of $10/MWh of the differential between the two NEP estimates.\(^\text{50}\)

**Company’s Right of First Negotiation to Purchase the Project:** In the event Waiawa Solar wishes to assign its interest in the Project or effect a change of control, HECO has the first right to negotiate for purchase of the Project.\(^\text{51}\) Additionally, "in the event that [HECO] is subject to consolidation treatment

---

\(^{50}\text{Application, Exhibit 4 at 7-8.}\)

\(^{51}\text{Application, Exhibit 4 at 8 (citing Exhibit 1 at 105, § 19.1; and Exhibit 1 at 294-307, Attachment P). The PPA also provides for limited instances of "exempt sales" to which HECO’s right of first negotiation does not apply. See Exhibit 1 at 296-297, Attachment P, § 1(c).}\)
under [Financial Accounting Standards Board Accounting Standards Codification (‘FASB ASC’)] 810 and/or lease treatment under FASB [ASC] 842 . . . with respect to Seller and the [Project], . . . [HECO and Seller] may effectuate a sale of the [Project] to [HECO] [(upon commercially reasonable terms at a fair market value)].”\(^5^2\)

HECO clarifies that any such purchase of the Project by HECO “shall be subject to application to the Commission for approval, and, prior to consummation, formal Commission approval of such purchase.”\(^5^3\)

Similarly, at the end of the PPA Term, HECO has the right of first negotiation to purchase the Project.\(^5^4\)

**Compliance with Laws and Regulations: ** Under the PPA, Waiawa Solar is responsible for:

- (A) obtaining any and all necessary permits, governmental approvals, and land rights for the construction and operation of the Project;

- (B) installing, operating, and maintaining the Project safely and in compliance with all applicable laws; and

- (C) Prior to commencement of construction of the Company-owned Interconnection Facilities, providing the necessary permits, government approvals, and land

\(^5^2\)Application, Exhibit 4 at 8-9 (citing Exhibit 1 at 124-25, § 24.5; and Exhibit 1 at 306-307, Attachment P, § 6).

\(^5^3\)Application, Exhibit 4 at 9.

\(^5^4\)Application, Exhibit 4 at 10 (citing Exhibit 1 at 294-307, Attachment P).
rights for construction, ownership, operation, and maintenance of the Company-Owned Interconnection Facilities.\textsuperscript{55}

Site Restoration: After termination of the PPA, or if the PPA is declared null and void, Waiawa Solar will, upon HECO's request, remove all Company-Owned Interconnection Facilities and Seller-Owned Interconnection Facilities from the land and restore the land to its condition prior to construction (alternatively, HECO may elect to remove all or part of the Company-Owned Interconnection Facilities and/or Seller-Owned Interconnection Facilities, in which case Waiawa Solar will reimburse HECO for the cost of removal).\textsuperscript{56}

Company Dispatch: HECO will have discretion to dispatch the Project, including the PV system and BESS, in its preferred manner.\textsuperscript{57}

Credit Assurances and Security: Waiawa Solar is required to post and maintain Development Period Security and Operating Period Security.\textsuperscript{58}

\textsuperscript{55}Application, Exhibit 4 at 9 (citing Exhibit 1 at 67-69, §§ 11.1 - 11.3).

\textsuperscript{56}Application, Exhibit 4 at 9 (citing Exhibit 1 at 250-251, Attachment C, § 7).

\textsuperscript{57}Application, Exhibit 4 at 10 (citing Exhibit 1 at 62-63, Article 8; and Exhibit 1 at 228-229, Attachment B, § 9(d)).

\textsuperscript{58}Application, Exhibit 4 at 10 (citing Exhibit 1 at 84-88, Article 14).
Guaranteed Commercial Operations Date, Project Milestones: HECO and Waiawa Solar have agreed to develop certain "Guaranteed Project Milestones" to keep the Project on schedule, as set forth in Article 13. "Failure to meet Guaranteed Project Milestones subjects Seller to daily delay damages [(‘Daily Delay Damages’)] and eventual termination for failure to cure."^59

The milestones will be developed following the completion of the IRS, with the intent of meeting the Guaranteed Commercial Operations Date ("GCOD") of December 31, 2021. In the event the IRS shows that a December 31, 2021 GCOD is commercially unreasonable, the date can be amended; however, "in no event shall the [GCOD] be extended beyond December 1, 2022."^61

If a Project milestone is not achieved by the applicable deadline, Waiawa Solar shall pay Daily Delay Damages to HECO in the amount of $10,000 per day following the 10th day after the applicable milestone deadline, not to exceed ninety (90) days for each missed milestone. If the GCOD is not achieved by its

---

59Application, Exhibit 4 at 10 (citing Exhibit 1 at 77-83, Article 13).

60See Application, Exhibit 1 at 276-277, Attachment K.

61Application, Exhibit 1 at 77, § 13.3. See also, id. at 277, Attachment K.

62Application, Exhibit 1 at 78-81, § 13.4. See also, HECO Response to CA/HECO-IR-1, Attachment 1 at 7, filed February 1, 2019.
applicable deadline, Waiawa Solar shall pay HECO Daily Delay Damages for up to three hundred (300) days; provided, however, that if the delay is solely attributed to Waiawa Solar's inability to obtain a required building permit within six (6) months of its timely filing of an application, Daily Delay Damages during the last one hundred twenty (120) days of the three hundred (300) day damages period shall be discounted by fifty percent (50%).

II.
PARTIES' AND PARTICIPANT'S POSITIONS

A.

HECO

In support of its Application, HECO puts forth a number of justifications, including: (1) the Project is the result of a competitive bidding procurement process; (2) the Project is advantageous due to the discretion it provides HECO regarding the dispatch of energy from the Project's PV system and/or BESS; (3) the PPA represents a new model of Renewable Dispatchable Generation ("RDG") PPA which contains many advantageous terms that protect HECO, and its customers, and represents improvements over prior PPAs; (4) the PPA's unit price is fixed for the duration of the PPA and is anticipated to result in lower effective rates for

63Application, Exhibit 1 at 77-81, §§ 13.3 and 13.4.
customers; (5) the Project is expected to provide bill savings for customers over the term of the PPA; and (6) the Project will reduce HECO's consumption of fossil fuel, resulting in a reduction of greenhouse gas ("GHG") emissions and progress towards the State's RPS goals.64

**Competitive Bidding Process.** HECO states that the PPA is the result of the Stage 1 RFP process established in Docket No. 2017-0352. Briefly, Docket No. 2017-0352 was established to "receive[] filings, review[] approval requests, and resolv[e] disputes relating to the [HECO] Companies' plans to acquire new renewable energy generation."65 HECO, along with the other HECO Companies, submitted a draft RFP for variable RDG, which was then reviewed and vetted by stakeholders and the commission and ultimately approved by the commission on February 20, 2018.66 Stage 1 of the RFP required proposals with GCODs no later than December 31, 2022, in order to take advantage of the 2019 ITC, and "represents the largest energy procurement undertaking in Hawaiʻi's history."67

---

64See Application at 7-9.

65Application, Exhibit 2 at 1.

66See Application, Exhibit 2 at 1-2.

67Application, Exhibit 2 at 3.
The RFP "was specifically designed to include the following characteristics: technology agnostic, not specifying a maximum size requirement, allowing projects to be sited at developer-defined sites, and allowing for variations within proposals (including the option to pair storage with generation), which provided the benefits of encouraging broader developer participation as well as allowing the market to dictate technology and price."68 "In order to maintain a competitive and fair process, the [HECO] Companies followed the Commission’s Framework for Competitive Bidding . . . with only minor modifications."69

HECO first divided the RFP proposals into separate "buckets" to ensure that proposals of "like" technology would be evaluated against each other. Proposals within each bucket were evaluated using both price-related and non-price related criteria. The highest-ranking proposals from each bucket were then placed on a "short list" and invited to update their proposals to reach their best and final offer ("BAFO"). The short-listed BAFOs were then evaluated by assessing the proposed costs of the delivered energy and operating characteristics of each proposed project to reach a Final Award Group of eight

68Application, Exhibit 2 at 3-4.

69Application, Exhibit 2 at 4. The commission’s Framework for Competitive Bidding was established in Docket No. 03-0372 by Decision and Order 23121, filed December 8, 2006.
proposals, which were then allowed to proceed with contract negotiations with the HECO Companies. The subject PPA is one of the results of these negotiations.\(^{70}\) In addition, Bates White LLC served as the commission-appointed Independent Observer ("IO") throughout the entire evaluation process.\(^{71}\)

**Project Dispatchability.** According to HECO:

The key benefit of the [Project], contracted through the RDG PPA, is that the Company will be able to utilize attributes of the [Project] to best meet the needs of the Company's system. Having the [PV] system paired with a [BESS] adds significant value to the [Project] by allowing the energy produced during the day that cannot be readily accepted by the Company to be stored and dispatched to the Company's system at future times of higher customer demand, which is more beneficial to the Company's system than past projects that required instantaneous use of energy produced. [HECO] anticipates that it will dispatch the [BESS'] stored energy to [HECO's] grid to, among other things, help with ramping towards [HECO's] periods of peak energy demand (rather than ramping up conventional generation), offset night time fossil fuel generation, and assist in grid stabilization subject to discharge limits.\(^{72}\)

**Curtailment.** HECO states that "[t]he Project is not expected to increase curtailment of existing as-available

\(^{70}\)Application, Exhibit 2 at 5-6.

\(^{71}\)Application, Exhibit 2 at 5.

\(^{72}\)Application at 14-15.
renewable resources or impede consideration of additional renewable resources to [HECO's] system[.]”  

Pricing. The PPA establishes a “Unit Price” of $0.095925727 per kWh. The Unit Price is then multiplied by the NEP to determine the monthly Lump Sum Payment. Additionally, as noted above, this amount may be subject to discount in the event Liquidated Damages are assessed.  

HECO notes that the Unit Price “is advantageous in that it is fixed for the duration of the PPA and anticipated to result in lower effective rates for customers.”  

Bill Savings. HECO estimates that the Project will provide bill savings to customers for the term of the PPA.  

Energy Policy Considerations. Both the PPA and Project are consistent with the Hawaiian Electric Companies’ PSIP Update Report: December 2016, filed December 23, 2016, in Docket

---

73Application at 3.
74Application, Exhibit 1 at 177.
75Application, Exhibit 1 at 269 (Attachment J, § 3) (calculating the Lump Sum Payment as 1/12th of the product of the Unit Price multiplied by the NEP Benchmark, subject to periodic adjustments to the NEP Benchmark throughout the term of the PPA).
76See Application at 15.
77Application at 8.
78See Application, Exhibit 3 at 5 and Attachment 4 (reflecting bill savings for a typical residential customer using 500 kWh of electricity per month).

HECO estimates that the renewable energy supplied by the Project will result in avoiding approximately 1,084,388 barrels of fuel and approximately 29 tons of coal over the initial term of the PPA. Specifically, HECO anticipates avoiding 12,339 barrels of diesel fuel and 1,260,980 barrels of ultra-low sulfur diesel fuel, but also experiencing increases of approximately 176,086 barrels of low sulfur fuel oil and 12,845 barrels of biodiesel fuel. HECO also estimates that the Project will avoid approximately 517,436 tons of GHG emissions over the PPA term.

HECO asserts that these estimated results are consistent with objectives identified in HRS § 226-18(a), including:

"(1) Dependable, efficient, and economical statewide energy systems capable of supporting the needs of the people; (2) Increased energy self-sufficiency where the ratio of indigenous to imported energy use is increased; (3) Greater energy

---

79Application, Exhibit 3, Attachment 3 (confidential) (January 11, 2019 supplement). See also, HECO Response to PUC-HECO-IR-01, filed February 19, 2019 (explaining reason for January 11, 2019 update).

80Application, Exhibit 3, Attachment 3 (confidential) (January 11, 2019 supplement).

81Application at Exhibit 5.
security and diversification in the face of threats to Hawaii’s energy supplies and systems; and (4) Reduction, avoidance, or sequestration of greenhouse gas emissions from energy supply and use.®2

Similarly, HECO maintains that the PPA and Project are relevant to the considerations listed in HRS § 269-6(b), which require the commission to “explicitly consider, quantitatively or qualitatively, the effect of the State’s reliance on fossil fuels on price volatility, export of funds for fuel imports, fuel supply reliability risk, and greenhouse gas emissions.”®3

HECO also refers to the State’s RPS goals, which require each of the State’s electric utility companies to establish a RPS of: (a) 10% of its net electricity sales by December 31, 2010; (b) 15% of its net electricity sales by December 31, 2015; (c) 30% of its net electricity sales by December 31, 2020; (d) 40% of its net electricity sales by December 31, 2030; (e) 70% of its net electricity sales by December 31, 2040, and (f) 100% of its net electricity sales by December 31, 2045.®4 HECO estimates that the

®2Application at 10 (citing HRS § 226-18(a)).
®3Application at 10-11 (citing HRS §. 269-6(b)).
®4Application at 11 (citing HRS § 269-92(a)).
Project will have an average impact of 1.6% toward meeting HECO’s RPS goal over the Term of the PPA.\textsuperscript{85}

B. The Consumer Advocate

The Consumer Advocate recommends approving HECO’s PPA-related requests, subject to certain conditions.\textsuperscript{86} In reaching this recommendation, the Consumer Advocate states that it considered: (1) the procurement process; (2) the pricing associated with the proposed PPA; (3) the terms and conditions of the proposed PPA; and (4) community outreach.\textsuperscript{87}

**Procurement Process.** The Consumer Advocate notes the history behind the procurement of the PPA, including the RFP process established and conducted in Docket No. 2017-0352.\textsuperscript{88} While not appearing to object to the process itself, the Consumer Advocate does raise concerns over the fact that “all four developers associated with the seven projects with PPAs currently before the Commission\textsuperscript{89} are represented by the same counsel:

\begin{itemize}
  \item Application, Exhibit 6 at 1.
  \item Consumer Advocate SOP at 1.
  \item Consumer Advocate SOP at 11.
  \item See Consumer Advocate SOP at 11-12, and Attachment 1.
\end{itemize}
Yamamoto Caliboso, a Limited Liability Law Company ('Yamamoto Caliboso').

The Consumer Advocate notes that the HECO Companies have stated that they "did not discuss concerns [with the IO] during the evaluation and selection process that multiple projects were represented by the same legal counsel[,]" but that "the issue was considered and discussed by the Company and the [IO] during contract negotiations." Additionally, after reviewing the IO's report on the procurement process, the Consumer Advocate observes that the IO "focus[ed] on whether the [HECO] Companies' evaluations were transparent and reasonable and done 'on a fair and consistent basis[,]'" and "do not appear to have raised any issues regarding the process or with the terms that were ultimately negotiated." "As such, the Consumer Advocate notes that there is no evidence of collusion thus far between developers, that developers were required to agree to a 'Certificate of Non-Collusion acknowledgement,' and that the IOs did not identify terms that appeared unreasonable resulting from the PPA negotiations."

---

90 Consumer Advocate SOP at 12.
91 Consumer Advocate SOP at 15 (citing HECO Response to CA/HECO-IR-25.a, filed March 1, 2019).
92 Consumer Advocate SOP at 15.
93 Consumer Advocate SOP at 17.
That being said, the Consumer Advocate is still "concerned that having one attorney lead negotiations for all four developers' PPAs gives rise to, at a minimum, the appearance of impropriety[,]" and contends "that this issue should be addressed in future competitive procurements to mitigate the possibility of similar circumstances."\(^94\)

**PPA Pricing.** The Consumer Advocate asserts that, "[n]otwithstanding that the selected projects were the result of an RFP process and that the prices do reflect a downward trend from PPA prices approved in the past, . . . given the nature of the RDG PPA contracts, which essentially guarantees payment as long as the capacity is available, as well as the declining price trends for renewable and storage technologies, it is important to assess whether the selected projects reflect reasonable prices with reasonable returns instead of reflecting 'sticky' prices [i.e., prices that are slow to respond to new market forces]."\(^95\)

In this regard, the Consumer Advocate maintains that the information provided by Waiawa Solar was "inadequate to support a definitive determination as to whether the Lump Sum Payments appear reasonable on [sic] based on project costs."\(^96\) That being said,

\(^94\)Consumer Advocate SOP at 17-18.

\(^95\)Consumer Advocate SOP at 21-22.

\(^96\)Consumer Advocate SOP at 22 (emphasis in the original). The Consumer Advocate notes that, at the time it filed its Statement of
the Consumer Advocate acknowledges that project costs are not the only consideration and that "the Commission may still find the PPA pricing reasonable based on other measures such as projected system and bill savings, recent PV plus BESS project pricing and national or regional cost studies."\textsuperscript{97}

Additionally, the Consumer Advocate observes that the PPA utilizes "fixed pricing, which is more consistent with the nature of the projects, where there is an upfront cost to build the project and little or no cost associated with the energy and other services to be delivered to the grid[,]" and which "significantly reduces price volatility, which can be detrimental to customers, especially those on a fixed income or with limited means to deal with volatility that . . . has been observed with fossil fuel prices."\textsuperscript{98}

\footnotesize{Position on March 6, 2019, instead of providing the native excel file of Waiawa Solar’s pro forma, a PDF copy of the table was provided, which did not allow the Consumer Advocate to view the calculations behind cells. \textit{Id.} at 20.}

\footnotesize{Waiawa Solar later clarified that it subsequently provided the Consumer Advocate with a copy of the native Excel file of the pro forma on March 7, 2019. See Letter from D. Morris To: Commission Re: Docket No. 2018-0435 – Waiawa Solar Power LLC’s Supplemental Responses to Consumer Advocacy’s Information Requests, CA/Waiawa-IR-1 and IR-9, filed March 11, 2019.}

\textsuperscript{97}Consumer Advocate SOP at 22.

\textsuperscript{98}Consumer Advocate SOP at 24.
Terms and conditions of the PPA. The Consumer Advocate observes that the PPA "represents an evolution from earlier contracts," which included "seniority curtailment provisions, evergreen terms, and [Risk Adjusted Pricing ('RAP')]" and "supports the underlying reasons why the proposed RDG PPA is being used for these contracts as it eliminates some of the terms and conditions that were not in the best interest of the public."\textsuperscript{99} For example, the Consumer Advocate notes that the seniority curtailment provision, which was incorporated into prior renewable energy PPAs, resulted in a rigid dispatch queue based on seniority which had the effect of "stifl[ing] innovation and new projects even while there were declining price trends and improvements in renewable energy technology since developers would be hesitant to enter into a contract with uncertainty surrounding the amount of energy that would be purchased on a regular basis."\textsuperscript{100}

However, the Consumer Advocate observes that the PPA is "for [a] very long term[[]", which, "during times of declining price trends and improvements in technology, . . . arguably stifle innovation since . . . the utility is locked into long-term contracts for available capacity."\textsuperscript{101} Furthermore, as the PPA is

\textsuperscript{99}Consumer Advocate SOP at 23.
\textsuperscript{100}Consumer Advocate SOP at 23.
\textsuperscript{101}Consumer Advocate SOP at 24.
"essentially [a] capacity contract[]," for which HECO provides payment as long as capacity is available, the Consumer Advocate states that this "represents a significant transference of risk to customers since regardless of whether there is a need for [the] Project's capacity, customers will bear the cost of the Project."\(^{102}\)

That being said, the Consumer Advocate recognizes the work of the IO in overseeing: (1) the procurement process and evaluating each bidders' pricing to determine the final award group; and (2) the negotiations between HECO and Waiawa Solar in reaching agreement on the other terms and conditions of the PPA, and concluding that the terms of the PPA are reasonable, retain value to HECO's customers, and do not exhibit any preferential treatment by HECO.\(^{103}\)

**Community outreach.**

The Consumer Advocate notes that Waiawa Solar states that it has received positive input from the community regarding the Project.\(^{104}\) Additionally, the Consumer Advocate observes that Waiawa Solar "has committed to a community benefits package as

\(^{102}\)See Consumer Advocate SOP at 24-25.

\(^{103}\)See Consumer Advocate SOP at 25.

\(^{104}\)See Consumer Advocate SOP at 26 (citing Application, Exhibit 8; and Waiawa Solar Response to CA/WAIWA-IR-6, filed February 8, 2019).
part of its Agreement to Grant Easement and Grant of Easement with Kamehameha Schools.\textsuperscript{105}

Summary. The Consumer Advocate states that, based on its expedited review of the PPA, there do not appear to be any "'fatal' flaws\textsuperscript{.}"\textsuperscript{106} "The Consumer Advocate recognizes that the aggressive schedule was set to meet project timelines that would enable developers to take advantage of the [ITC] credits that are set to start declining in 2019[,]" and further recognizes that the PPA "will also provide other benefits by contributing to the State's goals of renewable energy, providing a contribution to the [RPS] . . . , lower[ing] fossil fuel usage, reduc[ing] . . . greenhouse gas emissions and [providing] a hedge to fossil fuel prices[,]."\textsuperscript{107} Furthermore, notwithstanding its stated concerns regarding the capacity contract nature of the PPA, the Consumer Advocate "recognizes the possible benefit of flexibility associated with the [Project], as facilitated by the allowed utility control pursuant to the [PPA], as compared to an as-available project paid on a per kWh basis."\textsuperscript{108}

\textsuperscript{105}Consumer Advocate SOP at 26.

\textsuperscript{106}Consumer Advocate SOP at 27.

\textsuperscript{107}Consumer Advocate SOP at 27.

\textsuperscript{108}Consumer Advocate SOP at 27.
While providing general support for the PPA and Project, the Consumer Advocate recommends the commission adopt the following conditions to address some of the concerns raised in its Statement of Position:

1. HECO should file copies of all invoices relating to the engineering, procurement, construction, and maintenance associated with the PPA no later than sixty (60) days after the Commercial Operations Date, as well as Waiawa Solar's income statements or results of operations related to the PPA;

2. To the extent additional information is necessary, the Consumer Advocate should be allowed to issue IRs to Waiawa Solar as a participant in this proceeding;

3. As it relates to future procurement processes, bidders should be required to file the pro forma information related to their project, in addition to copies of any supporting documentation to support their bid price;

4. The procurement process should be reviewed to examine and develop guidelines, as necessary, to mitigate concerns about multiple bidders using the same representative(s) in negotiations; and

5. Further considerations and discussions should be made in Phase 2 regarding the competitive procurement process, as
discussed on pages 15 to 17 of Attachment 1 to the Consumer Advocate’s Statement of Position.\(^{109}\)

With regard to whether the non-energy payments under the PPA should be included in the PPAC to the extent such costs are not included in base rates, the Consumer Advocate states that “it appears reasonable that the PPAC be utilized to recover the costs associated with capacity payments of the proposed PPA[,] which [i]s its intended purpose.”\(^{110}\) Accordingly, the Consumer Advocate “does not object to the inclusion of the PPA payments in the Company’s PPAC . . . as such costs are not included in another cost recovery mechanism.”\(^{111}\)

C.

Waiawa Solar

In its Statement of Position, Waiawa Solar recommends that the commission find that the purchased power arrangements under the PPA are prudent and in the public interest.\(^{112}\) In support thereof, Waiawa Solar states:

\(^{109}\)Consumer Advocate SOP at 28-29, and Attachment 1 at 15-17.

\(^{110}\)Consumer Advocate SOP at 29 (citing to the commission’s Final Decision and Order in Docket No. 2008-0083, filed December 29, 2010).

\(^{111}\)Consumer Advocate SOP at 29-30.

\(^{112}\)Waiawa Solar SOP at 2-3 and 14. Waiawa Solar also asserts that, “if necessary,” the commission should determine that the
The PPA will provide cost savings to HECO's customers. Waiawa Solar states that the PPA Unit Price of $0.095925727/kWh is "well below the benchmark set forth by the Commission for solar plus battery storage projects." Additionally, due to the fixed nature of the monthly Lump Sum Payment, which provides "certainty of payment that was not present in [HECO's] prior PPA forms[,]" Waiawa Solar states that the Project is "eligible for preferred underwriting criteria from financiers which, in turn, allows Clearway to offer lower prices than would otherwise be possible under one of the prior contract forms." Waiawa Solar also notes that according to HECO's bill impact analysis, the Project is expected to result in monthly savings to a typical residential customer on an annually increasing basis throughout the term of the PPA. Furthermore, Waiawa Solar maintains that the Liquidated Damages provisions of the PPA "ensures that the ratepayer is not paying for services or capacity that it is not receiving."

46 kV line extension should be constructed above the surface of the ground. Id. at 13.


114 Waiawa Solar SOP at 5.

115 Waiawa Solar SOP at 5-6 (citing Application at 15, and Exhibit 3, Attachment 4).

The Project will provide much needed energy storage on Oahu. Waiawa Solar states that the Project includes a BESS facility, which, in addition to offsetting evening peak and night customer loads, can also be used to address the generation shortage that is expected to result from the planned retirement of AES’s 180 MW coal facility on Oahu in 2022.\textsuperscript{117}

The Project will contribute significantly to the State’s RPS, as well as provide other environmental and energy security benefits. Waiawa Solar observes that, according to HECO, the Project is estimated to contribute approximately 1.4% to HECO’s 2022 RPS.\textsuperscript{118} Relatedly, "the Project will help contribute to a cleaner environment for the island . . . . [as] solar energy will offset the use of polluting fossil fuels which will result in improved air and water quality."\textsuperscript{119} Again, referring to HECO’s Application, Waiawa Solar notes that the Project is estimated to displace "approximately 1,084,388 barrels of fuel and 29 tons of coal over the term of the PPA[]."\textsuperscript{120}

\textsuperscript{117}Waiawa Solar SOP at 6.
\textsuperscript{118}Waiawa Solar SOP at 6 (citing Application at 23).
\textsuperscript{119}Waiawa Solar SOP at 6-7.
\textsuperscript{120}Waiawa Solar SOP at 7 (citing Application at 23).
The Project has already made significant development progress. Regarding progress towards completing the Project, Waiawa Solar states as follows.

(1) The Project is in active negotiations with Kamehameha Schools on finalizing the Agreement to Grant Easement and Grant of Easement land agreements in line with a binding letter of intent already in place.\textsuperscript{121}

(2) An Archaeological Inventory Survey ("AIS") and subsurface testing have been completed and indicate that there are three historic properties eligible for protection. The State Historic Preservation Division of the Department of Land and Natural Resources has accepted a Preservation Plan as a condition for approving the AIS.\textsuperscript{122}

(3) An avian, mammalian and vegetation assessment is ongoing and is expected to be completed in March 2019; however, Waiawa Solar observes that the natural conditions at the Project site "are consistent across the larger Waiawa site, and there is a strong expectation of the same results that applied to the old SunE Waiawa Solar project . . . . [for which] no [protected] plants or animals . . . . were detected during field surveys."\textsuperscript{123}

\textsuperscript{121} Waiawa Solar SOP at 7.

\textsuperscript{122} Waiawa Solar SOP at 7-8.

\textsuperscript{123} Waiawa Solar SOP at 8.
(4) A Construction Traffic Assessment was performed for access to the Waiawa site in August 2014 and is currently being updated for the Project site, with expected results in March 2019 (Waiawa Solar states that the State Department of Transportation must accept the Traffic Assessment as part Waiawa Solar's request with the Land Use Commission).\textsuperscript{124}

(5) A "glint and glare analysis" has been commissioned, "which will look at FAA compliance for glint/glare based on the location and orientation of the [P]roject in relation to the major airports. . . . [as well as] impacts to neighboring residential communities."\textsuperscript{125}

The Project is supported by the local community. Waiawa Solar states that "[t]o-date, all input received by Clearway from the community has been positive."\textsuperscript{126} According to Waiawa Solar, "Clearway's community outreach to-date on behalf of the Waiawa Solar project has included one-on-one meetings with elected officials and community leaders, as well as a community open house . . . . [and] solicit[ing] written comments on the project at the community open house and via a dedicated email
address.” Waiawa Solar states that "[o]nly one comment was received at the community meeting, which expressed general support for Clearway's projects."  

In addition, Waiawa Solar states that "[a]s part of the Agreement to Grant Easement and Grant of Easement with Kamehameha Schools, Waiawa Solar has committed to a substantial community benefits package focused on renewable energy education and meeting education goals of the State and Kamehameha Schools. . . .[and will include] outreach to 7 schools in the Mililani Complex and 3 schools in the Waialua Complex."  

In response to the Consumer Advocate’s Statement of Position, Clearway, on behalf of Waiawa Solar, first emphasizes that neither it nor its counsel, Yamamoto Caliboso, engaged in any collusive actions during the RFP process. On this subject, Clearway clarifies: (1) Yamamoto Caliboso was not involved in Waiawa Solar’s initial bid response, or the pricing or commercial terms in Waiawa Solar’s initial response, aside from providing comments on the form of the PPA (which are not related to pricing); (2) Yamamoto Caliboso was not aware of or involved in any pricing or commercial bid discussions at any point in the process from the

127Waiawa Solar SOP at 10.  
128Waiawa Solar SOP at 11.  
129Waiawa Solar SOP at 11.
initial bid through the BAFO and final execution of the PPA; and
(3) Yamamoto Caliboso did not share with Clearway what other
developers were negotiating.\textsuperscript{130} Ultimately, Clearway "stand[s] by
[its] non-collision statements and representations and attest[s] that no collusion indirectly nor in conjunction with
Yamamoto Caliboso or directly in discussions with other developers
took place at any time throughout the competitive bidding process
or PPA negotiations process."\textsuperscript{131}

Second, regarding the Consumer Advocate’s proposed
conditions requiring HECO to file copies of Waiawa Solar’s Project
invoices and income statements or results of operation following
the Commercial Operations Date, Waiawa Solar objects on the basis
that they are "particularly burdensome and provide little value,
other than hindsight[,] which cannot be applied to the pricing in
these projects or reasonably applied to future projects
constructed under different conditions."\textsuperscript{132} Waiawa Solar argues
that the pricing for the Project is based on its pro forma, and
thus, it absorbs all the risk associated with final Project costs
coming in above or below these pro forma estimates.\textsuperscript{133} Accordingly,

\begin{itemize}
  \item \textsuperscript{130}Waiawa Solar SOP at 12; see also, \textit{id.}, Affidavits of
  Patrick Sullivan and Dean T. Yamamoto.
  \item \textsuperscript{131}Waiawa Solar SOP at 12, and Affidavit of Patrick Sullivan.
  \item \textsuperscript{132}Waiawa Solar SOP at 13.
  \item \textsuperscript{133}Waiawa Solar SOP at 13.
\end{itemize}
Waiawa Solar contends that comparing its final capital costs against these pro forma estimates is not appropriate and, furthermore, that the final cost information is highly confidential and should not be shared with HECO "under any circumstances."\(^{134}\)

D.  
HECO Reply

In its Reply Statement of Position, HECO "generally agrees with the . . . recommendations made by the Consumer Advocate in its SOP," and "supports the SOP filed by [Waiawa Solar], to the extent [it] recommends approval of the PPA," but takes no position as to [Waiawa Solar's] other arguments.\(^{135}\)

With regard to the Consumer Advocate's Statement of Position, HECO acknowledges the Consumer Advocate's proposed conditions and addresses them as follows:

1. Re: filing of Project invoices and Seller's income statements or results of operation following the Commercial Operations Date. HECO "does not object to this recommendation in concept," but contends that "[s]ince Seller will maintain such information, . . . the condition should apply to Seller, which is

\(^{134}\)Waiawa Solar SOP at 13.

\(^{135}\)HECO Reply SOP at 1-2.
a participant in this proceeding." (HECO also observes that Waiawa Solar can designate this information as confidential, if desired). 136

(2) Re: requiring bidders to submit pro forma information related to project in future procurement processes, with supporting documentation. HECO agrees with this recommendation and, upon reflecting on the RFP procurement process, "believe[s] that requiring a complete pro forma would have been beneficial to the process and allowed for a more informed evaluation of developers' proposed projects." 137

(3) Re: developing guidelines for the procurement process to mitigate concerns related to potential unaffiliated sellers using the same representative(s) in negotiations. HECO notes that "this appears to be a recommendation for prospective action and not any basis to deny approval of the present Application[,]" and agrees to "specifically address these concerns in Stage 2 of the RFPs." 138

(4) Re: pages 15-17 of Attachment 1 to the Consumer Advocate's Statement of Position. In connection with pages 15 to 17 of Attachment 1 to the Consumer Advocate's Statement

136 HECO Reply SOP at 5-6.
137 HECO Reply SOP at 6.
138 HECO Reply SOP at 7.
of Position, HECO states that "[i]n Stage 2 of the RFPs, the Company will further consider how different metrics are utilized in the evaluation process."\(^{139}\)

Regarding Waiawa Solar's "opposition to the Consumer Advocate's first recommendation . . . as the Company notes above, if the Commission is inclined to adopt this recommendation as a condition to approval, the condition should apply to Seller[.]")\(^ {140}\)

In conclusion, HECO reiterates its request that the commission grant its PPA-related requests.\(^ {141}\)

III.

DISCUSSION

A.

Legal Authorities

Generally, the rates agreed upon between HECO and Waiawa Solar pursuant to the PPA are subject to review under HRS § 269-27.2(c), which provides:

The rate payable by the public utility to the producer for the nonfossil fuel generated electricity supplied to the public utility shall be as agreed between the public utility and the supplier and as approved by the public

\(^{139}\)HECO Reply SOP at 7.

\(^{140}\)HECO Reply SOP at 7.

\(^{141}\)See HECO Reply SOP at 7-8.
utilities commission; provided that in the event the public utility and the supplier fail to reach an agreement for a rate, the rate shall be as prescribed by the public utilities commission according to the powers and procedures provided in this chapter.

The commission's determination of the just and reasonable rate shall be accomplished by establishing a methodology that removes or significantly reduces any linkage between the price of fossil fuels and the rate for the nonfossil fuel generated electricity to potentially enable utility customers to share in the benefits of fuel cost savings resulting from the use of nonfossil fuel generated electricity. As the commission deems appropriate, the just and reasonable rate for nonfossil fuel generated electricity supplied to the public utility by the producer may include mechanisms for reasonable and appropriate incremental adjustments, such as adjustments linked to consumer price indices for inflation or other acceptable adjustment mechanisms.

Additionally, HAR § 6-74-22 states that rates for purchases shall:

1. Be just and reasonable to the electric consumer of the electric utility and in the public interest;

2. Not discriminate against qualifying cogeneration and small power production facilities; and

3. Be not less than one hundred per cent of avoided cost for energy and capacity purchases to be determined as provided in [HAR] 6-74-23 from qualifying facilities and not less than the minimum purchase rate.
Concomitantly, HAR § 6-74-15(b)(1) provides that HAR § 6-74-22 does not prohibit an electric utility or any qualifying facility from agreeing to a rate for any purchase, or terms or conditions relating to any purchase, which differ from the rate or terms or conditions which would otherwise be required by HAR § 6-74-22.

Relatedly, HRS § 269-16.22 states:

All purchase power costs, including cost related to capacity, operations and maintenance, and other costs that are incurred by an electric utility company, arising out of power purchase agreements that have been approved by the public utilities commission and are binding obligations on the electric utility company, shall be allowed to be recovered by the utility from the customer base of the electric utility company through one or more adjustable surcharges, which shall be established by the public utilities commission. The costs shall be allowed to be recovered if incurred as a result of such agreements unless, after review by the public utilities commission, any such costs are determined by the commission to have been incurred in bad faith, out of waste, out of an abuse of discretion, or in violation of law. For purposes of this section, an “electric utility company” means a public utility company as defined under section 269-1, for the production, conveyance, transmission, delivery, or furnishing of electric power.

Similarly, HAR § 6-60-6(2) states:

No changes in the fuel and purchased energy costs may be included in the fuel adjustment clause unless the contracts or prices for the purchase of such fuel or energy have been previously approved or filed with the commission.
HRS § 269-6(b) further provides:

The public utilities commission shall consider the need to reduce the State's reliance on fossil fuels through energy efficiency and increased renewable energy generation in exercising its authority and duties under this chapter. In making determinations of the reasonableness of the costs of utility system capital improvements and operations, the commission shall explicitly consider, quantitatively or qualitatively, the effect of the State's reliance on fossil fuels on price volatility, export of funds for fuel imports, fuel supply reliability risk, and greenhouse gas emissions. The commission may determine that short-term costs or direct costs that are higher than alternatives relying more heavily on fossil fuels are reasonable, considering the impacts resulting from the use of fossil fuels.

B. Procurement Of The PPA

The PPA is the result of Phase 1 of the HECO Companies' competitive procurement process to acquire new, dispatchable and renewable energy resources for Oahu, Maui, and Hawaii Island, which is the subject of Docket No. 2017-0352. In Docket No. 2017-0352, the commission stated its intent:

[T]o 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[.].\textsuperscript{142}

Moreover, the commission stated it "believes the overall RFP[s] timeline should be accelerated to enable finalized PPAs to be submitted to the commission for approval by the end of 2018[,]" and this "accelerated timeline will allow the 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."\textsuperscript{143}

Notwithstanding the foregoing, the commission also said that, "while the existence of a competitive bidding process helps to provide assurances that a bid is selected 'fairly,' this does not act as a substitute for the commission's, or the Consumer Advocate's, independent review of the evidence in determining whether to approve, or recommend approval of, a proposed PPA."\textsuperscript{144}


\textsuperscript{144}Order No. 36169 at 10.
In this proceeding, the Consumer Advocate has expressed concern over the fact that the four developers associated with the seven projects selected through the procurement process are all represented by Yamamoto Caliboso. In particular, the Consumer Advocate is "concerned that having one attorney lead negotiations for all four developers' PPAs gives rise to, at a minimum, the appearance of impropriety." For example, the Consumer Advocate "believes having one attorney or set of attorneys handle all developers' negotiations raises the question, 'Would the terms have been more favorable to consumers (rather than developers) if information regarding utility concessions had not been shared?'"

However, the Consumer Advocate acknowledges that "there is no evidence of collusion thus far between developers, that developers were required to agree to a 'Certificate of Non-Collusion acknowledgment,'[] and that the IOs did not identify terms that appeared unreasonable resulting from the PPA negotiations." Given that "the potential savings from the proposed PPA could yield benefits to consumers and further certain

---

145Consumer Advocate SOP at 12.
146Consumer Advocate SOP at 17.
147Consumer Advocate SOP at 17.
148Consumer Advocate SOP at 17 (internal citation omitted).
State goals" [(e.g. RPS)], the Consumer Advocate states that it "will not object to the proposed PPA on the basis of the possible appearance of impropriety."^{149} Nevertheless, the Consumer Advocate "contends . . . that this issue should be addressed in future competitive procurements to mitigate the possibility of similar circumstances."^{150}

In response to the Consumer Advocate's concerns, Waiawa Solar emphatically states that it did not engage in any collusive efforts, either directly through communication with other developers, or indirectly through Yamamoto Caliboso.^{151} Regarding the negotiations of the PPA, Waiawa Solar asserts that "Yamamoto [Caliboso] did not share any developer-specific information with any other developer during the negotiation process[[],]"and, "[t]o the extent any developers received similar guidance from Yamamoto Caliboso related to the Model RDG PPA in preparing their initial responses to the RFP, such guidance was (1) not the result of information sharing among developers but rather the result of Yamamoto Caliboso's expertise and years of experience in the field of energy law, and (2) of the kind that should be expected by any developer seeking legal advice from a

^{149}Consumer Advocate SOP at 17-18.

^{150}Consumer Advocate SOP at 18.

^{151}See Waiawa Solar SOP at 12, and Affidavit for Patrick Sullivan.
law firm with similar expertise and experience in the field of energy law."\textsuperscript{152} In addition, Clearway, on behalf of Waiawa Solar, further states that "[w]e feel strongly that the alignment of some terms within the PPA is (1) more so an indication of the importance of these revisions that were made to ensure financeability of the PPAs, and (2) the result of HECO's desire to keep terms consistent among the various PPAs."\textsuperscript{153}

Attached to Waiawa Solar's Statement of Position are signed affidavits from Patrick Sullivan, Vice President of Waiawa Solar Power LLC, attesting that "the factual statements and representations made [in its SOP] with respect to Waiawa Solar are true and accurate based on my present knowledge, information, and belief[,]" and Dean T. Yamamoto, Managing Partner of Yamamoto Caliboso.\textsuperscript{154}

In its Reply Statement of Position, HECO states that it "takes no position" as to Waiawa Solar's "other positions and arguments" (i.e., Waiawa Solar's response to the Consumer Advocate's suggestion of a possible appearance of impropriety),\textsuperscript{155} and further notes that notwithstanding the

\textsuperscript{152}Waiawa Solar SOP, Affidavit of Dean T. Yamamoto at 1-2.

\textsuperscript{153}Waiawa Solar SOP at 12.

\textsuperscript{154}Waiawa Solar SOP, Affidavit of Patrick Sullivan and Dean T. Yamamoto

\textsuperscript{155}HECO Reply SOP at 2.
Consumer Advocate's stated concerns, the Consumer Advocate "does not contend that the stated concerns actually affected the integrity of this current procurement process."\footnote{HECO Reply SOP at 7.}

The commission appreciates the Consumer Advocate's concern and acknowledges the accelerated procedural timeline established for this proceeding required the Consumer Advocate to review HECO's Application in an expedited manner.\footnote{See Consumer Advocate SOP at 27.} For purposes of Phase 1 of the competitive procurement process, and in light of the accelerated timeline established for this proceeding, the commission finds the statements made by Waiawa Solar in its Statement of Position, which were attested to by Waiawa Solar's Vice President, Patrick Sullivan, and Waiawa Solar's counsel for this proceeding, Dean T. Yamamoto, through signed affidavits attached to Waiawa Solar's Statement of Position, provide sufficient assurance to the commission that the subject PPA was negotiated in good faith and without collusion.

However, going forward, the commission reserves the right to address issues relating to the appearance of impropriety during Phase 2 of the competitive procurement process in Docket No. 2017-0352.
C. Approving The PPA

1. PPA Terms And Conditions


Lump Sum Payment. As described above, the Lump Sum Payment is payable to Waiawa Solar on a monthly basis and calculated by multiplying the Unit Price by the NEP, which is then offset by Liquidated Damages, if applicable. The Unit Price is fixed at $0.095925727 per kWh of NEP, or approximately $0.10 per kWh, for the Term of the PPA.\footnote{See In re Kauai Island Util. Coop., Docket No. 2017-0443, Decision and Order No. 35538, filed June 20, 2018 (approving contract price of $0.10850/kWh); In re Kauai Island Util. Coop., Docket No. 2017-0018, Decision and Order No. 34723, filed July 28, 2017 (approving contract price of $0.1108/kWh); and In re Kauai Island Util. Coop., Docket No. 2015-0331, Decision and Order No. 33557, filed February 26, 2016 (approving contract price of $0.145/kWh).} 

The commission has recently reviewed and approved several power purchase agreements for PV paired with BESS systems and notices a declining trend in contract pricing.\footnote{Application, Exhibit 1 at 177 and Exhibit 4 at 6-7.} In Docket No. 2017-0018, the commission approved a PV plus BESS power purchase agreement between Kauai Island Utility Cooperative
("KIUC") and AES Kekaha Solar, LLC with a contract price of $0.10850/kWh.\(^{160}\)

The commission observes that, at approximately $0.10/kWh, the Unit Price is below the commission's recent PV plus BESS PPA, and continues the declining pricing trend in procurement of utility-scale renewable generation.

NEP. The NEP is defined by the PPA as:

The estimated single number with a P-Value of 95 for the annual Net Energy that could be produced by the Facility based on the estimated long-term monthly and annual total of such production over a ten-year period. The Net Energy Potential is subject to adjustment as provided in Attachment U (Calculation and Adjustment of Net Energy Potential) to this Agreement, but in no circumstances shall the Net Energy Potential exceed the NEP RFP Projection.\(^{161}\)

In more colloquial terms, as noted above, "[t]he NEP represents the theoretical annual energy delivery of the

\(^{160}\)See Decision and Order No. 35538 at 9. The commission recognizes that the material terms of the PPA in this proceeding are not identical to those in Docket No. 2017-0443, or any of the other identified KIUC dockets. Nevertheless, the contract pricing in those dockets is demonstrative of the declining costs of utility-scale PV plus BESS technology and provides general market context for the PPA's Unit Price of approximately $0.10/kWh.

\(^{161}\)Application, Exhibit 1 at 164 (emphasis added). "Net Energy," in turn, is defined as "[t]he total quantity of electric energy (measured in kilowatt hours) produced by the Facility over a given time period and delivered to the Point of Interconnection, as measured by the revenue meter. 'Net Energy' the equivalent of 'Actual Output.' [sic]" Id.
[Project]'s [PV] system to the Point of Interconnection assuming 'typical' availability and 'representative' meteorological conditions at the site, with a probability of exceedance of 95%.”  

In its RFP, Waiawa Solar projected that the Project would have a NEP of 87,927 MWh per year.  

The NEP is subject to adjustments during the Term of the PPA. The first assessment will occur prior to commercial operation of the Project, following receipt of the IE’s Assessment Report, which will include the IE’s own NEP estimate. If the IE’s NEP estimate is “equal to or greater than the NEP estimate provided in the Seller’s RFP Response, the Lump Sum Payment specified in this Application will apply for the first 15 months following Commercial Operations.” If the IE’s NEP estimate is less than the estimate in Seller’s RFP Response, Seller may either declare the PPA null and void or may accept the IE’s NEP estimate; however, if Seller accepts the IE’s NEP estimate, the IE’s NEP estimate will be used to determine the Lump Sum Payment during the first 15 months following Commercial Operations and Seller must pay a one-time Liquidated Damages penalty (calculated on the basis of $10/MWh of

162 Application, Exhibit 4 at 6.
163 Application at 2, and Exhibit 1 at 340.
164 Application, Exhibit 4 at 7.
165 Application, Exhibit 4 at 7.
the differential between the Seller's NEP estimate and the IE's NEP estimate).\footnote{Application, Exhibit 4 at 7-8.}

'Thereafter, IEs shall conduct periodic operational energy production reports ("OEPR"), which may trigger further recalculations of the Lump Sum Payments.\footnote{See Application, Exhibit 1 at 339-358 (Attachment U, "Calculation and Adjustment of Net Energy Potential") and Exhibit 4 at 8.}

Thus, although the NEP will be adjusted at certain intervals specified by the PPA, the PPA caps the NEP at the amount specified by the RFP (i.e., 87,927 MWh per year). Applying the PPA's Unit Price of $0.095925727/kWh, the maximum Lump Sum Payment under the PPA is $8,434,461 per year, or $702,872 per month.\footnote{Expressed as a mathematical equation: \((0.095925727 \text{ per kWh} \times 1,000) \times 87,927 \text{ MWh per year} = 8,434,461 \text{ per year.}\) $8,434,461 per year/12 months = $702,872 per month.}

Upon considering the PPA's NEP (which is capped at a maximum amount) and Unit Price (which is fixed for the Term of the PPA), the commission finds that the Lump Sum Payment is reasonable because placing a maximum amount payable on the Lump Sum Payment provides more certainty and comparatively less price volatility to fossil fuel prices.\footnote{See HRS § 269-6(b).}

In addition, as noted above, the Unit Price is reasonable when compared to similar PV plus BESS PPAs that have recently been approved by the commission.
Moreover, based on the Lump Sum Payment for this Project, it is anticipated that a typical residential HECO ratepayer using 500 kWh per month will save an estimated $0.77 on electricity payments in 2022, $1.97 in 2031, and $2.58 in 2041.\textsuperscript{170} Additionally, the Project is estimated to provide approximately $237,336,050 in savings (net present value).\textsuperscript{171}

Liquidated Damages. As stated above, Liquidated Damages have the potential to reduce the Lump Sum Payment down to zero if the Project is completely unavailable or underperforming as measured by the Performance Metrics. As discussed above, for the PV system of the Project, these Performance Metrics include: (a) the PV Equivalent Availability Factor ("EAF") Performance Metric, which evaluates the availability of the PV system for dispatch by HECO; and (b) the Guaranteed Performance Ratio ("GPR"), which evaluates the efficiency of the PV system.\textsuperscript{172}

Regarding the BESS system, the Performance Metrics include: (c) the BESS Capacity Performance Metric, which confirms the capability of the BESS to discharge energy as required under the terms of the PPA; (d) the BESS EAF Performance Metric, which determines whether the BESS is meeting its expected availability.

\textsuperscript{170} Consumer Advocate SOP, Attachment 2 at 6.

\textsuperscript{171} Consumer Advocate SOP, Attachment 2 at 7.

\textsuperscript{172} Application, Exhibit 1 at 9-28, and Exhibit 4 at 5.
and (e) the BESS Equivalent Forced Outage Factor ("EFOF") Performance Metric, which evaluates whether the BESS is experiencing excessive unplanned outages.\textsuperscript{173} Liquidated Damages are assessed based on three-month period in question (the "BESS Measurement Period").\textsuperscript{174}

The commission finds that these Performance Metrics will collectively provide cost savings to ratepayers, as well as ensure that ratepayers are not paying for services or capacity if the PV system or the BESS do not meet their expected capability\textsuperscript{175} (as noted above, the NEP for the Project is estimated at 95% capability which will be backstopped by these Performance Metrics).

b. Nature Of The PPA.

The PPA is essentially a capacity contract, under which HECO agrees to pay Waiawa Solar a monthly Lump Sum Payment in exchange for the "contractual flexibility to dispatch the [Project] (both generation and storage)."\textsuperscript{176} Consequently, "even if [HECO] is unable to take any energy from [Waiawa Solar], as

\textsuperscript{173}Application, Exhibit 1 at 9-13 and 28-37, and Exhibit 4 at 5.

\textsuperscript{174}Application, Exhibit 4 at 5.

\textsuperscript{175}See Waiawa Solar SOP at 6.

\textsuperscript{176}Application at 2.
long as the [Project’s] capacity is available, [HECO] will be making payments to [Waiawa Solar]."  
While the Performance Metrics and Liquidated Damages may offset the Monthly Lump Sum payments, in the event no Liquidated Damages are assessed, HECO is required to pay the full amount of the Monthly Lump Sum, regardless if HECO is capable of dispatching all of the Project’s energy during that month. As raised by the Consumer Advocate, this "represents a significant transference of risk to customers since regardless of whether there is a need for the project’s capacity, customers will bear the cost of the project."  

Notwithstanding the Consumer Advocate’s concerns, upon reviewing the record and considering the circumstances of this particular Project, the commission finds that the capacity contract nature of the PPA is reasonable. First, the commission notes that the PPA represents a new model of PPA which, as acknowledged by the Consumer Advocate, represents "an evolution from earlier contracts" and eliminates a number of less desirable provisions, including seniority curtailment, evergreen terms, and RAP.  

177 Consumer Advocate SOP at 24.  
178 Consumer Advocate SOP at 24-25.  
179 See Consumer Advocate SOP at 23.
The commission notes that these previously-included provisions were undesirable due to the impacts they had on curtailment of renewable energy. Under prior PPAs, the seniority curtailment provision provided that renewable PPAs would be curtailed on a seniority basis in reverse chronological order.\textsuperscript{180} As a result, the utility would "curtail deliveries of electric energy from power purchase agreements with the most recent chronological seniority date first, and deliveries under the earliest power purchase agreements last[,]"\textsuperscript{181} which ultimately meant that the newer, more efficient projects were curtailed first, while older, less efficient projects were curtailed last. In addition to curtailing more efficient renewable projects, this provision also discouraged potential Independent Power Producers ("IPPs") from entering into PPAs with the HECO Companies, as the IPPs anticipated that their projects were more likely to be curtailed.\textsuperscript{182}

These concerns subsequently resulted in new contract mechanisms, including RAP, under which the utility would pay an IPP for both electric energy delivered to the utility as well as

\textsuperscript{180}\textsuperscript{180}See In re Maui Elec. Co., Ltd., Docket No. 2015-0225, Decision and Order No. 33537, filed February 18, 2016 ("D&O 33537"), at 13.

\textsuperscript{181}\textsuperscript{181}D&O 33537 at 13.

\textsuperscript{182}\textsuperscript{182}See D&O 33537 at 56.
for "compensable curtailed energy," which is essentially energy from the IPP that the utility is unable to accept.\textsuperscript{183} While providing some assurance and financial stability to IPPs, RAP still constitutes payments for energy that customers cannot use. In prior proceedings, the commission has instructed the HECO Companies to investigate an "alternative mechanism to the current curtailment system[]."\textsuperscript{184}

The present PPA, with its Lump Sum Payment provision, represents an improvement over these prior contract models. Significantly, the addition of the BESS allows the Project to store electric energy received from the PV system, thereby allowing HECO the flexibility to dispatch it at a meaningful time, rather than curtailing it or dispatching it at the expense of curtailing another renewable resource.\textsuperscript{185} This should mitigate concerns regarding curtailment seniority and RAP, as the Project can use its BESS to store energy that HECO cannot immediately dispatch, rather than face curtailment or require complicated pricing mechanisms to provide financial recovery for the IPP.

\textsuperscript{183}See D\&O 33537 at 9-10.

\textsuperscript{184}See D\&O 33537 at 53-54 and 67-68.

\textsuperscript{185}While prior contract models provided IPPs with the ability to "bank" curtailed energy, this is somewhat of a misnomer, in that the curtailed energy is merely credited toward a future term, but is physically lost due to curtailment. See D\&O 33537 at 10-11 and 54-55.
Additionally, the commission finds that having additional capacity on HECO’s system increases system reliability and grid stability in the event, for example, of a shutdown of one or more of its IPPs (e.g., the planned retirement of AES’ 180 MW coal plant in 2022).\textsuperscript{186} Furthermore, as discussed above, the dispatchable nature of the PPA will allow HECO to “best meet the needs of the Company’s system[,]” and HECO “anticipates that it will dispatch the [BESS’s] stored energy to the [HECO] grid to, among other things, help with ramping towards [HECO’s] periods of peak energy demand (rather than ramping up conventional generation), offset night time fossil fuel generation, and assist in grid stabilization subject to discharge limits.”\textsuperscript{187}

That being said, the commission recognizes the Consumer Advocate’s concerns about the capacity-payment nature of the PPA and agrees with the Consumer Advocate’s suggestion that HECO should be “ready to show that resources are being used to maximize the customers’ benefit and not result in adverse impacts including, but not limited to, underutilized or excess capacity resources.”\textsuperscript{188}

\textsuperscript{186}See Waiawa Solar SOP at 6.

\textsuperscript{187}Application at 14-15.

\textsuperscript{188}Consumer Advocate SOP at 27-28.
As such, although the commission finds that the nature of the PPA is reasonable and in the public interest when considering other pricing terms of the PPA, as discussed above, the commission will require HECO to report on Project operations for purposes of accountability, to inform other projects, and to inform related dockets, as follows:

Monthly reporting. Beginning with the first full calendar month following the in-service date of the Project, HECO shall file hourly commitment, dispatch, and curtailment data for the Project and all other HECO and IPP units on the system. The monthly and annual reports shall be filed in Docket No. 2011-0206 and may be consolidated with other curtailment reports therein.

The commission finds that such reporting represents a reasonable step towards improving transparency regarding HECO's use of its renewable resources for the benefit of its customers. Additional reporting requirements may be imposed in other dockets to the extent the commission finds them to be reasonable and in the public interest.

---

189 See e.g., In re Hawaiian Elec. Co., Inc., Docket No. 2017-0213, Decision and Order No. 35556, filed June 27, 2018 ("D&O 35556"), at 63-64.

190 HECO shall work with commission staff to ensure the content of the monthly reports is consistent with this Decision and Order and adequately provides the transparency required herein.
c.

PPA Duration

As noted above, the PPA provides for an initial Term of twenty (20) years following the Commercial Operations Date.191 "Upon expiration of the Initial Term, the PPA automatically terminates[,]" however, "the Parties [to the PPA] may negotiate terms and conditions of an extension[.]"192

The Consumer Advocate notes that the PPA is for a "very long term[,]" and "during times of declining price trends and improvements in technology, such long terms arguably stifle innovation," as HECO's system capacity is already met with "long-term contracts," with the result being that HECO's ratepayers will not be able to receive the benefits of "such market improvements[.]"193

However, as the Consumer Advocate also notes, the IO in Docket No. 2017-0352 concluded that the non-price terms of the PPA are "reasonable" and that during the negotiation of the PPAs, the IOs "observed no undue preference or treatment by [the Company]."194

191Application at Exhibit 4 at 2.
192Application, Exhibit 4 at 2.
193Consumer Advocate SOP at 24.
194Consumer Advocate SOP at 25 (brackets in the original).
Additionally, the PPA will automatically terminate upon the expiration of the initial twenty-year term. While HECO and Waiawa Solar may negotiate for an extended term under the PPA, the PPA requires commission approval. This represents an improvement over previous PPAs, which included so-called "evergreen" provisions, under which the PPA would automatically renew upon the expiration of the initial term, without change in contract provisions. The Consumer Advocate and commission have expressed concern over such evergreen provisions in the past, which have necessitated commission-imposed notice requirements, and the subject PPA's move away from such provisions is a notable improvement.

Moreover, the PPA duration should not be viewed in isolation from the rest of the terms of the PPA. As discussed above, the Unit Price of the PPA is lower than recent PV plus BESS PPA pricing approved by the commission, and the Lump Sum Payment is capped pursuant to the terms of the PPA, thereby limiting the potential cost exposure to HECO's customers.

195See Application, Exhibit 4 at 2.


197See D&O 33036 at 67-70.
Overall, the commission finds that the subject PPA represents a significant step forward, not only towards Hawaii’s renewable energy goals consistent with HRS § 269-6, but also towards lower energy prices. As such, combined with the reporting requirements set forth above, in Section III.C.1.b, the commission finds that the twenty-year Term of the PPA is reasonable and in the public interest.

d.

Curtailment

As discussed above in Section III.C.1.b, above, the PPA contains a number of provisions which address curtailment issues present in prior power purchase agreements, such as seniority curtailment and RAP. As stated by HECO, "[t]he . . . PPA does not include curtailment provisions because . . . the Company will be procuring the ability to dispatch a renewable facility . . . [and] therefore, there would not be curtailment of the Project as experienced under prior PPAs."\(^{198}\) In contrast to prior "as-available renewable projects" with "fixed price energy on a must-take, as-available basis," "[w]ith the operating provisions provided in the . . . PPA, the Company will have the availability to dispatch the [P]roject’s capacity and energy, with the

\(^{198}\)HECO Response to CA/HECO-IR-16.a, filed February 13, 2019.
flexibility for the facility to be used by the Company in the manner to benefit the system as a whole, in real time, based on current conditions, available resources and immediate needs."^199

For similar reasons, HECO states that "addition of this [P]roject is not expected to increase nor decrease the system energy contributions of existing must-take, as-available independent power producer facilities[;]"^200 i.e., the Project should not affect curtailment of existing IPPs. As discussed above, many existing IPPs are curtailed for excess energy in reverse chronological seniority. HECO asserts that flexibility provided by the Project's BESS allows HECO to avoid this issue by "only dispatch[ing] the [Project] when there is a system need for the energy after taking into account energy contributions from existing independent power producer facilities."^201

That being said, HECO acknowledges that "it will not be able to take all of the available energy from the Project in every year of the PPA term[,]" and "[t]he amount of energy accepted . . . from the Project will have some dependence on the other resources on the system, including must-take renewable (distributed and

^199HECO Response to CA/HECO-IR-16.a.

^200HECO Response to CA/HECO-IR-17, filed February 13, 2019.

^201HECO Response to CA/HECO-IR-17.
central station), scheduled, and dispatchable resources.\textsuperscript{202} In other words, at some points during the duration of the Term, it may be necessary to curtail the Project.

HECO also clarifies that while the Project is not expected to increase existing levels of curtailment, it is also not expected to decrease curtailment levels either, as, under the provisions of the PPA, the Project's BESS can only be charged with energy produced by the Project's PV system (versus energy from HECO's system provided by other IPPs).\textsuperscript{203}

Upon review, the commission finds that these considerations do not outweigh the overall reasonableness of the Project. While some curtailment of the Project may occur during the Term of the PPA, the BESS helps to significantly reduce this risk, as compared to prior renewable PV projects. Furthermore, while the Project, due to the PPA's provisions, may not necessarily improve curtailment of other, existing, renewable IPPs, it is not expected to exacerbate or worsen curtailment issues.

Additionally, the commission observes that the reporting requirement described in Section III.C.1.b, above, provides the commission with assurances by providing transparency and accountability for HECO's dispatch decisions. If the commission

\textsuperscript{202}HECO Response to PUC-HECO-IR-5, filed February 26, 2019.

\textsuperscript{203}See HECO Response to CA/HECO-IR-17.
determines that renewable facilities are experiencing significant curtailments as a result of the Project, the commission may investigate this issue as warranted.

e.

Land Use

According to HECO, the Project will be located on approximately 200 acres of vacant Urban land in Pearl City owned by Kamehameha Schools. Waiawa Solar further describes the Project site by its TMK No.: 9-4-004:024 (as noted above, it appears that the correct TMK No. is 9-6-004:024).

Waiawa Solar states that it has a "binding letter of intent" in place with the Project site's landowner, Kamehameha Schools, and is "in active negotiations . . . on finalizing the Agreement to Grant Easement and Grant of Easement land agreements." While Waiawa Solar has not yet received all the necessary permits and/or approvals for the Project, the commission notes that Waiawa Solar has identified the necessary permits and

---

204 Application at 13 and Exhibit 7 at 2.
205 Application at 13.
206 Waiawa Solar SOP at 7. See also, Waiawa Solar Response to CA/WAIAWA-IR-3.a, filed February 8, 2019.
approvals and developed an anticipated timeline of when it expects to receive them.\textsuperscript{207}

Waiawa Solar acknowledges that if it is "unable to procure the required permit in the anticipated timeline, it could push out the start of construction of such activity which could affect [its] ability to meet certain Guaranteed Project Milestones under the PPA."\textsuperscript{208} However, Waiawa Solar also notes that, under several sections of the PPA, it is responsible for obtaining governmental approval for the Project, and thus, has an incentive to diligently pursue completion of the Project's milestones.\textsuperscript{209} In this regard, the commission notes that section 11.1 of the PPA expressly states: "Seller shall obtain, at its expense, any and all Governmental Approvals required for the construction, ownership, operation and maintenance of the Facility and the interconnection of the Facility to the Company System."\textsuperscript{210}

As noted above, the commission has encountered a discrepancy regarding the TMK No. for the Project site as stated in the Application. The Application provides TMK No. 9-4-004:024;

\begin{flushleft}
\textsuperscript{207}See Waiawa Solar Response to PUC-WAIWA-IR-03, Exhibit A, filed February 25, 2019. \textbf{See also}, Waiawa Solar Response to CA/WAIWA-IR-3.b.

\textsuperscript{208}Waiawa Solar Response to PUC-WAIWA-IR-03.d.

\textsuperscript{209}See Waiawa Solar Response to PUC-WAIWA-IR-03.d.

\textsuperscript{210}Application, Exhibit 1 at 67.
\end{flushleft}
however, the commission could not find any record for such a parcel. However, TMK No. 9-6-004:024 corresponds to the address for the Project site provided in the Application; i.e., 96-1110 Waihona Street. Given the similarities between TMK No. 9-4-004:024 and 9-6-004:024, the commission reasonably assumes that the TMK No. in the Application contains a typographical error and the proper TMK No. for the Project site is 9-6-004:024.

In the Application, HECO describes the Project site as "vacant Urban zoned land;" however, the commission notes that the parcel identified by TMK No. 9-6-004:024 is listed as containing both "Agriculture" and "Urban" State Land Use Districts. In addition, it appears that the parcel contains soil classified "A," according to the Land Study Bureau's detailed land classification productivity rating. While land use issues are governed by the Land Use Commission, and beyond the commission's scope of authority and expertise, the commission is aware that HRS Chapter 205 places certain restriction and/or requires specific permits for certain uses on agricultural land.

---

211 See [http://geodata.hawaii.gov/energis/](http://geodata.hawaii.gov/energis/) (providing database searchable by TMK No.).


213 See generally, HRS Chapter 205.
Waiawa Solar represents that it has researched the applicable governmental approval necessary to complete the Project and has a timeline for securing all outstanding governmental approvals. The commission accepts Waiawa Solar's representations regarding government approvals and further notes that, in the event Waiawa Solar fails to obtain the necessary governmental approvals, the PPA provides for the assessment of damages against Waiawa Solar and in favor of HECO, which protect HECO's customers from any potential negative effects related to permitting or other governmental approvals. The commission expects HECO to hold Waiawa Solar accountable to its representations and making diligent progress to complete the Project according to the timeline contemplated by the Application and the PPA.

Specifically, pursuant to the PPA, Waiawa Solar is required to pay Daily Delay Damages to HECO if Waiawa Solar misses a Guaranteed Project Milestone.\textsuperscript{214} Furthermore, "[i]n the event [Waiawa Solar] has not achieved a Guaranteed Project Milestone (other than the Commercial Operations Date) within 90 days of such Guaranteed Milestone Date . . . , then [HECO] has the right to terminate the PPA."\textsuperscript{215}

\textsuperscript{214}Waiawa Solar Response to PUC-WAIAWA-IR-03.d.

\textsuperscript{215}Waiawa Solar Response to PUC-WAIAWA-IR-03.d.
The commission finds that having these delay provisions in the PPA are reasonable in light of Hawaii's mandated RPS goals.\textsuperscript{216} Accordingly, the commission finds that land use issues are satisfactorily addressed by the PPA and through HECO and Waiwa Solar's representations.

However, the commission also finds that the PPA contemplates situations where Daily Delay Damages might be paid from Waiawa Solar to HECO prior to the Commercial Operations Date and the associated Lump Sum Payment.\textsuperscript{217}

According to the PPA, the Lump Sum Payment commences on the Commercial Operations Date.\textsuperscript{218} As such, it is possible that Daily Delay Damages could be paid from Waiawa Solar to HECO prior to the commencement of the Lump Sum Payment, in the event Guaranteed Project Milestones are not met before the Commercial Operations Date. Under these circumstances, if Daily Delay Damages area assessed, they would not be offset by HECO's Lump Sum Payment,

\textsuperscript{216}See, e.g., HRS § 269-92(a).

\textsuperscript{217}See Application, Exhibit 1 at 78-80; and Waiawa Solar Response to PUC-WAIWA-IR-03.d. As noted above, the PPA identifies the Guaranteed Commercial Operations Date of December 31, 2021. Application, Exhibit 1 at 281. Furthermore, HECO states that, for Phase 1 of its RFP competitive procurement process, "Proposals were required to have Guaranteed Commercial Operations Dates no later than December 31, 2022, with the intent that selected Projects would take advantage of the 2019 Investment Tax Credit[...]." Application, Exhibit 2 at 3.

\textsuperscript{218}Application, Exhibit 1 at 8.
because the date to begin the Lump Sum Payment (commencing with the Commercial Operations Date) would not yet have occurred.

According to the PPA, Daily Delay Damages are payable on a monthly basis from the "Development Period Security." Furthermore, "[i]f the Development Period Security is at any time insufficient to pay the amount of the draw to which Company is then entitled, Seller shall pay any such deficiency to Company promptly upon demand."^220

As such, to the extent that Daily Delay Damages are paid to HECO prior to commencement of the Lump Sum Payment, HECO shall credit the amount of the Daily Delay Damages received to its ratepayers through the PPAC.

2.

Community Outreach

Pursuant to the PPA, Waiawa Solar was required to conduct a public meeting in the community where the Project is to be located, with the intent of the meeting to gather stakeholders and other interested parties to inform the community about the Project and to allow for community concerns and questions to be raised.^221

^219Application, Exhibit 1 at 81 (PPA § 13.5).

^220Application, Exhibit 1 at 81 (PPA § 13.5).

^221Application at 18.
Exhibit 8 of the Application contains a summary of Waiawa Solar's community outreach efforts and public comments it received as of the time the Application was filed.222

In response to CA/WAIAWA-IR-6, Waiawa Solar stated that "[o]ur current assessment is that there is community support for this project[,]" and that "[w]e have not heard concerns from the community regarding the project." Likewise, in its Statement of Position, Waiawa Solar states that "[t]o date, all input received by Clearway from the community has been positive."223 Specifically, Waiawa Solar states that it conducted "one-on-one meetings with elected officials and community leaders, as well as a community open house where the public was invited to learn more about the Project[.]

Waiawa Solar states that it received only one comment at the community meeting, "which expressed general support for Clearway's projects."225 In addition, "Waiawa Solar has committed to a community benefits package focused on education outcomes and goals for the State . . . . [which will] include[.]"

222Application at 18 and Exhibit 8. Upon review of Exhibit 8, the commission observes that Clearway apparently combined its community outreach efforts for both its Waiawa Solar Project and its Mililani Solar I, LLC project (Docket No. 2018-0434).

223Waiawa Solar SOP at 10.

224Waiawa Solar SOP at 10.

225Waiawa Solar SOP at 11. See also, Waiawa Solar Response to CA/WAIAWA-IR-6.b.
outreach to 7 schools in the Mililani Complex and 3 schools in the Waialua Complex.  

3. **Conditions To Approval**

To reiterate, the commission finds it reasonable and in the public interest to require HECO to report on Project operations for purposes of accountability and to inform other projects and related dockets. As set forth above, HECO shall comply with the following reporting requirement:

**Monthly reporting.** Beginning with the first full calendar month following the in-service date of the Facility, HECO shall file hourly commitment, dispatch, and curtailment data for the Project and all other HECO and IPP units on the system. The monthly report shall be filed in Docket No. 2011-0206 and may be consolidated with other curtailment reports therein.

Regarding the Consumer Advocate’s proposed conditions, the commission finds as follows:

**Requiring HECO to file invoices related to the Project and Waiawa Solar’s income statements or results of operations related to the PPA.** The Consumer Advocate has proposed a similar

---

226 Waiawa Solar Response to CA/WAIWA-IR-6.d.

227 See D&O 35556 at 63-64.
condition in prior proceedings involving renewable PPAs. In support of its proposal in this proceeding, the Consumer Advocate states that it will allow the Consumer Advocate "to evaluate the comparability of the Project's actual results to the pro forma information consistent with prior Commission decision and orders (e.g., Decision and Order No. 33541, filed on February 19, 2016, in Docket No. 2015-0224)."

While recognizing the Consumer Advocate's concerns, the commission also observes that the circumstances present in this, and the other related RDG PPA proceedings, are distinguishable from Docket No. 2015-0224 and similar dockets. First, in Docket No. 2015-0224, in support of its recommended condition, the Consumer Advocate referenced its concerns regarding the PPA's potential curtailment of renewable resources, such as the seniority curtailment provision. To the extent this underlies the Consumer Advocate's proposal in this docket, the commission notes that the new RDG PPA model does not contain a curtailment

---


229Consumer Advocate SOP at 28.

seniority provision, nor is it expected to impact curtailment of existing renewable IPPs.231

Second, to the extent the Consumer Advocate desires such information to retroactively evaluate the reasonableness of Waiawa Solar's pro forma estimates, the commission observes that the nature of this procurement process has provided a number of safeguards that were not present in prior renewable PPA proceedings. For example, unlike Docket No. 2015-0224, in which a single IPP, Kuia Solar, LLC, negotiated a PPA with Maui Electric Company, Limited in isolation, the PPA with Waiawa Solar is the result of the RFP process. The RFP process itself was the subject of Docket No. 2017-0352, and was carefully reviewed and vetted by the commission and stakeholders. Additionally, unlike prior PPA negotiations that occurred in isolation, the RFP process evaluated multiple bidders concurrently, which added a competitive element to the process, providing further reassurance as to the reasonableness of bid amounts. Furthermore, the RFP process was

231 In this regard, the Consumer Advocate has acknowledged that this RDG PPA "represents an evolution from earlier contracts, such as those that contained seniority curtailment provisions, evergreen terms, and RAP pricing, . . . [and] supports the underlying reasons why the proposed RDG PPA is being used for these contracts as it eliminates some of the terms and conditions that were not in the best interest of the public. Consumer Advocate SOP at 23.
overseen by an IO, which concluded that there was no evidence of collusion and that the PPA terms appeared reasonable.\textsuperscript{232}

Finally, the Project’s costs are not the only consideration in evaluating the reasonableness of the PPA. As discussed above, the Project is expected to provide numerous benefits to HECO’s customers, including monthly bill savings, less fossil fuel consumption, reduced GHG emissions, and grid stabilizing services. Upon considering the record as a whole, the commission is not persuaded that the disclosure of the Project invoices and Waiawa Solar’s income statements, which Waiawa Solar has characterized as highly confidential and sensitive information,\textsuperscript{233} is warranted under these circumstances and, therefore, declines to adopt the Consumer Advocate’s proposed condition.

Requiring bidders to file pro forma information in future procurement processes. Waiawa Solar does not appear to oppose this condition and HECO agrees that such information would “be[] beneficial to the [procurement] process and allow[] for a more informed evaluation of developers’ proposed projects.”\textsuperscript{234}

\textsuperscript{232}See Consumer Advocate SOP at 16-17.

\textsuperscript{233}Waiawa Solar SOP at 13.

\textsuperscript{234}HECO Reply SOP at 6.
The commission observes that this proposal is prospective in nature and does not pertain to the Consumer Advocate's finding of overall reasonableness regarding the subject PPA. Accordingly, the commission declines to adopt this as a specific condition of approval to the PPA. However, to the extent the Consumer Advocate wishes to raise this issue further in Phase 2 of the RFP docket, the Consumer Advocate may do so in Docket No. 2017-0352.

Relatedly, on the issue of submitting pro forma information, the commission notes that in this proceeding, Waiawa Solar was reluctant to provide its pro forma information when requested by the Consumer Advocate and required an order to compel from the commission to produce this information to the Consumer Advocate.\textsuperscript{235} Furthermore, even after being compelled to produce this information, Waiawa Solar provided it in an inaccessible .pdf format, which limited the Consumer Advocate's ability to utilize this information.\textsuperscript{236} While the reasons for Waiawa Solar's conduct are unknown, they appear inconsistent with Waiawa Solar's earlier representations that it would provide "specialized, historical knowledge of the Project," and "not

\textsuperscript{235}See Order No. 36168.

\textsuperscript{236}See Consumer Advocate SOP at 19-20.
broaden the issues or delay the proceeding."^37 Going forward, the commission emphasizes that such information should be timely provided, when deemed necessary so as to avoid the need for commission intervention and delays in proceedings.

Development of guidelines for the procurement process to mitigate concerns related to potential unaffiliated sellers using the same representative(s) in negotiations. HECO agrees with this proposal and Waiawa Solar does not raise any objection. The commission observes that this appears to be a generalized proposal to improve the procurement process, rather than a specific proposed condition. The commission is open to suggestions to improve the procurement process and agrees, in principle, to review this issue in Phase 2 of the RFP docket.

The Consumer Advocate’s conditions proposed in pages 15 and 17 of Attachment 1 to its Statement of Position. With regard to the Consumer Advocate’s suggested condition on pages 15 through 17 of Attachment 1 to its Statement of Position, the commission observes that HECO does not object to the condition, instead stating: "In Stage 2 of the RFPs, the Company will further consider how different metrics are utilized in the evaluation process."^38 Likewise, Waiawa Solar does not lodge any objections. As stated

^37Waiawa Solar Motion at 5-6.

^38HECO Reply SOP at 7.
above, the commission is supportive of efforts to improve the procurement process and will be open to suggestions in Phase 2 of the RFP docket.

D.

Recovery Of PPA-Related Non-Energy Payments Through The PPAC

Given the commission's overall approval of the PPA, the commission likewise approves HECO's request to recover the PPA’s non-energy payments, including the Lump Sum Payments and related revenue taxes, through the PPAC; to the extent such costs are not included in base rates. This is consistent with HAR § 6-60-6(2), which authorizes the pass through of purchased energy charges through an electric utility’s PPAC, and HRS § 269-16.22, which requires the pass through of power purchase costs through an automatic adjustment surcharge.

However, the commission conditions approval of recovery of the non-energy payments under the PPA through the PPAC, as follows:

A. As discussed above, in Section III.C.1.e, to the extent Daily Delay Damages, Termination Damages, or other revenues or benefits are paid to HECO, such revenues or benefits paid to HECO shall be returned to HECO’s ratepayers through the PPAC; and
B. Recovery of the Lump Sum Payment through the PPAC shall be limited to the Lump Sum Payment net of Force Majeure adjustments or any offset due to Liquidated Damages.

E. Hawaii's Energy Policy Statutes

The State of Hawaii has adopted several energy policies requiring and/or encouraging reduction in the utilization of fossil fuels in statutes that directly pertain to the regulation of public utilities. These statutes include standards requiring minimum reductions in electric energy consumption through energy efficiency measures by specific dates;\textsuperscript{239} standards requiring minimum percentages of renewable energy generation by specific dates;\textsuperscript{240} provisions requiring preference for utility utilization and dispatch of renewable generation resources;\textsuperscript{241} provisions requiring consideration of factors related to impacts of fossil fuel use in the regulation of public utilities;\textsuperscript{242} and

\begin{itemize}
  \item \textsuperscript{239}\textit{See e.g.}, HRS § 269-96.
  \item \textsuperscript{240}\textit{See e.g.}, HRS §§ 269-91 to -95.
  \item \textsuperscript{241}\textit{See e.g.}, HRS § 269-27.2.
  \item \textsuperscript{242}\textit{See e.g.}, HRS § 269-6(b).
\end{itemize}
provisions that require consideration of specific resources and/or regulatory mechanisms.\textsuperscript{243}

In particular, HRS § 269-6(b) provides, in relevant part:

The public utilities commission shall consider the need to reduce the State's reliance on fossil fuels through energy efficiency and increased renewable energy generation in exercising its authority and duties under this chapter. In making determinations of the reasonableness of the costs of utility system capital improvements and operations, the commission shall explicitly consider, quantitatively or qualitatively, the effect of the State's reliance on fossil fuels on price volatility, export of funds for fuel imports, fuel supply reliability risk, and greenhouse gas emissions.

The commission recognizes the importance of considering the effects that Hawaii's reliance on fossil fuels have on the State's economy and general welfare in making utility resource planning, investment, and operation decisions. In performing the duties specified in HRS Chapter 269, the commission has been diligent in implementing the State's energy policies and statutes, giving deliberate weight to these provisions in the broader context of the many other statutes and considerations necessary to regulate and provide universal, reliable, and affordable access to essential electric utility services.

\textsuperscript{243}See e.g., HRS §§ 269-16.1 269-146, 269-147, 269-148, and 269-149.
As discussed above, the subject PPA is the result of Phase 1 of the HECO Companies' competitive procurement process to acquire new, dispatchable and renewable energy resources for Oahu, Maui, and Hawaii Island. According to HECO, the Project will provide a hedge against fossil fuel price volatility, which has fluctuated in the past ten years from as low as approximately $35 per barrel for low sulfur fuel oil to approximately $155 per barrel, inasmuch as "the fixed pricing structure attributable to the Project ... isolates customers from being impacted by future fuel price fluctuations."  

HECO further states that, with regard to export of funds for fuel imports, as described in HRS § 269-6(b), "the quantity of fuel consumed is forecasted to be lower with the addition of the Project." As such, the amount of funds that would have been spent on fuel imports will correspondingly decrease, and fuel supply reliability risk will be reduced due to the "likely decline" of overall fuel supply requirements as a result of the "transition to a 100% renewable future."
More specifically, HECO anticipates that, over the course of the Project's twenty-year Term, the Project will result in a total avoided fuel consumption of 12,339 barrels of diesel, 1,260,980 barrels of ultra-low sulfur diesel, and 29 tons of coal, as well as a reduction of approximately 517,436 short tons of GHG emissions.

Moreover, HECO estimates that the Project will contribute up to 1.4% towards HECO's RPS in 2022, with an average RPS impact of 1.6% between 2022 and 2041.

No Party or Participant disputes HECO's statements about the Project's impact on fuel price volatility, fuel supply reliability risk, export of funds for fuel imports, and reduction in GHG emissions.

Based on the above, and upon explicit consideration of the four specified criteria in HRS § 269-6(b) (price volatility, fuel supply reliability risk, export of funds for fuel imports, and GHG emissions), the commission finds HECO's PPA to be reasonable and in the public interest because the PPA advances Hawaii's goal of reducing reliance on fossil fuels through energy

---

248Application, Exhibit 3 at Attachment 3 (restricted).
249Application, Exhibit 5 at 1.
250Application, Exhibit 6 at 1; see also, HRS § 269-92.
251See Consumer Advocate SOP at 27 and Attachment 2 at 7-9.
efficiency and increased renewable energy generation through clean energy resources, and does so at a price that is estimated to result in savings for HECO's ratepayers between 2022 and 2041.252

F.

Remainder Of The Proceeding

As noted above, HECO requested that the commission issue two separate decisions and orders in this docket, the first decision approving the PPA-related requests, which are the subject of the commission's discussion, above, and the second decision approving the Interconnection-Related Requests.253 Pursuant to Order No. 36072, the commission bifurcated HECO's PPA-related requests from its Interconnection-Related Requests.254 Regarding its above-ground 46 kV line Interconnection-Related Requests, HECO explained that an "IRS will be conducted to evaluate the effects of the proposed interconnection of the Facility to the Company system."255 As of the filing of the Application, the IRS was not completed; however, in order to take advantage of federal investment tax credits, "the

252See HRS § 269-6(b); Consumer Advocate SOP, Attachment 2 at 6.

253See Application at 4-5.

254Order No. 36072 at 5-7 and 15.

255Application at 15.
Parties agreed to execute the PPA prior to the completion of the IRS for the Project."\textsuperscript{256} HECO has stated that it will file an amendment to the PPA based on the IRS results.\textsuperscript{257}

As such, upon HECO's filing of an amendment to the PPA based on the IRS results, the commission will issue a procedural schedule in this docket to govern its review of HECO's above-ground 46 kV line extension Interconnection-Related Requests (Issue 3).\textsuperscript{258}

IV.

SUMMARY OF FINDINGS OF FACT AND CONCLUSIONS OF LAW

Based on the foregoing, subject to the conditions set forth in Sections III.C.3 and III.D, the commission finds:

1. HECO has met its burden of proof in support of its request for approval of the PPA between HECO and Waiawa Solar, dated December 29, 2018. In support thereof, the commission further finds:

   A. The purchased power arrangements under the PPA, pursuant to which HECO will dispatch energy on an availability

\textsuperscript{256}Application at 16.

\textsuperscript{257}Application at 15-16.

\textsuperscript{258}See Order No. 36072 at 8 n.17 (stating that the commission intends to issue a separate procedural order to govern HECO's above-ground 46 kV line extension-related requests).
basis from Waiawa Solar, including the Lump Sum Payment to be paid
to Waiawa Solar, are prudent and in the public interest; and

2. HECO has met its burden of proof in support of its request to include all non-energy payments under the PPA, including the Lump Sum Payment and related revenue taxes, through the PPAC, to the extent such costs are not included in base rates.

V.

ORDERS

THE COMMISSION ORDERS:

1. Subject to the conditions set forth in Sections III.C.3 and III.D., the commission approves:

   A. The PPA between HECO and Waiawa Solar, dated December 29, 2018; and

   B. HECO’s request to include all non-energy payments under the PPA, including the Lump Sum Payments (as defined in the PPA) and related revenue taxes, through the PPAC, to the extent such costs are not included in base rates.
2. Following the HECO's filing of an amendment to the PPA based on its IRS results, the commission will issue a procedural schedule in this docket to govern its review of HECO's above-ground 46 kV overhead line Interconnection-Related Requests.

DONE at Honolulu, Hawaii  MAR 25 2019

PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

By
James P. Griffin, Chair

By
Jennifer M. Potter, Commissioner

APPROVED AS TO FORM:

Mark Kaetsu
Commission Counsel
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

KEVIN M. KATSURA
DIRECTOR, REGULATORY NON-RATE PROCEEDINGS
HAWAIIAN ELECTRIC COMPANY, INC.
P.O. Box 2750
Honolulu, HI 96840-0001

DEAN T. YAMAMOTO
WIL K. YAMAMOTO
DAVID A. MORRIS
YAMAMOTO CALIBOSO, LLC
1100 Alakea Street, Suite 3100
Honolulu, HI 96813

Counsel for WAIAWA SOLAR POWER LLC