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 Agreement for Renewable Dispatchable Generation with Ho'ohana Solar 1, LLC.

DOCKET NO. 2018-0431

DECISION AND ORDER NO. 36236
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DECISION AND ORDER

By this Decision and Order, the Public Utilities
Commission ("commission"), subject to conditions: (A) approves
the Power Purchase Agreement ("PPA") between HAWAIIAN ELECTRIC
COMPANY, INC. ("HECO" or "Applicant")¹ and Ho'ohana Solar 1, LLC
("Ho'ohana"), dated December 27, 2018; and (B) approves HECO's
request to include all energy and non-energy payments under the
PPA, including the payments for energy on a per kilowatt hour
("kWh") basis, the Lump Sum Payments (as defined in the PPA), and
related revenue taxes, through the Energy Cost Recovery Clause

¹The Parties to this proceeding are HECO and the 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 Ho'ohana participant
status. See Order No. 36127, "Granting Participant Status to
Ho'ohana Solar I, LLC, and Amending Procedural Schedule," filed on
("ECRC") and Purchased Power Adjustment Clause ("PPAC") (or equivalent), to the extent such costs are not included in base rates.²

I.

BACKGROUND

A.

Procedural History

On December 31, 2018, HECO filed its Application requesting approval of a PPA for Renewable Dispatchable Generation with Ho'ohana, and for approval of additional requests, relating to a 52-megawatt ("MW") photovoltaic system paired with a 52MW/208 MW-hour ("MWh") battery energy storage system ("BESS"), to be located in Kunia, on the island of Oahu (the "Project" or the "Facility").

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

²See "Hawaiian Electric Company, Inc.'s Application; Exhibits 1-10; Verification; and Certificate of Service," filed on December 31, 2018; "Revision to Exhibit 3," filed on January 11, 2019; "First Amendment to Power Purchase Agreement," filed on February 5, 2019 ("Amendment to PPA") (collectively, "Application"). The PPA is included as Exhibit 1 of the Application.

³The "Hawaiian Electric Companies" are HECO, Maui Electric Company, Limited, and Hawaii Electric Light Company, Inc. (the "HECO Companies" or "Companies").
filed Order No. 36068, which (1) approved HECO's request to bifurcate its PPA-related requests from its above-ground 138 kV extension-related requests, (2) adopted a procedural order to govern HECO's PPA-related requests, and (3) set forth a statement of issues governing HECO's PPA-related requests. The commission further stated that it intended to issue a separate procedural order to govern HECO's above-ground 138 kV line extension-related requests.

Pursuant to Order No. 36068, the issues in this proceeding are:

1. Whether HECO has met its burden of proof in support of its request for approval of the PPA between HECO and Ho'ohana, dated December 27, 2018, for a 52-MW photovoltaic project, coupled with a [208] MWh BESS, proposed to be located in Kunia, 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 Ho'ohana, including the Lump Sum Payments to be paid to Ho'ohana, 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

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"Order No. 36068, "(1) Approving Hawaiian Electric Company, Inc's Request to Bifurcate its Power Purchase Agreement-Related Requests from its Above-Ground 138 Kilovolt Line Extension-Related Requests; and (2) Adopting a Procedural Order to Govern the PPA-related Requests," filed on January 14, 2019 ("Order No. 36068").

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imports, fuel supply reliability risk, and greenhouse gas emissions.

b. Whether the purchased energy charges based on the Energy Price to be paid by HECO pursuant to the PPA are just and reasonable.

2. Whether HECO has met its burden of proof in support of its request to include payments for energy on a per kWh basis under the PPA, and related revenue taxes, through the BCRC and 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 138 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) & (b).

On January 22, 2019, Ho'ohana filed a motion to participate without intervention ("Motion to Participate"). The Consumer Advocate stated that it was not taking a position on Ho'ohana's Motion to Participate, and HECO stated that it "supports the granting of [Ho'ohana's Motion to Participate]."

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5As noted above, the commission intends to issue a separate procedural order to govern HECO's above-ground 138 kV line extension-related requests.

6"Division of Consumer Advocacy's Response to Ho'ohana Solar 1 LLC's Motion to Participate; and Certificate of Service," filed on January 24, 2019 ("Consumer Advocate Response"), at 1.

7"Company's Response to Motion to Participate," filed on January 25, 2019 ("HECO Response"), at 1.
In Order No. 36127, filed on January 25, 2019, the commission granted Ho'ohana's motion, limiting Ho'ohana's participation to (A) Issue No. 1 (including sub-parts), and (B) Issue No. 3.\(^8\) The commission additionally modified the procedural schedule based on its decision to grant Ho'ohana participant status.\(^9\)

Additionally, on January 25, 2019, the commission issued Protective Order No. 36121 in response to HECO's January 16, 2019 Motion for Protective Order.

On February 15, 2019, Life of the Land ("LOL") filed a Motion for Leave, with an attached Motion to Intervene, seeking an enlargement of time to file a motion to intervene in this proceeding.\(^10\)

On February 20, 2019, the commission issued Order No. 36167, compelling Ho'ohana to respond to certain Information

\(^8\)Order No. 36127 at 16, 19.

\(^9\)See Order No. 36127 at 18.

\(^10\)See Motion for Leave at 1. LOL's Motion for Leave did not expressly request an enlargement of time by which to file a motion to intervene; however, given that LOL attached a motion to intervene to its Motion for Leave, the commission concluded that this was LOL's intent.
Requests ("IRs") issued by the Consumer Advocate to which Ho'ohana had objected as irrelevant.\textsuperscript{11}

On February 25, 2019, Ho'ohana 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 of Position and HECO's Reply Statement of Position ("SOPs").\textsuperscript{12} Ho'ohana stated that it believed that its SOP, "to the extent necessary, would be more useful to the Commission if filed after the Consumer Advocate's [Statement of Position]."\textsuperscript{13} Accordingly, Ho'ohana requested that "if changes are made to the procedural schedule, the Commission adjust [the] deadline for [Ho'ohana's Statement of Position] to [a] date[] midway between the deadlines for the Consumer Advocate's [SOP] and the deadline[] for [HECO's Reply SOP]."\textsuperscript{14}

On February 25, 2019, the Consumer Advocate submitted a motion for enlargement of time, seeking an extension of time for

\textsuperscript{11}Order No. 36167, "Compelling Ho'ohana Solar I, LLC to Respond to the Consumer Advocate's Information Requests," filed on February 20, 2019 ("Order No. 36167").


\textsuperscript{13}February 25, 2019 Letter at 1.

\textsuperscript{14}February 25, 2019 Letter at 1.
it and Ho‘ohana to file their SOPs and for HECO to file its Reply SOP. In support of its Motion, the Consumer Advocate referenced Order No. 36167 and noted that the deadline by which Ho‘ohana was required to respond to the Consumer Advocate’s IRs was February 27, 2019, one week before the date the Consumer Advocate’s SOP was due.

On February 28, 2019, the commission issued Order No. 36194, in which the commission amended the procedural schedule to provide the Consumer Advocate and Ho‘ohana additional time to file their respective SOPs.

On March 12, 2019, in Order No. 36216, the commission concluded that LOL had not sufficiently shown that its failure to file a motion to intervene within the time period prescribed by HAR § 16-601-57 was the result of excusable neglect and, accordingly, denied LOL’s Motion for Leave.

15“Division of Consumer Advocacy’s Motion for Enlargement of Time; and Certificate of Service,” filed on February 25, 2019 (“Consumer Advocate’s Motion”).

16Consumer Advocate’s Motion at 2.

17Order No. 36194, “(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 on February 28, 2019 (“Order No. 36194”).

18Order No. 36216, “Denying Life of the Land’s Motion for Leave,” filed on March 12, 2019, at 9, 11.
The Parties and Participant exchanged IRs consistent with the scope of discovery established by the modified procedural schedule. The commission also submitted IRs to HECO and Ho'ohana.

On March 6, 2019, the Consumer Advocate filed its SOP. On March 8, 2019, Ho'ohana filed its SOP. On March 13, 2019, HECO filed its Reply SOP.

Pursuant to the deadlines set forth in Order No. 36194, no further briefing is contemplated, and the PPA-related requests are ready for decision-making.

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19 See Order No. 36127 at 18.

20 "[Consumer Advocate’s] Statement of Position," filed on March 6, 2019 ("Consumer Advocate SOP").

21 "[Ho'ohana’s] Statement of Position; Affidavit of Benjamin Sturgeon; Affidavit of Dean T. Yamamoto; and Certificate of Service," filed on March 8, 2019 ("Ho'ohana SOP").

22 "[HECO’s] Reply Statement of Position; and Certificate of Service," filed on March 13, 2019 ("HECO Reply SOP").

23 See Order No. 36194 at 10.
B.

Parties to the PPA

HECO is the franchised provider of electric service for Oahu, and is engaged in the production, purchase, transmission, distribution, and sale of electricity on the island of Oahu.

Ho'ohana is a Delaware limited liability company with its principle place of business in California. Ho'ohana is owned by FCHQC Development, LLC, which was created by a joint venture between 174 Power Global Corporation ("174PG") and Forest City Sustainable Resources, LLC. 174PG is a wholly owned subsidiary of Hanwha Energy Corporation and part of the Hanwha Group of companies. Hanwha Corporation, the parent corporation of the Hanwha Group, is a Fortune Global 500 company with listed revenues for 2017 of approximately $41 billion, assets of $128 billion, and equity of $37 billion. Regarding the experience of 174PG and Forest City with renewable energy projects in Hawaii, Ho'ohana states that "Forest City has developed six small utility scale Feed-in-Tariff projects on Oahu[;]" and that 174PG "recently

24 Application at 13.

25 Application at 13; see id., Exhibit 1, Attachment A, Exhibit A-2 (Ownership Structure), at 191.

26 Application at 14. In addition, "the Hanwha Group has installed over 35 utility-scale projects worldwide, totaling more than 600 MW in North America and over 1 gigawatt (‘GW’) globally." Id.
developed the larger (5 MWac) Kalaeloa Renewable Energy Project under a current PPA contract with HECO."  

C. Proposed Project

Pursuant to the PPA, Ho'ohana will construct, own, operate, and maintain the Project, a 52-MW photovoltaic system paired with a 52MW/208 MWh BESS (with a four-hour duration at full capacity), to be located in Kunia, on the island of Oahu. HECO represents that the Facility is capable of generating up to 114,481 MWh per year, equivalent to power used by approximately 19,100 homes.

The Facility will be located on a parcel of land leased by Ho'ohana from Robinson Kunia Land, LLC. The Project Site consists of adjacent land parcels identified by Tax Map Key Nos. ("TMKs") (1)9-4-002:052 and (1)9-4-003:001. The Project Site is

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27Motion to Participate at 4; see Application, Exhibit 1, Attachment A, Exhibit A-2 (Ownership Structure), at 191.

28Application at 15.

29Application at 15.

30See Ho'ohana's Response to PUC-Ho'ohana-IR-04, Exhibit B at 12, filed on February 19, 2019.

31Application at 15, Exhibit 7.
approximately 352 acres.\textsuperscript{32} TMK (1)9-4-002:052 is located in the Urban State Land Use District ("Urban Parcel"), and TMK (1)9-4-003:001 is located in the Agricultural State Land Use District ("Agricultural Parcel").\textsuperscript{33} The Agricultural Parcel includes land classified by the Land Study Bureau’s detailed land classification productivity rating as A, B, C, D, and E, in the following acreage amounts: 549 acres in A; 65 acres in B; 22 acres in C; 35 acres in D; and 210 acres in E.\textsuperscript{34} Under county zoning, both the Urban and Agricultural Parcels are zoned AG-1 Restricted Agricultural District.\textsuperscript{35}

The Facility is proposed to be connected to the Company’s 138 kV Kahe-Waiau transmission line, which runs through the Project Site and there may be the need for a 138 kV line extension to interconnect the Project.\textsuperscript{36} The details of the interconnection will be determined by the IRS study.\textsuperscript{37}

\textsuperscript{32}Application at 15.

\textsuperscript{33}See Application at 15; Ho‘ohana’s Response PUC-Ho‘ohana-IR-06.a at 1, filed on March 12, 2019; see also HRS § 205-2, titled “Districting and classification of land.”

\textsuperscript{34}Ho‘ohana’s Response to PUC-Ho‘ohana-IR-06.b at 2.

\textsuperscript{35}See Ho‘ohana’s Response to PUC-Ho‘ohana-IR-06.c at 2; see also Revised Ordinances of Honolulu (“ROH”), Chapter 21, Articles 3, 5.

\textsuperscript{36}Application at 15.

\textsuperscript{37}Application at 15.
According to the PPA, the Guaranteed Commercial Operations Date of the Project is December 31, 2021. Additional Guaranteed Project Milestone Dates will be revised to reflect the results of the IRS. Ho'ohana represents and warrants that as of the Commercial Operations Date, "the Facility will be a qualified renewable resource under the [Renewable Portfolio Standards ("RPS") in effect as of the effective date of the PPA ("Effective Date")."

The Facility will contain a system of solar photovoltaic panels on sun-tracking mounting structures with twenty-six (26) 2,200 kW inverters. The Facility will also contain a 52 MW /208 MWh battery energy storage system that will consist of

38Application, Exhibit 1 at 282; see also id. at 73 (indicating that the "absolute deadline for [the Guaranteed Commercial Operations Date is] to be no later than December 1, 2022[.]"), 78 ("stating, "provided that, in no event shall any such extension result in the Guaranteed Commercial Operations Date extending beyond December 1, 2022[.]")

39Application, Exhibit 1 at 282.

40See HRS §§ 269-91, -92, -93, -94, -95, and -96.

41Application at 16; id., Exhibit 1 at 117. 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 158.

42Application at 15.
twenty-six (26) 2,200 kW inverters coupled with 4.3 MWh of Lithium Ion batteries housed in containers.43

HECO states that having the PV system paired with a BESS will:

allow[] the energy produced during the day that cannot be readily accepted by the Company to be stored and dispatched to the 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. Hawaiian Electric anticipates that it will dispatch the battery energy storage system’s stored energy to the Hawaiian Electric grid to, among other things, help with ramping towards Hawaiian Electric’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.44

HECO represents that the estimated levelized energy price pursuant to the PPA will be approximately $0.1047 per kWh, based on the PPA’s Lump Sum Payment and the energy payment rate.45 HECO additionally represents that it estimates that “a typical residential [ ] customer consuming 500 kWh per month could save

43 Application at 15.

44 Application at 16-17.

45 HECO’s Response to CA-IR-10, Attachment 1, re-filed on March 19, 2019 (HECO had previously timely filed an excel file of Attachment 1 and additionally filed a paper copy on March 19, 2019); see Application at 2, Exhibit 1 at 275-281, Exhibit 4 at 6-8; Amendment to PPA; see also Hawaiian Electric Companies’ January 3, 2019 News Release, “New solar-plus-storage projects set low-price benchmark for renewable energy in Hawaii.”
$1.16 per month in 2022 and $1.81 per month in 2023 on the customer’s electric bills."\(^{46}\)

HECO represents that the Project will contribute 1.8% toward its 2022 RPS goal.\(^ {47}\)

D.

**Material Terms of the PPA**

The PPA is included as Exhibit 1 to HECO’s Application.\(^ {48}\)

The material terms of the PPA are provided below.

**Term:** The Initial Term of the PPA commences upon the Execution Date and remains in effect for an initial term of twenty (20) years following the Commercial Operations Date, unless terminated sooner pursuant to the PPA.\(^ {49}\) When the Initial Term expires, the PPA automatically terminates.\(^ {50}\) The Parties may negotiate terms and conditions of an extension term (the Extended Term), including reduced Contract Pricing, subject to the commission’s approval of any new or amended PPA.\(^ {51}\)

\(^{46}\) Application at 25.

\(^{47}\) Application at 26.

\(^{48}\) See Application, Exhibit 1 (the PPA). For ease of reference, this Decision and Order shall cite to the PPA by the page numbers found at the top right of each page.

\(^{49}\) See Application at 2, Exhibit 1 at 71.

\(^{50}\) Application, Exhibit 1 at 71.

\(^{51}\) See Application, Exhibit 1 at 71, Exhibit 4 at 2.
Pricing:
The payment structure is comprised of (1) a monthly Lump Sum Payment, and (2) an Energy Payment. Pursuant to the terms of the PPA, the monthly Lump Sum Payment paid to Ho'ohana is derived from multiplying the Unit Price by the Net Energy Potential ("NEP"), and then dividing that result by twelve months. The Lump Sum Payments for availability of the Facility's NEP and the availability of the BESS to respond to Company dispatch are subject to offsets for assessed Liquidated Damages, and subject to adjustment based on reassessment of the NEP. Liquidated damages could reduce the Lump Sum Payment 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 Lump Sum Payment is made on the basis of the fixed Unit Price of $0.098850264 per kWh of NEP for the duration of the PPA. In its Request for Proposals ("RFP") response, Ho'ohana represents that the annual Lump Sum Payment will be $11,317,363, or approximately $943,114 per month, based on the projected annual energy production for the Project. See HECO's Response to Application, Exhibit 4 at 5, 8, Exhibit 1 at 8, Exhibit 4 at 4-7.
projected that the Project would have a NEP of 114,481 megawatt hours ("MWh") per year. However, the NEP "is subject to adjustment . . . but in no circumstances shall the [NEP] exceed the NEP RFP Projection."

The Energy Payment for electric energy delivered in response to Company dispatch following Commercial Operations is paid on a monthly basis at the rate of $0.00092/kWh ("Energy Price").

Based on estimates of the annual payments (i.e., Lump Sum Payments and any applicable Energy Payment) and projected generation of the Project, HECO represents that the estimated levelized energy price per kWh is $0.1047.

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57Application, Exhibit 1 at 343.

58Application, Exhibit 1 at 170.

59Application, Exhibit 1 at 8 "(Company shall, by an Energy Payment, pay for the Actual Output produced by the Facility and delivered to the Point of Interconnection in response to Company Dispatch of the Facility"), 275; Amendment to PPA, Exhibit 1 (Amended Page J-1 of Attachment J, amending the electric energy rate to be $0.00092/kWh, instead of the amount originally included in the PPA of $0.095/kWh).

HECO represents that the annual Energy Payment will be between $79,417 and $103,432. See HECO’s Response to CA-IR-10, Attachment 1.

60See HECO’s Response to CA-IR-10.a & b., filed on February 11, 2019, and Attachment 1, filed on March 19, 2019.
Test Energy: “Prior to the Commercial Operations Date, Company may accept test energy delivered by Seller and if such test energy is accepted, pay for such test energy[.]”\(^{61}\) The Test Energy price is $0.045/kWh.\(^{62}\)

Liquidated Damages: Liquidated Damages may be applicable for the PV system and BESS. Liquidated damages are allocated to the performance of the PV system and BESS separately.\(^{63}\) The PPA provides for assessment of liquidated damages based on availability and if Ho'ohana fails to achieve the required performance specified in the PPA for any one or more Performance Metrics, and are assessed based on the Lump Sum Amount.\(^{64}\)

Interconnection Requirements Study ("IRS") and Interconnection Facilities: After the IRS is completed, HECO will make an informational filing in the docket of an Amendment to the PPA to reflect the results of the IRS. If Ho'ohana is dissatisfied with the result of the IRS, it has the option to declare the PPA null and void no later than the Termination Date.\(^{65}\) Ho'ohana will

\(^{61}\) Application, Exhibit 1 at 42.

\(^{62}\) Application at 7, Exhibit 1 at 281.

\(^{63}\) Application, Exhibit 4 at 5-6.

\(^{64}\) See Application at 17, Exhibit 1 at 10-39, Exhibit 4 at 5, 7.

\(^{65}\) Application, Exhibit 1 at 73.
own, operate, and maintain all Interconnection Facilities required to interconnect the Facility to HECO's up to the Point of Interconnection and is required to pay for all costs. The PPA additionally provides that certain terms and conditions may be modified based on the results of the IRS.

HECO's Right of First Negotiation and Other Purchase Rights: Pursuant to the PPA, HECO has the right of first negotiation prior to the end of the initial term and an option to purchase at the end of the initial term. In addition, the Parties may effectuate a sale of the Facility to HECO if HECO is subject to consolidation treatment under FASB ASC 810 and/or lease treatment under FASB Accounting Standards Codification 842. Any sale of the Facility is subject to commission approval.

See Application, Exhibit 1 at 242-260.

See Application at 5, Exhibit 1 at 5. As noted above, after the IRS is completed, HECO will make an informational filing in the docket of an Amendment to the PPA to reflect the results of the IRS. See id. at 5, Exhibit 1 at 73. The commission notes that Attachment K, Guaranteed Project Milestones, provides that the Guaranteed Project Milestone Date for "Construction Financing Milestone" and "Permit Application Filing Milestone" dates have been left blank in the PPA, and will be revised to reflect the results of the IRS. Id., Exhibit 1 at 282; see also id., Exhibit 1 at 283-84 (Seller's Conditions Precedent were also subject to revisions to reflect the results of the IRS).

See Application, Exhibit 1 at 302-316, Exhibit 4 at 9.

See Application, Exhibit 1 at 302-316, Exhibit 4 at 9.
Compliance with Laws and Regulations: Ho'ohana is responsible for obtaining, at its own expense, any and all necessary permits, governmental approvals, and Land Rights for the construction, ownership, operation, and maintenance of the Facility and interconnection of the Facility to Company System, including but not limited to rights-of-way, easements, or leases. In addition, Ho'ohana is required to install, operate, and maintain the Facility safely and in compliance with all applicable laws.

Site Restoration: After termination of the PPA, or if the PPA is declared null and void, upon HECO's request, Ho'ohana is required to remove all HECO-owned and Ho'ohana-owned interconnection facilities, and to restore the land to its condition prior to construction.

Dispatch: HECO has the contractual and operational discretion to dispatch the Facility in HECO's preferred manner.

Credit Assurance and Security: Ho'ohana is required to post and maintain Development Period Security and Operating Period Security pursuant to Article 14. Ho'ohana is required to acquire

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70 See Application, Exhibit 1 at 68-70, 259, 260, Exhibit 4 at 9-10, 11.

71 See Application, Exhibit 1 at 70, Exhibit 4 at 9-10, 11.

72 See Application, Exhibit 1 at 256-257, Exhibit 4 at 10.

73 Application, Exhibit 4 at 10.

74 See Application, Exhibit 1 at 85-86, Exhibit 4 at 11.
and maintain, at its own expense, specified minimum insurance coverage.75

Guaranteed Milestones and Commercial Operations: Ho'ohana must meet agreed upon Guaranteed Project Milestones, including for commercial operations.76 Although the PPA provides for potential extensions of certain Milestone Dates,77 no extension shall result in the Guaranteed Commercial Operations Date extending beyond December 1, 2022 (except in limited instances of Force Majeure or failure of HECO to timely perform its obligations).78 Failure to meet Milestones subjects Ho'ohana to daily delay damages, liquidated damages, and eventual termination for failure to cure.79

Termination Rights: HECO and Ho'ohana agree to certain conditions that trigger termination rights, or trigger one or both contracting Parties' right to declare the PPA null and void.80

75See Application, Exhibit 1, Article 18 at 104.

76See Application, Exhibit 1 at 78, Exhibit 4 at 11. The PPA states: "Time is of the essence of this Agreement, and Seller's ability to achieve the Construction Milestones and Company's ability to achieve the Company Milestones is critically important." Application, Exhibit 1 at 78.

77Application, Exhibit 1 at 78-79.

78Application, Exhibit 1 at 78-79.

79See Application, Exhibit 1 at 79-83, Exhibit 4 at 11.

80See Application, Exhibit 1 at 81-82, 90-96, 114-115, Exhibit 4 at 2-4.
HECO may terminate the PPA with immediate effect if Ho‘ohana does not achieve a Guaranteed Project Milestone Date.\footnote{Application, Exhibit 1 at 81-82.}

II.
PARTIES' AND PARTICIPANT'S POSITIONS

A.

HECO

In support of its Application, HECO states that the PPA is reasonable and in the public interest, and should be approved because:

1. "Both the PPA and Project are consistent with the Hawaiian Electric Companies' PSIP Update Report: December 2016, and the Commission’s Inclinations;"\footnote{Application at 3 (citing the Hawaiian Electric Companies' PSIP Update Report: December 2016, filed on December 23, 2016, in Docket No. 2014-0183, and the Commission's Inclinations on the Future of Hawaii's Electric Utilities, filed as Exhibit A to Decision and Order No. 32052 on April 28, 2014, in Docket No. 2012-0036); see id. at 9-10 (stating, "[t]he right to dispatch the Facility under the PPA will assist Hawaiian Electric in achieving the goals set forth in Hawaiian Electric’s PSIP to move towards energy independence and decreased reliance on foreign imported oil while maintaining reliability of the Company’s system.").}

2. "The Project was selected through a competitive procurement process that has resulted in a reasonable Lump Sum Payment and Energy Price for the PPA;"\footnote{Application at 3; see also id. at Exhibit 2.}
3. "The Project is not expected to increase curtailment of existing as-available renewable resources or impede consideration of additional renewable resources to Hawaiian Electric's system;"\(^{84}\)

4. "The Project will help to meet the energy policy objectives and [RPS] goals of the State of Hawaii ('State') as well as contribute to the State's goal of greater energy security, resiliency and self-sufficiency;"\(^{85}\) and

5. "The PPA incorporates the recently-developed Renewable Dispatchable Generation ('RDG') contracting mechanism that will improve on the Company's ability to plan for this and subsequent renewable resources."\(^{86}\)

Offering further justification, HECO additionally states that the Project and PPA are reasonable because:

1. "The Project is advantageous due to the Company's ability to dispatch the Facility subject only to the constraints of the renewable resource. Hawaiian Electric will be able to dispatch generated energy from the Project's photovoltaic system (or stored energy from the battery energy storage system as needed (rather than only relying on conventional generation units) to offset night-time customer demand and assist in grid stabilization subject to discharge limits. . . . [T]he Facility is anticipated to have a substantial positive environmental impact by decreasing Hawaiian Electric's future dispatch of oil-fueled units."\(^{87}\)

\(^{84}\)Application at 3.

\(^{85}\)Application at 3.

\(^{86}\)Application at 4 (footnote omitted); see id. at 8 (briefly discussing the role of the Independent Observers ("IOs") as well as the negotiation process).

\(^{87}\)Application at 8.
2. "The Unit Price, as defined in the PPA, is advantageous in that it is fixed for the duration of the PPA and anticipated to result in lower effective rates for customers."^88

3. "It is anticipated that the Project will provide bill savings to customers over the Term of the PPA[]."^89

4. "The Project will reduce Hawaiian Electric's fossil fuel consumption and result in a reduction of [greenhouse gas ('GHG')] emissions[]."^90

5. "The renewable energy to be dispatched from the Facility pursuant to the PPA will assist Hawaiian Electric in achieving the State's RPS goals. [...] Hawaiian Electric estimates that the Facility will contribute approximately 1.8% to Hawaiian Electric's 2022 RPS."^91

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^88 Application at 9; see Application, Exhibit 1 at 182 (defining "unit price" as "$0.09885800264 per kWh of Net Energy Potential annually"); see also Amendment to PPA, Amended Page J-1 of Attachment J (specifying that the energy rate is $0.00092/kWh).

^89 Application at 9; see id. at 25 (stating, "[i]t is estimated that as a result of this Project, a typical residential Hawaiian Electric customer consuming 500 kWh per month could save $1.16 per month in 2022 and $1.81 per month in 2023 on the customer's electric bills.").

^90 Application at 9; see id. at 10-11 (stating, "it is estimated that the renewable energy supplied by the Project may save Hawaiian Electric up to 1,555,687 barrels of fuel and 465 tons of coal over the term of the PPA based on forecasted fuel consumption reduction."), 12 (stating that "an estimated total of 747,601 tons of GHG emissions [] will be avoided during the 20-year term of the PPA"), 25, Exhibits 3 & 5.

^91 Application at 9; see id. at 12 (stating that the Project is expected to "contribute to the Companies' consolidated RPS on average 1.4% per year").
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 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."\(^3\)

\(^2\)Application at 11 (citing HRS § 226-18(a)).

\(^3\)Application at 11 (citing HRS § 269-6(b)).
B.

Consumer Advocate

The Consumer Advocate recommends disapproval of the requests in HECO’s Application, stating:

based on the information at this time and the Consumer Advocate’s expedited review, there appears to be a potential “fatal” flaw that could jeopardize the ability for the project to move forward. The Consumer Advocate recognizes that the aggressive schedule was set to meet project timelines that would enable developers to take advantage of the Federal investment tax credits that are set to start declining in 2019. It is in recognition that time is of the essence that the Consumer Advocate has recommended disapproval at this time in order to avoid uncertainty regarding whether the project will be able to move forward if conditional approval was granted.

Although the Consumer Advocate bases its recommendation on its review and analysis related to “site control and allowed uses of the site[,]” discussed further below, the Consumer Advocate also considered: the procurement process, pricing associated with the PPA, terms and conditions of the PPA, and community outreach and benefits.

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94 See Consumer Advocate SOP at 1.

95 Consumer Advocate SOP at 29.

96 Consumer Advocate SOP at 26 (formatting altered).

97 Consumer Advocate SOP at 10, 26.
Procurement Process. The Consumer Advocate notes with concern that all four developers for the seven PPAs before the commission are represented by the same counsel, which "gives rise to, at a minimum, the appearance of impropriety." The Consumer Advocate states that "it is unclear that having one attorney negotiate on behalf of all developers is in the best interest of consumers," and recommends "that this issue [] be addressed in future competitive procurements to mitigate the possibility of similar circumstances." Despite its concerns, the Consumer Advocate does note that: (1) "there is no evidence of collusion thus far between developers[,]" (2) "developers were required to agree to a 'Certificate of Non-Collusion acknowledgement[;]'" and (3) "the IOs did not identify terms that appeared unreasonable resulting from the PPA negotiations."

Price. With regards to pricing under the terms of the PPA, the Consumer Advocate considered the levelized price, the estimated bill impact and bill savings to customers, and the

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98Consumer Advocate SOP at 16; see id. at 11-16.

99Consumer Advocate SOP at 16.

100Consumer Advocate SOP at 15.

101Consumer Advocate SOP at 15.

102Consumer Advocate SOP at 15-16.
The estimated total system savings and avoided costs. The Consumer Advocate raises concerns related to the structure of the RDG PPA contracts, "which essentially guarantees payment as long as the capacity is available," and recognizes "the declining price trends for renewable and storage technologies," contending 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 . . . [,] it is important to assess whether the selected projects reflect reasonable prices with reasonable returns instead of reflecting 'sticky' prices." Essentially, although the Consumer Advocate does not object to the proposed Project based on the price, the Consumer Advocate does assert that, based on the underlying information on pricing provided by Ho'ohana, "additional questions might be warranted

103 See Consumer Advocate SOP at 17, Attachment 2 at 1-7. The Consumer Advocate noted that the IO for the Oahu RPPs "found the levelized prices 'far below' on-peak and off-peak avoided energy costs." Id., Attachment 2 at 2. The Consumer Advocate also noted that the expected bill savings and system savings under the Companies' avoided cost analysis "appears consistent with the result of the IO analyses." Id., Attachment 2 at 7.

The Consumer Advocate acknowledges that the levelized price of the proposed PPA is informative, but additionally acknowledges that "other factors, such as when and how the energy will be used must be considered in determining the value of the project to the grid." Consumer Advocate SOP at 17.

104 Consumer Advocate SOP at 20.

105 The Consumer Advocate takes issue with Ho'ohana's failure to provide certain pricing information including its pro forma,
related to a definitive determination as to whether the Lump Sum Payments appear reasonable [] based on project costs."\textsuperscript{106}

Terms and Conditions of the PPA. The Consumer Advocate observes that the subject PPA "represents an evolution from earlier contracts," including those based on "seniority curtailment provisions[]."\textsuperscript{107} The Consumer Advocate states that it "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{108}

However, the Consumer Advocate observes that the duration of the PPA is "very long[,]" and "during times of declining price trends and improvements in technology," the Consumer Advocate asserts that "such long terms arguably stifle innovation" because, "as technology improves and prices decline, customers are not able to receive the benefits . . . if the utility is locked into long-term contracts for available capacity."\textsuperscript{109} The Consumer Advocate also states that the nature of the PPA, which is

\begin{flushleft}
and recommends changes to future procurement cycles. The Consumer Advocate’s recommendations are addressed in Section III.C.3, below.
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\textsuperscript{106}Consumer Advocate SOP at 21.
\textsuperscript{107}Consumer Advocate SOP at 22.
\textsuperscript{108}Consumer Advocate SOP at 22.
\textsuperscript{109}Consumer Advocate SOP at 23.
essentially a "capacity contract" "represents a significant transference of risk to customers" because, "regardless of whether there is a need for a project's capacity, customers will bear the cost of the project."\textsuperscript{110} The Consumer Advocate does recognize that the fixed pricing does serve to "significantly reduce[] 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{111}

Community Outreach. The Consumer Advocate references the community outreach efforts, set forth in Exhibit 8 of the Application, which began in 2014 related to prior efforts to enter into a PPA, which was the subject of Docket No. 2014-0355.\textsuperscript{112} The Consumer Advocate notes that Ho'ohana has made limited commitments to community benefits, aside from "providing teachers with a professional development course that will facilitate 'inquiry-based renewable energy education.'"\textsuperscript{113} Additional concessions may be forthcoming, the Consumer Advocate explains, "relate[d] to possible commitments that will be required to acquire legal authority to construct the proposed Project." However, as

\textsuperscript{110}Consumer Advocate SOP at 23.

\textsuperscript{111}Consumer Advocate SOP at 23.

\textsuperscript{112}See Consumer Advocate SOP at 25.

\textsuperscript{113}Consumer Advocate SOP at 25.
the information of the referenced "possible commitments" "is not available nor reliable at this time, the Consumer Advocate does not believe that the Commission needs to consider these possible concessions at this time."¹¹⁴

Site Control and Allowed Uses of the Site. In support of its position that the PPA should not be approved, the Consumer Advocate raises a number of questions and concerns related to the land on which the Project is proposed to be located, including that the characterization of the land as urban and agricultural land may not be correct;¹¹⁵ that "it appears that the land is AG-1 restricted land that should be reserved for agricultural purposes[;]"¹¹⁶ that although the record reflects that construction on TMK 9-4-002:052 could potentially start by the end of 2019, the same assertion is not made for construction on TMK 9-4-003:001;¹¹⁷ that it is not evident that the proposed project


¹¹⁵See Consumer Advocate SOP at 26-27 (recounting that in the Application, "the project site is identified as consisting of approximately 352 acres; part of the Project is situated on agricultural land designated by the State as State Land Use Urban and the other part is designated as Agriculture" (citing Application at 15) but that according to the City and County of Honolulu GIS website, "both parcels are 'AG-1' zoned lands" which is defined as "Restricted Agricultural" pursuant to ROH, Chapter 21).

¹¹⁶Consumer Advocate SOP at 27.

¹¹⁷Consumer Advocate SOP at 27.
site is consistent with HRS section 205;[^118] and that the proposed project may not be able to meet applicable milestones if pending legislation (i.e., HB 593, which "may be an effort to streamline the possibility that the proposed project can proceed") does not become law.[^119]

It appears that, underlying the Consumer Advocate's position, is the Consumer Advocate's primary concerns that "the proposed project may be inconsistent with current state law[;]" and that if proposed legislation is not enacted, "the viability

[^118]See Consumer Advocate SOP at 27; see also id. at 30 (stating, "[t]he Consumer Advocate contends that the utility should always strive to ensure that any utility resource or third-party resource utilized by the utility is cost-effective and supportive of affordable and reliable services that do not adversely impact the utility customers but also supports advancing projects that are not inconsistent with state or county laws, ordinances, or rules.")(emphasis added).

[^119]Consumer Advocate SOP at 28. On the issue of HB 593, the Consumer Advocate additionally states:

The proposed legislation proposes to insert additional language that, if passed, would significantly expand the potential use of Class A land, which could include the proposed project but would also require that any solar project taking advantage of the proposed exemptions would have to meet certain requirements, such as providing water infrastructure to any service area in which agricultural production has been impacted by the solar energy facilities. The Consumer Advocate notes that there are several entities that oppose HB 593, including, but not limited to, the Office of Planning, the Department of Agriculture, and the Hawaii Agriculture Research Center.
of the project, "as proposed, may be threatened." 120

The Consumer Advocate states:

[u]ntil sufficient evidence can be provided to address the concern that the proposed project may be inconsistent with current state law, the Consumer Advocate does not believe it is in the public interest for the Commission to grant the requested relief as it would be inappropriate for the Commission to grant approval of the project that is inconsistent with State law, county ordinances, and/or rules. 121

Although the Consumer Advocate recommends that the PPA not be approved, the Consumer Advocate does recognize that the proposed RFP PPAs "can provide benefits by contributing to the State's goals of renewable energy, providing a contribution to the [RPS] as set forth by HRS § 269-92(a), lower fossil fuel usage, reduc[e] greenhouse gases ('GHG') emissions and a hedge to fossil fuel prices[.]" 122 In addition, the Consumer Advocate recognizes "the possible benefit of the flexibility associated with the proposed project, as facilitated by the allowed utility control pursuant to the proposed RDG PPA, as compared to an as-available project paid on a per kWh basis" 123 and that "the proposed contract

120 Consumer Advocate SOP at 28.

121 Consumer Advocate SOP at 28-29.

122 Consumer Advocate SOP at 29.

123 Consumer Advocate SOP at 29-30.
is for a price that is lower than historical PPA prices and could place downward pressure on the Company's avoided cost."^{124}

In the event that the PPA is approved, the Consumer Advocate recommends the following:

1. "The Company file copies of all invoices relating to the engineering, procurement, construction, and maintenance associated with the proposed PPA no later than sixty (60) days after the Commercial Operations Date. In addition, the Company should file the Seller's income statements or results of operations related to the PPA that will allow the Commission and 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)];^{125}

2. "To the extent that additional information is necessary, the Consumer Advocate reserves its right to file information requests on the Seller as a participant to the proceeding[;]"^{126}

3. "As it relates to future procurement processes, [] bidders [should] be required to file the pro forma information

^{124}Consumer Advocate SOP at 30.

^{125}Consumer Advocate SOP at 30-31.

^{126}Consumer Advocate SOP at 31.
related to their project [], in addition to copies of any supporting documentation (e.g., copies of leases, EPC contracts, etc.) to support its bid price[;]”127

4. “[T]o mitigate concerns with potential appearance of impropriety, the procurement process should be reviewed to examine and develop guidelines, as necessary, to mitigate concerns related to potential unaffiliated sellers using the same representative(s) in negotiations[;]”128 and

5. Further considerations and discussions should be made in Phase 2 of the competitive procurement process, as discussed on pages 15 to 17 of Attachment 1 to the Consumer Advocate’s SOP.129

127Consumer Advocate SOP at 31.

128Consumer Advocate SOP at 31.

129Consumer Advocate SOP at 31. The commission notes that Attachment 1, pages 15 through 17 includes confidentially filed text. The Consumer Advocate appears to be recommending that, in Phase 2, “the Hawaiian Electric Companies should provide further explanation regarding why this project is expected to confer greater benefits to consumers[,]” compared with other projects under consideration during the bid phase of the competitive procurement process. Consumer Advocate SOP, Attachment 1 at 17.
C. Ho'ohana

Ho'ohana requests that the commission "find that the purchased power arrangements under the PPA, including the Lump Sum Payments to be paid to Seller, are prudent and in the public interest (especially when considering HRS § 269-6), and that the purchased energy charges based on the Energy Price to be paid by HECO pursuant to the PPA are just and reasonable." Ho'ohana highlights that the PPA will assist HECO in achieving the state's RPS goals, contributing up to 1.8% of the Company's 2022 RPS; that the Project will "help contribute to a cleaner environment for the island by reducing the Company's fuel consumption, which will result in a reduction of GHG emissions[,]" and that the Project "will help to reduce the State's reliance on fossil fuels, reduce price volatility, reduce the export of funds for fuel imports, reduce fuel supply reliability risk, and reduce [GHG] emissions." Ho'ohana additionally contends that the Project is well supported by the local community, and describes its efforts to reach out to stakeholders and community members.

130 Ho'ohana SOP at 3.

131 Ho'ohana SOP at 10.

132 Ho'ohana SOP at 11.

133 Ho'ohana SOP at 12.
In support of its position that the purchased power arrangements are prudent and in the public interest, Ho'ohana asserts:

1. The PPA is the result of a "rigorous competitive bidding process with significant oversight by the Commission and the Independent Observer[;]"\(^{134}\)

2. The PPA was the result of arms-length negotiations between Ho'ohana and HECO;\(^{135}\) and

3. "Besides offering a structure that allows for lower pricing [based on "eligibility for preferred underwriting criteria from financiers"\(^{136}\)] and ultimately cost savings to ratepayers, the PPA also ensures that the ratepayer is not paying for services or capacity that it is not receiving."\(^{137}\)

In support of its position that the purchased energy charges are just and reasonable, Ho'ohana emphasizes that "[t]he Unit Price of $0.09885800264 per kWh of Net Energy Potential (or capacity) [] is fixed for the duration of the PPA[,]"\(^{138}\) and the "pricing is among the lowest to date for renewable electricity in

\(^{134}\)Ho'ohana SOP at 8.

\(^{135}\)Ho'ohana SOP at 8.

\(^{136}\)Ho'ohana SOP at 8-9.

\(^{137}\)Ho'ohana SOP at 9.

\(^{138}\)Ho'ohana SOP at 9.
the state and significantly lower than the current cost of fossil fuel generation, which is about $0.15 per kWh." In addition, the Project will result in cost savings to a typical residential customer throughout the PPA term.

In response to the Consumer Advocate's position, Ho'ohana argues that:

1. The Consumer Advocate's assumptions that there is a "fatal" flaw that may jeopardize the ability of the project to move forward, and that the proposed project may be inconsistent with current state law, are incorrect;

2. Although other solar projects before the commission similarly require discretionary permits prior to construction, the Consumer Advocate is treating Ho'ohana differently by recommending that the commission "prematurely disapprove the Project[;]"

3. "Development risks are appropriately managed by Seller and negotiated with the Company through the PPA[;]"

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139 Ho'ohana SOP at 10.

140 Ho'ohana SOP at 10.

141 Ho'ohana SOP at 13-14.

142 Ho'ohana SOP at 16 (additionally stating that in disapproving the Project, "Seller would be prevented from continuing to pursue the necessary permits it needs to develop its Project on class A soils, which it is entitled to pursue under the RFP and PPA.").

143 Ho'ohana SOP at 16.
4. "Although there is no express prohibition against developing on class A soils in the RFP, it appears that the Consumer Advocate is effectively imposing a new RFP condition after Seller has already expended significant money and efforts towards developing a successful Project under the existing RFP[;]"\textsuperscript{144}

5. Hoʻohana "is an experienced developer and has a multi-faceted land use strategy in place to obtain the necessary permits to develop the Project under the RFP and PPA[,]" "should be allowed to continue its efforts to carry out and execute its land use strategy," and "fully intends to meet the Federal investment tax credit deadline by the end of 2019 and commence construction in 2020[;]"\textsuperscript{145} and

6. "The Consumer Advocate’s suggestion of a ‘possible appearance of collusion’ is unsupported and unjustified[.]"\textsuperscript{146}

Turning to Hoʻohana’s position on the Consumer Advocate’s recommended conditions, Hoʻohana objects to the Consumer Advocate’s recommendation that HECO file invoices related to the engineering, procurement, construction, and

\textsuperscript{144}Hoʻohana SOP at 17.

\textsuperscript{145}Hoʻohana SOP at 17.

\textsuperscript{146}Hoʻohana SOP at 20 (formatting altered). The commission discusses this issue at length below.
maintenance associated with the PPA because (1) Ho'ohana would not ordinarily share such confidential commercial and financial information with the Company without guarantees regarding use of the information, (2) HECO may be a direct competitor in future competitive bidding processes, and (3) it is unclear for what purpose the Consumer Advocate seeks this information.\(^{147}\) Ho'ohana contends that the additional recommended conditions of approval "are beyond the scope of the proceeding and not relevant to the issues to be decided[.]\(^{148}\)

Ho'ohana additionally states its position on HECO's request for approval of an above-ground 138 kV line extension,\(^{149}\) an issue the commission will address at a later date.\(^{150}\)

\(^{147}\)Ho'ohana SOP at 18 (additionally stating, "[a]s an independent power producer ["IPP"]), Seller is not subject to future rate regulation, and is also not guaranteed a rate of return on its investments, thus once the PPA is approved and the rates are determined to be just and reasonable, there is no legitimate use for such information in the evaluation of this project or the Commission's consideration of this Application.").

\(^{148}\)Ho'ohana SOP at 20 (listing the three remaining conditions recommended by the Consumer Advocate, and citing to the Consumer Advocate SOP at 27-28).

\(^{149}\)Ho'ohana SOP at 27-28.

\(^{150}\)See Order No. 36068 at 7, 15.
D.

HECO Reply.

In response to the Consumer Advocate's position recommending that the commission not approve the PPA, HECO states that "[b]ecause of the acknowledged benefits this project would bring to Company and its customers if successfully developed, Company believes Seller's project should be provided the opportunity to overcome the permitting issues raised by the Consumer Advocate." HECO does acknowledge that it agrees with the Consumer Advocate "that obtaining the permit or boundary amendment required for Seller to build its project on one of its two parcels will likely be difficult and time consuming[,]" but argues that "this difficulty does not necessarily amount to impossibility and should not, at this time, be considered a 'fatal flaw.' Rather, it is Company's position that Seller should be permitted to pursue its permit or boundary amendment in accordance with the PPA." HECO asserts that "the PPA contains adequate protections for Company and its customers, in the form of Daily Delay Damages and ultimately, if necessary, Termination Damages, if Seller is unsuccessful in completing its project as agreed or otherwise

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151 HECO Reply SOP at 2.
152 HECO Reply SOP at 8.
defaults on the PPA." According to HECO, "provisions in the PPA provide measures that are intended to make Company and its customers whole while alternative generation resources are sought to replace the project." As such, "the development risk is solely on Seller to deliver its project under the terms and conditions of the PPA" and HECO "believes Seller should be afforded the opportunity to deliver on its commitment."

In response to concerns raised by the Consumer Advocate regarding the procurement process as well as the terms and conditions of the PPAs, HECO states:

1. HECO "stands by the fairness of its procurement process" and although it "note[s] concerns over the representation of multiple proposers by the same law firm, the Company believes that this issue can be adequately addressed in Stage 2 of this RFP."  

2. Regarding the Consumer Advocate's concerns about the "very long term" of the PPA, HECO "contends that pursuing shorter term PPAs could result in higher incremental pricing for..."
the same project due to necessarily shorter financing structures, capital recapture and potential investment returns."\textsuperscript{157}

Turning to the Consumer Advocate's recommended conditions (if the commission approves the PPA), HECO addresses the recommended conditions as follows:

1. **Filing of Project invoices and Seller's income statements or results of operations following the Commercial Operations Date.** HECO "does not object to this recommendation in concept,"\textsuperscript{158} but contends that "[s]ince Seller will maintain such information, . . . the condition should apply to Seller, which is a participant in this proceeding."\textsuperscript{159} HECO also observes that Seller can designate this information as confidential, if desired.\textsuperscript{160}

2. **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

\textsuperscript{157}HECO Reply SOP at 7-8.

\textsuperscript{158}HECO Reply SOP at 9.

\textsuperscript{159}HECO Reply SOP at 10.

\textsuperscript{160}HECO Reply SOP at 10.
the process and allowed for a more informed evaluation of developers' proposed projects."\textsuperscript{161}

3. Developing guidelines for the procurement process to mitigate concerns related to potential unaffiliated sellers using the same representative(s) in negotiations. HECO "agrees with this recommendation . . . and intends to specifically address this concern in Stage 2 of the RFPs."\textsuperscript{162}

4. Condition in 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 of Position, HECO states it "will further consider how different metrics are utilized in the evaluation process" during "Stage 2 of the RFPs[.]."\textsuperscript{163}

Regarding Ho'ohana's SOP, HECO states that it supports the SOP to the extent Ho'ohana recommends commission approval of HECO's PPA Requests.\textsuperscript{164} Regarding Ho'ohana's response to the Consumer Advocate's recommendation that the commission not approve the PPA, HECO states that it "takes no position other than Company's prior responses to Commission and Consumer Advocate

\textsuperscript{161}HECO Reply SOP at 10.
\textsuperscript{162}HECO Reply SOP at 11.
\textsuperscript{163}HECO Reply SOP at 11.
\textsuperscript{164}HECO Reply SOP at 11.
requests on Seller’s permitting issue.”165 Lastly, on Ho‘ohana’s opposition to the Consumer Advocate’s first recommended condition, HECO states that "if the Commission is inclined to adopt this recommendation as a condition to approval, the condition should apply to Seller[.]”166

In conclusion, HECO reiterates its request that the commission grant its PPA Requests.167

III.

DISCUSSION

A.

Legal Authorities168

Generally, the rates agreed upon between HECO and Ho‘ohana pursuant to the PPA are subject to review under HRS § 269-27.2(c), which states:

(c) 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 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

165HECO Reply SOP at 11.
166HECO Reply SOP at 12.
167See HECO Reply SOP at 2, 6-9, 12.
168HECO states that it requests approval pursuant HRS §§ 226-18, 269-6, 269-27.2, 269-27.5, 269-27.6, 269-91, 269-92; HAR §§ 6-60-6, 6-61-74; and HAR Chapter 6-74.
public utilities commission according to the powers and procedures provided in this chapter [269].

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(a) 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.

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.

With regard to HECO's request to include all non-energy payments under the PPA through the PPAC, HAR § 6-60-2(2) states:

No changes in 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.

Additionally, HRS § 269-16.22 provides:

All power purchase costs, including costs 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 as defined under section 269-1, for the production, conveyance, transmission, delivery, or furnishing of electric power.

B. Procurement of the PPA

The PPA filed in this docket is the result of Phase 1 of the Hawaiian Electric 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. 2017-0352.169 The commission stated its intent to ensure that each competitive bidding process “is fair in its design and implementation so that selection is based on the merits;” that projects selected through a competitive bidding process are consistent with the utility’s PSIPs; that the utility’s actions represent prudent practices; and that throughout the process, the utility’s interests are aligned with the public interest. . . . 170

Moreover, the commission stated it “believes the overall RFPs 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."  

Notwithstanding the foregoing, the commission also said that, "[w]hile 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."  

In this proceeding, the Consumer Advocate expressed its concern "that all four developers associated with the seven projects with PPAs currently before the Commission are represented by the same counsel: Yamamoto Caliboso, a Limited Liability Law Company[]." The Consumer Advocate is "concerned that having one attorney lead negotiations for all four developers' PPAs gives

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172Order No. 36167 at 10.

173Consumer Advocate SOP at 11.
rise to, at a minimum, the appearance of impropriety."\textsuperscript{174} The Consumer Advocate "believes having one attorney or set of attorneys handling 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?'\textsuperscript{175}

However, the Consumer Advocate notes 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."\textsuperscript{176} The Consumer Advocate also notes "that the potential savings from the proposed PPA could yield benefits to consumers and further certain State goals and will not object to the proposed PPA on the basis of the possible appearance of impropriety."\textsuperscript{177} The Consumer Advocate contends "that this issue should be addressed in future competitive procurements to mitigate the possibility of similar circumstances."\textsuperscript{178}

\textsuperscript{174}Consumer Advocate SOP at 16.
\textsuperscript{175}Consumer Advocate SOP at 17.
\textsuperscript{176}Consumer Advocate SOP at 15-16.
\textsuperscript{177}Consumer Advocate SOP at 16.
\textsuperscript{178}Consumer Advocate SOP at 16.
In response to the Consumer Advocate's concerns, Ho'ohana asserts that the "suggestion of an appearance of collusion is way off-base, not supported by any evidence, and inflammatory[,]" "affirms that [Ho'ohana] did not collude in any way, directly or indirectly, with any other bidder" and "affirms that it has complied with the Certificate of Non-Collusion acknowledgment to present day."\textsuperscript{179} Ho'ohana's SOP includes a statement prepared by Ho'ohana's Senior Corporate Counsel additionally stating, among other things, that Ho'ohana takes accusations of collusion very seriously, and explaining that lenders and investors may influence the creation of uniform contract provisions, and that HECO requested certain provisions that HECO had agreed to with other developers.\textsuperscript{180}

With regards to the role of Yamamoto Caliboso during the procurement process, and in response to the Consumer Advocate's "suggest[ion] that the law firm's representation of multiple developers could give rise to the 'possible appearance of impropriety[,]'" Ho'ohana states: that Yamamoto Caliboso "did not share any information specific to a single developer with any other developer[;]"\textsuperscript{181} Yamamoto Caliboso's involvement with the initial

\textsuperscript{179}Ho'ohana SOP at 20; see id. at 21-25.

\textsuperscript{180}Ho'ohana SOP at 21; see id. at 21-25.

\textsuperscript{181}Ho'ohana SOP at 26.
response to the RFP was limited to providing comments on legal terms and risks (and not pricing); any similar guidance to developers was "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 "should be expected by any developer seeking legal advice from a law firm with similar expertise and experience[;]" during the initial response to the RFP, Yamamoto Caliboso was not privy to "project commercial information, including pricing, financial modeling, and project specifications[;]" and Yamamoto Caliboso was not involved in the submission of best and final offers.

Attached to Ho'ohana's SOP is a signed affidavit from Benjamin Sturgeon, Senior Corporate Counsel of Hanwa USA Energy Holdings Energy Corporation, manager of Ho'ohana, attesting that "the factual statements and representations made [in the SOP] with respect to Seller are true and accurate based on my present knowledge, information, and belief."  

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182 Ho'ohana SOP at 26.
183 Ho'ohana SOP at 26-27.
184 Ho'ohana SOP at 27.
185 Affidavit of Benjamin Sturgeon.
In its Reply SOP, HECO states it "takes no position" as to Ho'ohana's "other positions and arguments"\textsuperscript{186} (i.e., Ho'ohana's response to the Consumer Advocate's suggestion of a possible appearance of impropriety), and states in response to the Consumer Advocate's suggested recommendation that the procurement process should be reviewed to examine and develop guidelines, as necessary, to mitigate concerns about sellers using the same representative(s) in negotiations:

The Consumer Advocate does not contend that the stated concerns actually affected the integrity of this current procurement process. As such, this appears to be a recommendation for prospective action and not any basis to deny approval of the present Application. Nevertheless, the Company agrees with the recommendation to consider process improvements and intends to specifically address these concerns in Stage 2 of the RFPs.\textsuperscript{187}

The commission appreciates the Consumer Advocate's concern and acknowledges the accelerated procedural timeline established for this proceeding. 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 Ho'ohana in its SOP, which were attested to by Benjamin Sturgeon, Senior Corporate Counsel of Hanwa USA Energy Holdings Corporation, through his signed affidavit, provide

\textsuperscript{186}HECO Reply at 2.

\textsuperscript{187}HECO Reply SOP at 11.
sufficient assurance to the commission that the subject PPA was negotiated in good faith and without collusion.

Moreover, based on this record as reflected by the discussion below, the commission finds it does not appear that Ho'ohana's choice of outside counsel had any adverse impact on the pricing terms of the PPA.

However, to the extent necessary, the commission may 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. Material PPA Terms and Conditions


      1. Lump Sum Payment. As described above, the Lump Sum Payment is payable to Ho'ohana on a monthly basis and calculated by multiplying the Unit Price by the NEP, which is then offset by liquidated damages, if applicable.
2. **Unit Price.** The Unit Price is fixed over the entire term at $0.09885800264/kWh per kWh of NEP, or approximately $0.10 per kWh of NEP.\(^{188}\)

3. The commission finds that a fixed Unit Price throughout the PPA term is reasonable and in the public interest because the fixed price provides more certainty and comparatively less price volatility to fossil fuel prices.\(^{189}\)

4. **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 . . . , but in no circumstances shall the Net Energy Potential exceed the NEP RFP Projection.\(^{190}\)

5. In its RFP, Ho'ohana projected that the Project would have a NEP of 114,481 MWh per year.\(^{191}\)

\(^{188}\)Application, Exhibit 1 at 182, Exhibit 4 at 7.

\(^{189}\)See HRS § 269-6(b). "The Project will provide a hedge against fossil fuel price volatility . . . fixed pricing structure attributable to the Project further isolates customers from being impacted by future fuel price fluctuations." HECO's Response to PUC-HECO-IR-9, filed on February 26, 2019.

\(^{190}\)Application, Exhibit 1 at 169-170 (emphasis added). "Net Energy" is further defined as the "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' is the equivalent of 'Actual Output.'" Id. at 169.

\(^{191}\)Application at 343; see id. at 2, 15.
6. Based on the above, the commission finds that, although the NEP will be adjusted at certain intervals specified by the PPA, the NEP is reasonable and in the public interest because the PPA caps the NEP at the amount specified by the Ho'ohana RFP, or at 114,481 MWh per year, and thus provides a cap to the NEP portion of the Lump Sum Payment specified by the PPA.\(^\text{192}\)

7. As such, based on the publicly-available information in the Application, the commission finds that the maximum Lump Sum Payment under the PPA is $11,317,363 per year, or $943,114 (rounded) per month.\(^\text{193}\)

8. Applying the PPA's Unit Price of $0.09885800264/kWh, the maximum Lump Sum Payment under the PPA is $11,317,363 per year.

9. Together with the fixed Unit Price, the commission further finds that the Lump Sum Payment is reasonable and in the public interest, in part, because placing a maximum amount payable on the Lump Sum Payment provides more certainty and comparatively less price volatility to fossil fuel prices.\(^\text{194}\)

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\(^{192}\)See HRS § 269-6(b).

\(^{193}\)Expressed as a mathematical equation: \((\$0.09885800264 \text{ per kWh} \times 1,000) \times 114,481 \text{ MWh per year} = \$11,317,363 \text{ per year.}\) 
\(\$11,317,363 \text{ per year}/12 \text{ months} = \$943,113.58 \text{ per month.}\)

\(^{194}\)See HRS § 269-6(b).
10. **Energy Payment.** The Energy Payment for electric energy delivered in response to Company dispatch following Commercial Operations is paid on a monthly basis at the rate of $0.00092/kWh\(^5\) (i.e., the Energy Price). Based on the projected annual energy production, minus losses from the BESS, HECO represents that it estimates Energy Payments will be between $79,417 and $103,432 during the PPA term.

11. The commission finds that the Energy Payment, together with the Energy Price, is just and reasonable, in part, because the electric energy rate is extremely low ($0.00092/kWh), and is a small percentage of the total PPA pricing. In addition, the Lump Sum Payment and Energy Payment amounts, together, result in an estimated levelized price of $0.1047/kWh.\(^6\)

12. 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.\(^7\) In Docket

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\(^5\)Application, Exhibit 1 at 8, 275; Amendment to PPA, Exhibit 1 (Amended Page J-1 of Attachment J, amending the electric energy rate to be $0.00092/kWh, instead of the amount originally included in the PPA of $0.095/kWh).

\(^6\)HECO's Response to CA-IR-10, Attachment 1.

\(^7\)See In re Kauai Island Util. Coop., Docket No. 2017-0443, Decision and Order No. 35538, filed on 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 contact price of $0.1108/kWh); and In re Kauai Island Util. Coop., Docket No. 2015-0331, Decision and Order 2018-0431.
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. The commission observes that, at $0.1047/kWh, the estimated levelized price per kWh is below the commission's most recent PV plus BESS PPA, and continues the declining pricing trend in procurement of utility-scale renewable generation.

13. Moreover, it is anticipated that a HECO ratepayer using 500 kWh per month will save an estimated $1.16 on electricity payments in 2022, $2.61 in 2031, and $3.77 in 2041. Additionally, the Project is estimated to provide approximately $334,351,191 in savings (net present value).

14. **Test Energy.** Prior to the Commercial Operations Date, HECO may accept Test Energy at a price of $0.045/kWh.

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198 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 docket. Nevertheless, the contract pricing in those docket 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.

199 Application, Exhibit 3, Attachment 4.

200 Application, Exhibit 3, Attachment 2.

201 Application, Exhibit 1 at 42, 281. HECO explains that the Test Energy payment was not included in the estimated annual payments because of numerous factors, and any estimate for the 2018-0431
15. Liquidated damages. As stated above, liquidated damages have the potential to reduce the Lump Sum Payment 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.202

16. 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.203

Regarding the BESS system, 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, and (e) the BESS Equivalent Forced Outage Factor ("EFOF") Performance Metric, which evaluates whether the BESS is experiencing excessive unplanned outages.204 Liquidated Damages amount of Test Energy accepted would be speculative. See HECO's Response to CA/HECO-IR-10.b at 3.

202Application, Exhibit 4 at 5.

203Application, Exhibit 1 at 9-26, Exhibit 4 at 5.

204Application, Exhibit 1 at 9-13, 27-35, Exhibit 4 at 5.
relating to the BESS are assessed based on three-month period (the "BESS Measurement Period").\(^{205}\)

The commission finds that the liquidated damages provision appears to be reasonable in that it will ensure that the Project will deliver the value it purports to deliver to ratepayers.

b.  

**Nature of the PPA**

1. Pursuant to the terms of the PPA, HECO is agreeing to pay Ho'ohana a monthly Lump Sum Payment in exchange for the right to dispatch, subject to the Project's NEP and offset by any Liquidated Damages. Compared with the Energy Payment, which is based on the amount of actual energy dispatched to HECO's system, the Lump Sum Payment makes up the majority of the payment amount HECO will make pursuant to the PPA.

2. The Project is fully dispatchable and does not have a minimum dispatch limit.\(^{206}\)

3. As such, although subject to Force Majeure adjustments\(^{207}\) and offset by liquidated damages, the monthly Lump

\(^{205}\)Application, Exhibit 4 at 6.

\(^{206}\)Application, Exhibit 4 at 10.

\(^{207}\)Force Majeure is discussed in Article 21 of the PPA. See Application, Exhibit 1 at 111.
Sum Payment must be paid to Ho‘ohana regardless if the Project is dispatched at all or in part due to excess capacity. 208

4. However, the commission finds that having additional capacity is beneficial because the additional capacity increases HECO’s system reliability and grid stability in the event, for example, of an unforeseen shutdown of one or more other units on HECO’s system.

5. Nonetheless, the commission agrees with the Consumer Advocate that the nature of the PPA places risk on HECO’s ratepayers because HECO’s ratepayers may be paying for unused capacity during periods of time throughout the PPA’s term. To that end, the commission 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.” 209

6. As such, although the commission finds that the nature of the PPA is reasonable when balanced against other pricing terms of the PPA, as discussed above, and considerations of grid stability and increased system reliability, the commission finds it reasonable and in the public interest to require HECO to report

208See Application at 2, Exhibit 1 at 343.

209Consumer Advocate SOP at 30.
on Project operations for purposes of accountability, to inform other projects, and to inform related docket.\textsuperscript{210} The reporting requirements are as follows:

(a) 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.

(b) The above-described monthly report shall be filed in Docket No. 2011-0206, and may be consolidated with other curtailment reports therein.\textsuperscript{211}

7. The commission finds that the above-reporting requirements represent a step toward increasing transparency in the use of HECO's renewable resources for the benefit of its customers. Additional reporting requirements may be required in other dockets to the extent the commission finds them to be reasonable and in the public interest.

\textsuperscript{210}See In re Hawaiian Elec. Co., Inc., Docket No. 2017-0213, Decision and Order No. 35556, filed on June 27, 2018, at 63-64 ("Decision and Order No. 35556").

\textsuperscript{211}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

1. As noted above, the PPA provides for an initial Term of twenty (20) years following the Commercial Operations Date; and shall automatically terminate after the twenty-year "Initial Term." HECO and Ho'ohana may negotiate for an extended term under the PPA, which requires commission approval.

2. 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[.]"

3. 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]." As noted above, the PPA will automatically

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212 Application, Exhibit 1 at 71.

213 See Application, Exhibit 1 at 71 (§ 12.1) (discussing the "Extended Term").

214 Consumer Advocate SOP at 23.

215 Consumer Advocate SOP at 24 (brackets in the original).
terminate upon the expiration of the initial twenty-year term. While HECO and Ho'ohana 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.

4. The PPA duration should not be viewed in isolation from the rest of the terms of the PPA. Most notably, as discussed above, the Lump Sum Payment is capped pursuant to the terms of the PPA, the Performance Metrics could offset the amount of the Lump Sum Payment, a HECO ratepayer using 500 kWh per month is projected to save money on electric bills over the Project's duration, and the net present value of the savings resulting from the Project is positive.

5. The commission thus finds that the subject PPA overall represents a significant step not only towards Hawaii's renewable energy goals consistent with HRS §§ 269-6 and 269-92 (RPS), but also towards lower energy prices.
6. As such, subject to the reporting requirements set forth above, in Section III.C.1.b, the commission finds that the term of the PPA is reasonable and in the public interest.

d.

Curtailment

1. As discussed in Section III.C.1.b, above, the PPA contains a number of provisions that 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] [t]herefore, there would not be curtailment of the Project as experienced under prior PPAs."\footnote{HECO's Response to CA/HECO-IR-17.a, filed on February 13, 2019.} 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 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." 217

2. For similar reasons, HECO states that "addition of this Project is not expected to increase nor decrease the system energy contributions of existing must-take, as-available independent power producer facilities" (i.e., the Project should not affect curtailment of existing IPPs). 218 As discussed above, 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." 219

3. 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 central station), scheduled, and dispatchable

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217HECO’s Response to CA/HECO-IR-17.a.

218HECO’s Response to CA/HECO-IR-18, on filed February 13, 2019.

219HECO’s Response to CA/HECO-IR-18.

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resources. In other words, at some points during the duration of the Term, it may be necessary to curtail the Project.

4. 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).

5. Upon review, the commission finds that these considerations do not outweigh the overall reasonableness of the PPA. 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.

6. 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

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\textsuperscript{220}HECO’s Response to PUC-HECO-IR-5, filed on February 26, 2019.

\textsuperscript{221}See HECO’s Response to CA/HECO-IR-18.
commission 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

1. In its Application, HECO states that "[t]he Project Site is approximately 352 acres[,]" located on adjacent land parcels on two TMKs. HECO's Application additionally provides a "Project Site Map" outlining three adjacent project areas.

2. HRS § 205-2 sets out the four land use districts (i.e., urban, rural, agricultural, and conservation) into which all lands in the State are placed. TMK (1)9-4-002:052 is located in the Urban district ("Urban Parcel") and consists of approximately 161 acres; TMK (1)9-4-003:001 is located in the Agricultural district ("Agricultural Parcel") and consists of approximately 192 acres.

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222Application at 15; Exhibit 8 at 4.

223Application at 15; but see id., Exhibit 8 at 4 (referencing "the overall 330.27-acre Ho'ohana solar project."); Ho'ohana's Response to PUC-Ho'ohana-IR-04 (indicating that the Urban Parcel is 138 acres, and the Agricultural Parcel is 192 acres). The commission notes that the PPA itself does not appear to specify the approximate acreage of the Project Site, stating only that the proposed Project will be located on the two listed TMKs. See Application, Exhibit 1 at 183.

224Application, Exhibit 7.
approximately 881 acres.\textsuperscript{225} Regarding its intended use of the two parcels, Ho'ohana states:

The majority of [the Urban Parcel] is intended to be used for the Project site. This parcel is capable of accommodating 50\% to 60\% of the total 52 MWac solar array capacity of the Project, including facilities such as the on-site substation and battery storage components.

\ldots Up to 245 acres of the 881-acre [Agricultural Parcel] may be used for the Project, of which approximately 160 acres will be needed for the remaining 40\% to 50\% of the total 52 MWac solar array capacity of the Project.\textsuperscript{226}

3. Ho'ohana additionally represents that, according the Land Study Bureau's detailed land classification productivity rating, the Agricultural Parcel contains soil classified as A, B, C, D, and E, in the following acreage amounts: 549 acres in A; 65 acres in B; 22 acres in C; 35 acres in D; and 210 acres in E.\textsuperscript{227}

4. Revised Ordinances of Honolulu, Chapter 21 (Land Use Ordinance), Article 3 (Establishment of Zoning Districts and Zoning District Regulations) sets out the county zoning districts

\textsuperscript{225}See Application at 15; Ho'ohana's Response to PUC-Ho'ohana-IR-06.a at 1.

\textsuperscript{226}Ho'ohana's Response PUC-Ho'ohana-IR-06.a at 1-2.

\textsuperscript{227}Ho'ohana's Response PUC-Ho'ohana-IR-06.b at 2.
for land within the City and County of Honolulu.\(^{228}\) Ho'ohana states that both the Urban and Agricultural Parcels are zoned by the City and County of Honolulu as "AG-1 Restricted Agricultural District."\(^{229}\)

5. Pursuant to the PPA, Ho'ohana is required, at its own expense, to obtain "any and all Government Approvals required for the construction, ownership, operation and maintenance of the Facility and the interconnection of the Facility to the Company System."\(^{230}\) Ho'ohana is similarly required, at its own expense, to obtain "any and all Land Rights required for the construction, ownership, operation and maintenance of the Facility and the interconnection of the Facility to the Company System."\(^{231}\)

6. Ho'ohana identifies certain specific permits and/or approvals that are needed from State or County agencies for the Urban Parcel, which include permits related to construction of the Project.\(^{232}\) Ho'ohana estimates that the necessary permits and/or

\(^{228}\)See HRS §§ 205-5 (authorizing the counties to zone lands within the state land use districts other than in conservation districts), 46-4.

\(^{229}\)Ho'ohana's Response PUC-Ho'ohana-IR-06.c at 2; see also Revised Ordinance of Honolulu, Chapter 21, Articles 3, 5.

\(^{230}\)Application, Exhibit 1 at 68.

\(^{231}\)Application, Exhibit 1 at 68.

\(^{232}\)Ho'ohana's Response to PUC-Ho'ohana-IR-04.a & c at 10.
approvals may take up to 6 months to obtain, upon application.\textsuperscript{233} Although there is overlap with the permits and/or approvals Ho'ohana identifies as being required for the Agricultural Parcel, Ho'ohana indicates that the Agricultural Parcel will additionally require either a "State Special Use Permit" ("SUP") or a "State Land Use District Boundary Amendment" ("DBA") from the LUC.\textsuperscript{234} Ho'ohana estimates that the SUP would take 8-10 months for a decision upon application, while a DBA would take 12-14 months for a decision.\textsuperscript{235} Ho'ohana explains that it "may entitle the solar project use [on the Agricultural Parcel] through either a State Special Use Permit or a State Land Use District Boundary Amendment" and that "[t]hese permits will include conditions of approval to specify the scope and intent of the renewable energy project objectives, compatibility with agricultural lands, and scheduled project lifespan."\textsuperscript{236}

7. Ho'ohana states that it will decide whether to pursue a SUP or DBA for the Agricultural Parcel by June 2019, and notes that it "may potentially pursue both types of approvals concurrently."\textsuperscript{237} Ho'ohana asserts that whether it pursues a SUP

\textsuperscript{233}Ho'ohana's Response to PUC-Ho'ohana-IR-04.c. at 9.

\textsuperscript{234}Ho'ohana's Response to PUC-Ho'ohana-IR-04.a & c at 8, 9.

\textsuperscript{235}Ho'ohana's Response to PUC-Ho'ohana-IR-04.a & c at 8, 9.

\textsuperscript{236}Ho'ohana's Response to PUC-Ho'ohana-IR-04.c at 10.
or DBA (1) should not directly affect its ability to comply with the Guarantee Project Milestones, and (2) "should not directly require any change(s) to the [PPA]." HECO similarly states that it does not anticipate that an amendment to the PPA would be required, based on whether Ho'ohana pursues a SUP or a DBA.238

8. In response to the commission's IRs regarding Ho'ohana's contingency plan related to its ability to obtain all necessary government permits and approvals, Ho'ohana states that, in the event that any required permits and/or approvals are not received within the time provided in its projected timeline, its contingency plan includes: (1) beginning construction (as early as December 2019) on the Urban Parcel (which contains 50%-60% of the total 52 MWac solar array capacity of the Project); and (2)

237Ho'ohana's Response to PUC-Ho'ohana-IR-08.a at 6, filed on March 12, 2019.

238Ho'ohana's Response to PUC-Ho'ohana-IR-08.b & c at 6 & 7.

239HECO's Response to PUC-HECO-IR-11.b at 2, filed on March 12, 2019. HECO additionally states:

Any request by Ho'ohana to amend the PPA prior to the Effective Date (the later of the Non-appealable PUC Approval Order Date or the Interconnection Requirements Amendment) would be subject to Company's null and void rights under Section 12.5 of the PPA. After the Effective Date, or if Company is amenable to a PPA amendment prior to the Effective Date, a PPA amendment would be subject to Company's agreement and may be subject to further Commission approval. Id.
accelerating the projected schedule, if necessary, to make up any reasonable delays.  

9. Regarding Ho'ohana's contingency plan if permits and/or approvals are not received in time to meet Guaranteed Project Milestones, Ho'ohana highlights that the only milestone with a specific date is the Guaranteed Commercial Operations Date of December 31, 2021, which is subject to change based on the results of the IRS. Ho'ohana additionally acknowledges that if it "misses any of the Guaranteed Project Milestones, [it] has a liquidated damages period under Section 13.3 of the PPA before [HECO's] termination right becomes effective."  

10. HECO's stated contingency plan, in the event that Ho'ohana fails to comply with Guaranteed Project Milestones, includes remedies under the PPA, as well as replacing generation in Stage 2 RFPs or in the Integrated Grid Planning process. HECO states:

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240Ho'ohana's Response to PUC-Ho'ohana-IR-07.b at 4, filed on March 12, 2019 (additionally explaining that "[t]here is a buffer in the projected timeframe that will allow for completion of the Project ahead of the December 2021 Commercial Operations Date under the PPA.").

241Ho'ohana's Response to PUC-Ho'ohana-IR-07.c at 5. Other Guaranteed Project Milestones are not yet specified in the PPA, but will be determined after the IRS results. Id.; see Application, Exhibit 1.

242Ho'ohana's Response to PUC-Ho'ohana-IR-07.c at 5.
If Ho'ohana fails to meet any of the Guaranteed Project Milestones in the PPA — specifically, the "Construction Financing Closing Milestone," the "Permit Application Filing Milestone," or the "Guaranteed Commercial Operations Date" — and if any applicable grace periods and liquidated damages delay periods have expired, the Company has the option to terminate the PPA and collect Termination Damages (as defined in the PPA). In connection with the failure of any project in this Stage 1 request for proposals ("RFP"), the Company's contingency plan to replace the potential generation lost by such failed project, depending on the timing of such potential termination, is: (1) procure replacement generation in the Stage 2 RFPs in Docket No. 2017-0352; or (2) include such additional generation in the Company's integrated grid planning process if termination is after completion of selection of the Final Award Group in the Stage 2 RFPs.243

11. HECO additionally states "the loss of this project should not have an effect on Company's ability to meet its RPS requirement in 2030."244

12. In its SOP, the Consumer Advocate asserts that "there appears to be a potential 'fatal' flaw that could jeopardize the ability for the project to move forward[,]"245 and that absent enactment of proposed legislation, "the viability of the project, as proposed, may be threatened."246 Moreover, the Consumer Advocate contends that "[t]his situation raises questions about whether the

243HECO's Response to PUC-HECO-10 at 1.
244HECO's Response to PUC-HECO-10 at 1.
245Consumer Advocate SOP at 29.
246Consumer Advocate SOP at 28.
proposed project can meet milestones given that time is of the essence." Referencing the "aggressive schedule [ ] set to meet project timelines that would enable developers to take advantage of the Federal investment tax credits that are set to start declining in 2019[,]" and "in recognition that time is of the essence[,]" "the Consumer Advocate has recommended disapproval at this time in order to avoid uncertainty regarding whether the project will be able to move forward if conditional approval was granted." The Consumer Advocate additionally states:

Until sufficient evidence can be provided to address the concern that the proposed project may be inconsistent with current state law, the Consumer Advocate does not believe it is in the public interest for the Commission to grant the requested relief as it would be inappropriate for the Commission to grant approval of a project that is inconsistent with State law, county ordinances, and/or rules.247

13. Ho'ohana takes issue with the Consumer Advocate's contention that Ho'ohana may not be able to obtain permits required for the Project,248 stating that the Consumer Advocate's position "is based on [ ] speculation that seller will not be able to obtain permits needed to develop the Project on Class A soils[]."249 Ho'ohana emphasizes that "[o]ther solar projects currently under

247Consumer Advocate SOP at 28-29.

248Ho'ohana SOP at 16, 17.

249^0'ohana SOP at 13 (formatting altered).
consideration by the Commission likewise have discretionary permits that much be obtained prior to the start of construction on their respective project sites" and that "[s]everal of these permits may not be obtained until 2020[.]" According to Ho'ohana, the fact that the Consumer Advocate did not identify similar uncertainty with regards to other projects essentially results in the Consumer Advocate "treat[ing] Seller disparately in connection with the recommendation to prematurely disapprove the Project." Ho'ohana additionally contends that a "premature disapproval" of the Project would: (1) prevent it "from continuing to pursue the necessary permits it needs to develop its Project on class A soils, which it is entitled to pursue under the RFP and PPA[;]" (2) effectively impose "a new RFP condition after Seller has already expended significant money and efforts towards developing a successful Project under the existing RFP[;]" and (3) prevent Ho'ohana from "continuing its efforts to carry out and execute its land use strategy[.]

250Ho'ohana SOP at 16.
251Ho'ohana SOP at 16.
252Ho'ohana SOP at 16.
253Ho'ohana SOP at 17.
254Ho'ohana SOP at 17.

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14. Ho'ohana and HECO each emphasize that under the PPA, the developer (i.e., Ho'ohana) assumes the risk regarding development of the Project. Ho'ohana states, "[d]evelopment risks are appropriately managed by Seller and negotiated with the Company through the PPA." HECO similarly states, "the development risk is solely on Seller to deliver its project under the terms and conditions of the PPA." 

15. HECO "respectfully disagrees with the Consumer Advocate's recommendation not to approve the PPA[."

Responding to the Consumer Advocate's argument that there is a potential "fatal flaw," HECO asserts that: (1) "estimating now whether Seller will be able to meet its Guaranteed Project Milestones is speculative given the multi-pronged nature of Seller's overall plan[;]" and (2) "the PPA contains adequate protections for [HECO] and its customers, in the form of Daily Delay Damages and ultimately, if necessary, Termination Damages, if Seller is unsuccessful in completing its project as agreed or otherwise defaults on the PPA."  

255 Ho'ohana SOP at 16.
256 HECO Reply SOP at 9.
257 HECO Reply SOP at 2.
258 HECO Reply SOP at 8.
259 HECO Reply SOP at 8.
16. While HECO concedes that "obtaining the permit or boundary amendment required for Seller to build its project on one of its two parcels will likely be difficult and time consuming[,]" HECO contends that "this difficulty does not necessarily amount to impossibility and should not, at this time, be considered a 'fatal flaw.'"\(^{260}\) HECO additionally states:

> it is Company's position that Seller should be permitted to pursue its permit or boundary amendment in accordance with the PPA. If such efforts prove to be timely and successful, Company and its customers will be the beneficiary of cost-effective renewable energy resource dispatchable by the Company for twenty years. If unsuccessful, provisions in the PPA provide measures that are intended to make Company and its customers whole while alternative generation resources are sought to replace the project.\(^{261}\)

17. In sum, HECO "believes Seller should be afforded the opportunity to deliver on its commitment."\(^{262}\)

18. While the commission appreciates the Consumer Advocate's thorough examination of the various factors that may affect the timeline, or potentially even the viability, of the Project, the commission does not agree with the

\(^{260}\)HECO Reply SOP at 8.

\(^{261}\)HECO Reply at 8-9.

\(^{262}\)HECO Reply at 9.
Consumer Advocate’s position that granting HECO’s requested relief is not in the public interest.  

19. The record reflects that in order to move forward with the Project, Ho’ohana must obtain certain permits and/or approvals for both the Urban and Agricultural Parcels, and that for development to proceed on the Agricultural Parcel, either a SUP or a DBA is required. While decisions on land use are governed by the Land Use Commission, and are beyond the commission’s scope of authority, jurisdiction, and expertise, the commission is aware

263See Consumer Advocate SOP at 28-29 (stating, "[u]ntil sufficient evidence can be provided to address the concern that the proposed project may be inconsistent with current state law, the Consumer Advocate does not believe it is in the public interest for the Commission to grant the requested relief as it would be inappropriate for the Commission to grant approval of a project that is inconsistent with State law, county ordinances, and/or rules.").

As discussed in more detail above, although the Consumer Advocate “has recommended disapproval at this time in order to avoid uncertainty regarding whether the project will be able to move forward . . . [,]” the Consumer Advocate also “recognizes that the proposed RFP PPAs can provide benefits by contributing to the State’s goals of renewable energy, providing a contribution to the [RPS] as set forth by HRS § 269-92(a), lower fossil fuel usage, reduc[e] [GHG] emissions and [provide] a hedge to fossil fuel prices as summarized on Attachment 2. Furthermore, due to the nature of the proposed PPAs as capacity type contracts, the Consumer Advocate recognizes the possible benefit of the flexibility associated with the proposed project, as facilitated by the allowed utility control pursuant to the proposed RDG PPA, as compared to an as-available project paid on a per kWh basis.” Consumer Advocate SOP at 29-30.

264See generally, HRS Chapter 205.
that HRS Chapter 205 places certain restrictions and/or requires certain permits and/or approvals for certain uses in the Agricultural district, and that the type of permit and/or approval required may depend on the specific soil classification(s) of a given parcel.\textsuperscript{265} Indeed, Ho’ohana represents that additional permit(s) and/or approval(s) are required for the Agricultural Parcel (i.e., either a SUP or a DBA), which are not required for the Urban Parcel.\textsuperscript{266} Whether or not, and at what point in time, Ho’ohana will obtain specific required permits and/or approvals is currently unknown. Ho’ohana represents that it will decide in June 2019 whether to pursue a SUP or DBA\textsuperscript{267} and estimates that obtaining a SUP would take 8-10 months and a DBA will take 12-14 months to obtain;\textsuperscript{268} and states that it “fully intends to meet the Federal investment tax credit deadline by the end of 2019 and commence construction in 2020.”\textsuperscript{269}

20. In the event that there is a delay, Ho’ohana and HECO have each identified contingency plans, which include recognition of terms and conditions of the PPA that expressly

\textsuperscript{265}See HRS §§ 205-2, -4.5.

\textsuperscript{266}See Ho’ohana’s Responses to PUC-Ho’ohana-IR-04, -07.

\textsuperscript{267}Ho’ohana’s Response to PUC-Ho’ohana-IR-08.a at 6.

\textsuperscript{268}Ho’ohana’s Response to PUC-Ho’ohana-IR-08.c at 9.

\textsuperscript{269}Ho’ohana SOP at 17.
anticipate delays. These terms and conditions include "Daily Delay Damages" and "Termination Damages."

21. For all Guaranteed Project Milestones (other than Commercial Operations), Ho'ohana is required to pay Daily Delay Damages in the amount of $14,444 for each day beyond the tenth day after the applicable deadline, not to exceed 90 days. For the Guaranteed Commercial Operations Date Milestone, "in addition to any delay damages collected pursuant to Section 13.4(a)(1)" of the PPA, for Guaranteed Project Milestones other than the Commercial Operations Date Milestone, HECO "shall collect and [Ho'ohana] shall pay Daily Delay Damages following the Guaranteed Commercial Operations Date or (if applicable) the expiration of such extended period that Seller fails to achieve the Guaranteed Commercial Operations Date[.]" Upon expiration of any applicable delay periods, if Ho'ohana has not achieved the Guaranteed Project Milestone Date, HECO has the right to terminate the PPA. HECO contends that these provisions "are intended to make [HECO] and

270 See PPA at 79-80; see also Ho'ohana's Response to PUC-Ho'ohana-IR-5, filed on February 25, 2019. The number of days beyond the deadline shall not exceed 90 days.

271 See PPA at 79-81; see also Ho'ohana's Response to PUC-Ho'ohana-IR-5. The Guaranteed Commercial Operations Date is subject to limited extended periods, and the collection of damages are subject to maximum delay periods.

272 See PPA at 81-82; HECO Reply SOP at 8; see also Ho'ohana's Response to PUC-Ho'ohana-IR-5.
its customers whole while alternative generation resources are sought to replace the project."\textsuperscript{273} The commission notes that any Daily Delay Damages and any Termination Damages shall necessarily be passed through to ratepayers through the PPAC.

22. The record reflects that Ho'ohana has not received all of the required permits and/or approvals to move forward with the Project. However, the terms of the PPA require Ho'ohana to obtain, at its own expense, any and all government approvals; and provides remedies, in the form of Daily Delay Damages and HECO's termination rights, if Ho'ohana fails to meet Guaranteed Project Milestone Dates, including the Guaranteed Commercial Operations Date. The commission notes that neither the RFP nor the PPA require Ho'ohana to have obtained all necessary permits and/or approvals by the time of HECO's Application submission to the commission; and, as noted by Ho'ohana, Ho'ohana "has complied with the RFP requirements" and "there is no express prohibition against developing on class A soils in the RFP[.]"\textsuperscript{274}

23. Based on the record and upon review of the PPA, the commission determines that HECO and ratepayers are adequately protected through the PPA terms. For the reasons discussed herein, the commission declines to adopt the Consumer Advocate's position

\textsuperscript{273}HECO Reply SOP at 8-9.

\textsuperscript{274}Ho'ohana SOP at 17.
that, due to the existing uncertainty regarding land use permits and/or approvals required for the Project, the Application is not in the public interest and should not be approved. As discussed throughout the Discussion Section herein, the commission has considered a variety of factors related to the PPA, and finds that HECO has met its burden of proof that the purchased power arrangements under the PPA are prudent and in the public interest, and that the purchased energy charges pursuant to the PPA are just and reasonable.

24. In order to provide additional clarification, the commission explicitly states the following:

A. The commission's approval of HECO's requests in the instant Decision and Order is limited to approvals of HECO's PPA-related requests. The commission does not have jurisdiction nor the authority to issue decisions related to land use; these types of decisions rest with the Land Use Commission as well the respective counties and other applicable government agencies.275

275The commission further clarifies that its decision to approve HECO's PPA-related requests is one of a number of permits and/or approvals necessary for the Project to come to fruition. Although the commission's approval of HECO's requests at this point in time is occurring prior to other decisions (including a Land Use Commission decision on a yet-to-be-filed request for a SUP or DBA), the commission's decision does not presuppose any subsequent decision by the Land Use Commission or any other government agency. Additionally, HECO's specific requests for approval are before the commission at this time rather than later in the development or planning process, because, the commission presumes, HECO, and likely the Seller, seek assurances that the purchased energy

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B. The commission fully expects HECO to firmly hold Ho'ohana to the timelines established in the PPA, and to pursue contractual remedies if Ho'ohana fails meet applicable timelines. In addition, the commission is not inclined to be involved in lengthy contract disputes related to the PPA.

C. In the event of delay or termination of the PPA with Ho'ohana, the commission fully expects that HECO will expeditiously pursue alternatives for the project.

D. Any assessed Daily Delay Damages, Termination Damages, and any other revenues or benefits obtained by HECO in relation to the PPA terms and conditions shall be passed on to ratepayers through the PPAC.

2. Community Outreach

1. Pursuant to the PPA, Ho'ohana was required to conduct a public meeting in the community where the Project is to be located, with the intent of gathering stakeholders and other interested parties to inform the community about the Project and charges may be collected from ratepayers. The commission’s approval herein should not be viewed as the first in a linear series of approvals that leads to approvals by other agencies; the commission, as well as the Land Use Commission, each apply their own criteria to decision-making, consistent with applicable rules and State law.
to allow for community concerns and questions to be raised.\textsuperscript{276} Exhibit 8 of the Application contains a summary of Ho'ohana's community outreach efforts and public comments it received as of the time the Application was filed.\textsuperscript{277}

In response to CA/Ho'ohana-IR-6, Ho'ohana states that it "has met with hundreds of stakeholders at meetings conducted since early 2014. [ ] Strong support for the project is indicated among elected officials, community organizations, neighbors and environmental groups, and this dialogue continues."\textsuperscript{278}

In October 2018, "[e]lected officials and community members were briefed on the project plans, who indicated their continued support for the renewable energy plans for the Kunia lands."\textsuperscript{279} Ho'ohana further represents that:

There were very few issues of concern raised by government agencies, elected officials, and the community regarding the Ho'ohana Solar project.

The few project-related concerns raised for discussion in the community outreach process included: i. Historic agricultural features on the property were identified in the sun/ey's; ii. Views of the solar farm facilities; iii. drainage and stormwater runoff; iv. potential for increased traffic and noise; and v. site security.\textsuperscript{280}

\begin{footnotes}
\item[\textsuperscript{276}] Application at 20.
\item[\textsuperscript{277}] Application at 20, Exhibit 8.
\item[\textsuperscript{278}] Ho'ohana's Response to CA/Ho'ohana-IR-6.a at 12, filed on February 8, 2019.
\item[\textsuperscript{279}] Ho'ohana's Response to CA/Ho'ohana-IR-6.b at 12.
\item[\textsuperscript{280}] Ho'ohana's Response to CA/Ho'ohana-IR-6.b at 12.
\end{footnotes}
Ho‘ohana states that it is "carefully addressing each of these community concerns."\(^{281}\) In addition, Ho‘ohana describes the community benefits of the project, including constructing/repairing a non-potable water line to the State of Hawaii Kunia Agricultural Park, and conducting educational outreach to area public schools about sustainability.\(^ {282}\)

In addition, Ho‘ohana states that since the Application was filed, it has continued its outreach to "stakeholders and community members includ[ing], for example, neighboring residents, businesses, farmers, nonprofits, policy makers, government officials, government departments, regulatory agencies, K-16 educators, outreach extension programs, board members, and commissioners" "to keep them informed, ask for feedback, answer questions, and share updates."\(^ {283}\)

3.

Conditions to Approval

1. To reiterate, the commission finds it reasonable and in the public interest to require HECO to report on Project

\(^{281}\) Ho‘ohana’s Response to CA/Ho‘ohana-IR-6.b at 13.

\(^{282}\) See Ho‘ohana’s Response to CA/Ho‘ohana-IR-6.d at 14.

\(^{283}\) Ho‘ohana SOP at 11.
operations for purposes of accountability, to inform other projects, and to inform related dockets. The reporting requirements are as follows:

(a) 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.

(b) The above-described monthly report shall be filed in Docket No. 2011-0206, and may be consolidated with other curtailment reports therein.

2. The commission continues to expect that HECO's curtailment of fossil fuel generation will occur before curtailment of must-take, as-available renewable resources.

3. Regarding the Consumer Advocate's recommended conditions (provided by the Consumer Advocate in the event that the commission approves the PPA) the commission finds as follows:

Requiring HECO to file invoices related to the Project and Ho'ohana's income statements or results of operations related to the PPA. The Consumer Advocate has proposed a similar

284 See Decision and Order No. 35556.

285 See HRS § 269-6(b); In re Hawaii Elec. Light Co., Inc., Docket No. 2011-0040, Decision and Order No. 30088, filed December 30, 2011 ("Decision and Order No. 30088"), at 42.

286 Consumer Advocate SOP at 30-31.
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

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288 Consumer Advocate SOP at 31.

seniority provision, nor is it expected to impact curtailment of existing renewable IPPs.\footnote{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.}

Second, to the extent the Consumer Advocate desires such information to retroactively evaluate the reasonableness of Ho‘ohana’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 Ho‘ohana 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
overseen by an IO, which concluded that there was no evidence of collusion and that the PPA terms appeared reasonable.291

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, lower 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 Ho'ohana's income statements, which Ho'ohana has characterized as "confidential commercial and financial information[,]"292 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.293 Ho'ohana contends that this recommendation (as well as the remaining recommendations proposed by the Consumer Advocate) is:

beyond the scope of this proceeding and not relevant to the issues to be decided in evaluating the Application. Matters related to future procurement efforts are more properly before the commission in Docket No. 2017-0352, and that would


292Ho'ohana SOP at 18.

293Consumer Advocate SOP at 31.
be the appropriate forum for the Commission to consider such concerns. However, we note that these concerns should not be raised without an opportunity for public comment because they do raise concerns that warrant further discussion.  

HECO, meanwhile, states that it "agrees with this recommendation" and "believe[s] that requiring a complete pro forma would have been beneficial to the [procurement] process and allow[] for a more informed evaluation of developers' proposed projects."  

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, Ho'ohana 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

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294Ho'ohana SOP at 20.

295HECO Reply SOP at 10.
Furthermore, even after being compelled to produce this information, Ho'ohana provided it in an inaccessible, .pdf format, which limited the Consumer Advocate's ability to utilize this information. While the reasons for Ho'ohana's conduct are unknown, they appear inconsistent with Ho'ohana's earlier representations that it would provide "specialized, historical knowledge of the Project," and "not broaden the issues or delay the proceeding." Going forward, the commission emphasizes that such information should be timely provided 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. Ho'ohana raises the same objection as quoted above, in response to the Consumer Advocate's second recommended condition. HECO, however, agrees with this proposed recommendation, stating: "the Company agrees with the recommendation to consider process improvements and intends to specifically address these concerns in Stage 2 of

296See Order No. 36167.
297See Consumer Advocate SOP at 18-19.
298Ho'ohana's Motion to Participate at 8.
299Consumer Advocate SOP at 31.
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." Ho’ohana, again, raises the same objection as quoted above, in response to the Consumer Advocate’s second recommended condition. As stated 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.

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300 HECO Reply SOP at 11.

301 Consumer Advocate SOP at 31.

302 HECO Reply SOP at 11.
D.

Recovery of PPA-Related Energy Payments Through the ECRC and Non-Energy Payments Through the PPAC

1. Given the commission's overall approval of the PPA, the commission likewise approves HECO's request to recover the payments for energy on a per kWh basis under the PPA, and related revenue taxes, through the ECRC and 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. Such decision is consistent with HAR § 6-60-6(2), which authorizes the pass through of purchased energy charges through an electric utility's PPAC; and with HRS § 269-16.22, which states that a utility "shall be allowed" to "recover[] . . . from its customer base" and "through one or more adjustable surcharges . . . established by the . . . commission[,]" "[a]ll power purchase costs . . . arising out of [PPAs] that have been approved by the . . . commission and are binding obligations on the electric utility company." \(^{303}\)

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

\(^{303}\)The PPAC was approved by the commission in Decision and Order No. 30168, filed in Docket No. 2009-0164 on February 8, 2012. 2018-0431
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 prior to the commencement of the Lump Sum Payment, 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

1. The State of Hawaii has expressed 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;\(^{304}\) standards requiring minimum percentages of renewable energy generation by specific dates;\(^{305}\) provisions requiring preference for utility utilization and dispatch of renewable generation resources;\(^{306}\) provisions

\(^{304}\)See, e.g., HRS § 269-96.

\(^{305}\)See, e.g., HRS §§ 269-91 to -95.

\(^{306}\)See, e.g., HRS § 269-27.2.
requiring consideration of factors related to impacts of fossil fuel use in the regulation of public utilities; and provisions that require consideration of specific resources and/or regulatory mechanisms.

2. 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.

3. As discussed above, the subject PPA is the result of Phase 1 of the Hawaiian Electric Companies' competitive procurement process to acquire new, dispatchable and renewable energy resources for Oahu, Maui, and Hawaii Island. According to HECO and as discussed above in Section III.C.1.a, the Project will provide a hedge against fossil fuel price volatility, which has

\[\text{307} \text{See, e.g., HRS § 269-6(b).}\]

\[\text{308} \text{See, e.g., HRS §§ 269-16.1 269-146, 269-147, 269-148, & 269-149.}\]
fluctuated in the past ten years from $35 per barrel of 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."  

4. 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."

5. More specifically, HECO anticipates that, over the course of the life of the PPA, the Project will result in a total avoided fuel consumption of 102,824 barrels of low sulfur fuel oil, 12,696 barrels of diesel fuel, 1,659,897 barrels of

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309HECO's Response to PUC-HECO-IR-9.a at 1, filed on February 26, 2019.


312HECO's Response to PUC-HECO-IR-9.c at 2.
ultra-low sulfur diesel, and 465 tons of coal,\textsuperscript{313} as well as a reduction of approximately 747,601 short tons of GHG emissions.\textsuperscript{314}

6. Moreover, HECO estimates that the Project will contribute 1.8% towards HECO's RPS in 2022 and 2% in 2030, with an average RPS impact of 1.9% between 2022 and 2041.\textsuperscript{315}

7. 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 reducing GHG emissions.\textsuperscript{316}

8. As such, upon explicit consideration of the specified criteria in HRS § 269-6(b) (price volatility, fuel supply reliability risk, export of funds for fuel imports, and greenhouse gas emissions), the commission finds HECO's PPA to be reasonable and in the public interest because the PPA overall advances Hawaii's goal of reducing reliance on fossil fuels through energy efficiency and increased renewable energy generation, reduces greenhouse gas emissions, and does so at a price that is estimated to result in savings for HECO's ratepayers between 2022 and 2041.\textsuperscript{317}

\textsuperscript{313}Application, Exhibit 3 at 3-4.

\textsuperscript{314}Application, Exhibit 5 at 1.

\textsuperscript{315}Application, Exhibit 6 at 1; see also HRS § 269-92.

\textsuperscript{316}See Consumer Advocate SOP at 29, Attachment 2 at 7-9.

\textsuperscript{317}See HRS § 269-6(b); Consumer Advocate SOP, Attachment 2, at 6.
F.

Remainder of the Proceeding

As noted above, HECO requested that the commission issue two separate decisions and orders in this docket: (1) the first decision approving requests relating to the PPA, which is the subject of the commission's discussion, above, and (2) the second decision approving requests related to the proposed above-ground 138 kV line extension. Pursuant to Order No. 36068, the commission bifurcated HECO's PPA-related requests from its above-ground 138 kV line extension-related requests.

Regarding its above-ground 138 kV line extension-related requests, HECO explained that "[a]n IRS will be conducted to evaluate the effects of the proposed interconnection of the Facility to the Company system." As of the filing of the Application, the IRS was not completed; however, in order to take advantage of federal investment tax credits, "the Parties agreed to execute the PPA prior to the completion of the IRS for

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318 See Application at 5-6.
319 See Order No. 36068.
320 Application at 17.
321 See Application at 17.
the Project."\textsuperscript{322} HECO has stated that it will file an amendment to the PPA based on the IRS results.\textsuperscript{323}

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 138-kV line extension-related requests (Issue 3).\textsuperscript{324}

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 Ho'ohana, dated December 27, 2018. In finding as such, the commission further finds:

A. The purchased power arrangements under the PPA, pursuant to which HECO will dispatch energy on an availability basis from Ho'ohana, including the Lump Sum Payment to be paid to Ho'ohana, are prudent and in the public interest; and

\textsuperscript{322}Application at 18.
\textsuperscript{323}Application at 18.
\textsuperscript{324}See Order No. 36068 at 8 n.16 (stating that the commission intends to issue a separate procedural order to govern HECO's above-ground 138-kV line extension-related requests).
B. The purchased energy charges based on the Energy Price to be paid by HECO pursuant to the PPA are just and reasonable.

2. HECO has met its burden of proof in support of its request to include all payments for energy on a per kWh basis under the PPA, and related revenue taxes, through the ECRC and 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 Ho‘ohana, dated December 27, 2018; and

B. HECO’s request to include all payments for energy on a per kWh basis under the PPA, and related revenue taxes, through the ECRC, and 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. 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 138 kV line extension-related requests (Issue 3).

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:

Jessica R. Freedman
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:

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