DIVISION OF CONSUMER ADVOCACY
Department of Commerce and
Consumer Affairs
335 Merchant Street, Room 326
Honolulu, Hawaii 96813
Telephone: (808) 586-2800

# OF THE STATE OF HAWAII

In the Matter of the Application of	
HAWAIIAN ELECTRIC COMPANY, INC.	DOCKET NO. 2022-0007
For Approval of Power Purchase Agreement )	
for Renewable Dispatchable Generation with) BCE Kupono Solar, LLC.	

# DIVISION OF CONSUMER ADVOCACY'S STATEMENT OF POSITION FOR THE SECOND PHASE

Pursuant to the Hawaii Public Utilities Commission's ("Commission") Order No. 38731 Establishing a Procedural Order for the Second Phase of this Proceeding, filed on November 30, 2022 ("Order No. 38731"), the Division of Consumer Advocacy ("Consumer Advocate") informs the Commission that it has completed its review of the application. Based upon that review, the Consumer Advocate hereby states that it does not object to a Commission determination that the 46 kV transmission line extension as described in Hawaiian Electric Company, Inc.'s ("Hawaiian Electric" or the "Company") letter, filed on November 3, 2022 ("November 3, 2022 Letter"), be constructed above the surface of the ground, pursuant to Hawaii Revised Statutes ("HRS") § 269.-27.6(a).

#### I. BACKGROUND.

On July 22, 2022, the Commission issued Decision and Order No. 38519 ("D&O 38519"), which among other things, subject to certain conditions, approved the Power Purchase Agreement for Renewable Dispatchable Generation (PV + BESS) between BCE Kupono Solar, LLC ("Kupono Solar" or "Seller") and the Company, dated December 20, 2021 ("PPA") for a 42-megawatt ("MW") photovoltaic project paired with a 168-megawatt hour ("MWh") lithium-ion battery energy storage system ("Project"). Furthermore, D&O 38519 stated that after Hawaiian Electric files an amendment to the PPA based on its Interconnection Requirements Study ("IRS") results, the Commission will issue a procedural schedule in this docket to govern its review of Hawaiian Electric's above-ground 46 kV overhead line Interconnection-Related Requests, which would be in the second phase.<sup>2</sup>

In its November 3, 2022 Letter, Hawaiian Electric is requesting the Commission:

(a) Determine that the 46 kV line extension that is included as part of Company-Owned Interconnection Facilities should be constructed above the surface of the ground, pursuant to HRS § 269-27.6(a) and if required by law under HRS § 269-6, with explicit consideration of the effect of the State's reliance on fossil fuels on price volatility, export of funds for fuel imports, fuel supply reliability risk, and greenhouse gas emissions; and

<sup>&</sup>lt;sup>1</sup> D&O 38519, at 101.

The Consumer Advocate notes that the issues in this proceeding were bifurcated in Order No. 38258 (1) Approving Hawaiian Electric Company, Inc.'s Request to Bifurcate Its Power Purchase Agreement-Related Requests from Its Interconnection-Related Requests; (2) Establishing a Statement of Issues for the First Portion of the Proceeding; (3) Setting the Scope of Participation for Participant; and (4) Ordering the Parties to File a Procedural Schedule, filed on March 4, 2022 ("Order No. 38258").

# Confidential Information Deleted Pursuant To Protective Order No. 38237

(b) Grant such other relief as may be just and reasonable under the circumstances.

On November 16, 2022, Hawaiian Electric submitted its Greenhouse Gas ("GHG") Emissions Analysis as Exhibit H to the November 3, 2022 Letter ("GHG Analysis").

On November 30, 2022, the Commission filed Order No. 38731.

On December 19, 2022, the Consumer Advocate filed its Second Submission of Information Requests. Hawaiian Electric and Kupono Solar responded on January 17, 2023.

On January 31, 2023, the Consumer Advocate filed its Second Submission of Supplemental Information Requests. Hawaiian Electric and Kupono Solar responded on February 14, 2023.

## II. <u>DISCUSSION</u>.

In Order No. 38731, the Commission set forth the following statement of issue ("SOI") for the second phase of this proceeding:

Whether it is in the public interest for the 46 kV line extension, required to interconnect the [P]roject to Hawaiian Electric's system, to be constructed above the surface of the ground pursuant to HRS § 269-27.6(a).<sup>3</sup>

#### Hawaiian Electric states that:

The scope of work for Hawaiian Electric's 46 kV sub-transmission overhead line extension will span from the existing 46 kV overhead line near pole P.35X located north of the Hawaii Prince Golf Course to the new Seller- owned Substation. It consists of the installation of one (1) 46 kV 70' class H4 wood intercept pole, one (1) 46 kV 70' class H4 wood pole, one (1) group operated inertia air switch, and approximately 237 circuit feet of 556 KCM All Aluminum Conductor 46 kV overhead conductors.<sup>4</sup>

<sup>&</sup>lt;sup>3</sup> Order No. 38731, at 5.

<sup>4</sup> November 3, 2022 Letter, at 7.

Prior to discussing the issue set forth in Order No. 38731, the Consumer Advocate reviewed the proposed request to determine whether a public hearing is required pursuant to HRS § 269-27.5 which states, in relevant part, that:

Whenever a public utility plans to place, construct, erect, or otherwise build a new 46 kilovolt or greater high-voltage electric transmission system above the surface of the ground through any residential area, the public utilities commission shall conduct a public hearing prior to its issuance of approval thereof.

#### Hawaiian Electric states:

The Project involves the extension of a short segment of 46 kV overhead line. A public hearing pursuant to HRS § 269-27.5 is not requested for this Project because there are no existing residential homes in or near the Project site. The zoning of the area where the 46 kV line will be extended is zoned Agriculture "AG-2" and Federal and Military Preservation "F-1". The closest residential area, the Haleakea neighborhood, is approximately 854 feet away from the Project. In addition, the 46 kV line extension will not be visible from the homes due to the distance and terrain. The Project site and surrounding areas consist mainly of undeveloped land and the Hawaii Prince Golf course....<sup>5</sup>

The Consumer Advocate notes that based on its review of the project area map and photos provided in Exhibit F of the November 3, 2022 Letter and responses to CA/HECO-SIR-12 and CA/BCE-IR-14, the proposed 46 kV line extension will not be constructed or built through a residential area. Thus, based on its review, the Consumer Advocate agrees that a public hearing, pursuant to HRS § 269-27.5, is not required.

November 3, 2022 Letter, at 8.

A. ISSUE FOR THE SECOND PHASE – DETERMINE THAT THE 46 KV LINE EXTENSION, REQUIRED TO INTERCONNECT THE PROJECT TO HAWAIIAN ELECTRIC'S SYSTEM, SHOULD BE CONSTRUCTED ABOVE THE SURFACE OF THE GROUND PURSUANT TO HRS § 269-27.6(a).

As it relates to the issue for the second phase, pursuant to HRS §269-27.6(a), the following factors shall be considered in the construction of a new 46 kV or greater electric transmission system:

- (1) Whether a benefit exists that outweighs the costs of placing the electric transmission system underground;
- (2) Whether there is a governmental public policy requiring the electric transmission system to be placed, constructed, erected, or built underground, and the governmental agency establishing the policy commits funds for the additional costs of undergrounding;
- (3) Whether there are any governmental agency or other parties are willing to pay for the additional costs of undergrounding;
- (4) The recommendation of the division of consumer advocacy of the department of commerce and consumer affairs, which shall be based on an evaluation of the factors set forth under this subsection; and
- (5) Any other relevant factors.
- 1. Whether a Benefit Exists that Outweighs the Costs of Placing the Electric Transmission System Underground.

In Exhibit D of the November 3, 2022 Letter, Kupono Solar estimates that the costs to construct the 46 kV underground line extension from the substation for the Project directly to a new HECO-installed dead-end riser pole installed in line with the HECO 46 kV

transmission line is approximately \$429,000, which is approximately 3.6 times the estimated cost to place the line extension overhead (i.e., \$120,270). To determine whether any benefits exist that outweighs the cost of undergrounding the 46 kV line extension for the Project, the Consumer Advocate considered the following:

- Whether the proposed 46 kV line extension will result in added visual impact in the area; and
- Whether other factors exist that support the underground placement of the 46 kV line extension.

# (a) Whether the Proposed 46 kV Line Extension will Result in Added Visual Impact in the Area.

Based on a review of the map and photos of the project area provided by the Company it does not appear that the proposed 46 kV line extension will have a significant visual impact. The Consumer Advocate notes that the proposed 46 kV line extension is 854 feet away from the nearest home and due to the distance and the landscape of the Hawaii Prince Golf Course the proposed line extension is not visible from the homes. The Consumer Advocate also notes that the Project area already has existing 46 kV transmission lines which will be interconnected to the Seller's Facilities.<sup>6</sup>

In CA/BCE-SIR-10, the Consumer Advocate requested copies of any other photographs taken to illustrate the different visual views of the proposed overhead line extensions (e.g., from locations nearest the proposed overhead line from Iroquois Point, Ewa Beach across the Hawaii Prince Golf course).<sup>7</sup> In response, the Seller stated that:

November 3, 2022 Letter, at 7 and Exhibit F.

See also response to CA/HECO-SIR-12a.

All photographs that were taken to illustrate the different visual views of the proposed overhead line extensions were included in Hawaiian Electric Company, Inc.'s Request for Approval of Overhead Line Extension, dated November 3, 2022. As such, there are no other photographs to provide.<sup>8</sup>

Based on a review of Google maps, the Consumer Advocate notes that the closest area with structures from Iroquois Point is over 1.5 miles away from the proposed line extension and the closest area with homes from Ewa Beach is across the Hawaii Prince Golf course and is less than 0.5 miles away. The Consumer Advocate observes that due to distance and terrain, the proposed line extension may not be visible from those areas. The Consumer Advocate also notes that Hawaiian Electric and Kupono Solar have not received any written comments raising concerns associated with the proposed overhead line extension.<sup>9</sup>

### (b) Other Factors.

### (1) Operations and Maintenance ("O&M") Costs.

In response to CA-IR-33a., Hawaiian Electric provided its annual O&M costs (per mile) for both overhead and underground facilities for years 2018 through 2021, as follows:<sup>10</sup>

Response to CA/BCE-SIR-10. .

See also responses to CA/HECO-IR-34 and CA/BCE-IR-16.

In response to CA/HECO-IR-33.c., the Company also states that:

[It] has not incurred higher maintenance costs to repair or replace overhead or underground facilities beyond the "normal" wear-and-tear in the area of the proposed project. A search of the Company's trouble database did not find unusual repair incidents over the last 10 years in the area of the proposed extension line.

	Annual Operation and	Annual Operation and Maintenance Costs (per mile)	
Year	Overhead Cost	Underground Cost	
2018	\$15,256	\$29,813	
2019	\$17,216	\$4,843	
2020	\$20,123	\$1,894	
2021	\$21,794	\$316	
Average Cost	\$18,597	\$9,217	

As shown in the table above, the differences in the annual expenses related to O&M costs for overhead facilities compared to underground facilities has historically varied per mile for years 2018 through 2021. The Consumer Advocate notes that the average O&M cost for underground facilities is significantly less than the average O&M cost for overhead facilities for that same period, as the O&M costs for underground facilities has decreased in the years 2019 through 2021. As it relates to the Company's annual O&M costs for underground facilities (\$316 per mile) in 2021, which is significantly lower than the previous years, the Company states that:

The higher cost of historic years is mainly due to repair work needed and completed on the Company's 46kV underground lines during that time. While 2021 had lower O&M costs, \$12,593 is the five year average O&M cost for the years 2017-2021 which would more accurately depict the typical underground transmission O&M costs.<sup>11</sup>

As it relates to the five-year average O&M costs for the years 2017 through 2021, the Consumer Advocate notes that the O&M costs for overhead facilities was still higher than underground facilities, \$17,238 per mile and \$12,593 per mile, respectively.

That being said, the Consumer Advocate notes that the proposed line extension is only for a short distance as noted above (approximately 237 circuit feet) and that the

Response to CA/HECO-SIR-10a. In response to CA-IR-4, filed in Docket No. 2022-0141, the annual O&M expenses for overhead facilities was \$26,099 per mile and \$11,802 per mile for underground facilities for the year 2017.

Seller will be responsible to pay the Company for any reasonable costs incurred in operating, maintaining and replacing Company-Owned Interconnection Facilities, as set forth in Section 4(c) of Attachment G of the Second Amendment to Power Purchase Agreement for Renewable Dispatchable Generation (PV + BESS), effective as of September 30, 2022.<sup>12</sup> As such, the Company's ratepayers should not be impacted by the O&M costs of the proposed line extension and placing the proposed extension underground would not generate immediate cost savings.<sup>13</sup>

2. Whether there is a Governmental Public Policy Requiring the Electric Transmission System to be Placed, Constructed, Erected, or Built Underground, and the Governmental Agency Establishing the Policy Commits Funds for the Additional Costs of Undergrounding.

Hawaiian Electric states that it is unaware of any governmental public policy requiring the undergrounding of the 46kV lines.<sup>14</sup> As noted in prior statements of position, while the Consumer Advocate recognizes that there have been past State legislative efforts to study the feasibility of requiring the underground placement of all electric transmission lines, the Consumer Advocate is not aware of any governmental public policy or mandate requiring the undergrounding of transmission systems.

<sup>12</sup> Response to CA/HECO-SIR-10.c.

The Consumer Advocate offers that, if the observed trend for O&M expenses for overhead and underground infrastructure continues, further analysis of the decision to place infrastructure on overhead facilities may be necessary.

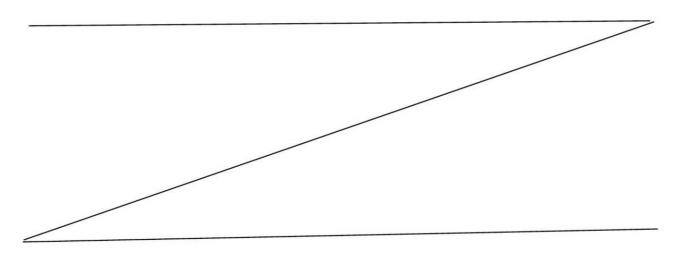
November 3, 2022 Letter, at 8.

# 3. Whether there are any Governmental Agency or Other Parties are Willing to Pay for the Additional Costs of Undergrounding.

Hawaiian Electric states that it is unaware of any governmental agencies or other parties willing to pay for the additional costs of undergrounding the line. Hawaiian Electric asked the Seller and the landowners, Hawaii Prince Hotel Waikiki LLC, and the Navy, if they were willing to pay for the additional costs to underground the 46 kV line extension. Hawaii Prince Hotel Waikiki, LLC, and the Navy have indicated that they are not willing to pay the additional costs.

### 4. Any Other Relevant Factors.

Hawaiian Electric states there are no other relevant factors of which the Company is aware as it relates to whether the proposed 46 kV line extension should be placed underground, 18 with which the Consumer Advocate agrees.



November 3, 2022 Letter, at 8 and response to CA/HECO-IR-31b.

November 3, 2022 Letter, at 8 and Exhibit E.

November 3, 2022 Letter, at 8, Exhibit E, and response to CA-IR-31, Attachment 1.

November 3, 2022 Letter, at 8.

#### B. OTHER ISSUES.

1. Hawaiian Electric's Request to Waive the Evaluation of Non-Transmission Alternatives ("NTA").

In its November 3, 2022 Letter, the Company is requesting that the evaluation of NTAs<sup>19</sup> as required for transmission projects be waived for this type of project.<sup>20</sup> The Company states that:

The subject Project involves the construction of 46 kV interconnection facilities, which are required to interconnect the Project with the Company's grid and are being paid for by Seller. To the extent the Commission considers whether an NTA analysis is required, the Company notes that the above-quoted section of the Commission's Inclinations does not appear to apply to interconnection facilities that are necessary to connect a proposed renewable distributed generation resource to the grid. Rather, the interconnection facilities and generation project together should be considered an NTA, as generation will be placed closer to the load in the project area.<sup>21</sup>

The Consumer Advocate notes that as the Project was approved by the Commission, the interconnection facilities and the approved renewable generation project should be considered together. As such, the Consumer Advocate agrees that the Commission should waive the evaluation of NTAs for the proposed 46 kV line extension.

11

2022-0007

The consideration of non-transmission alternatives is consistent with the Commission's Inclinations of the Future of Hawaii's Electric Utilities, attached as Exhibit A to Decision and Order No. 32052, filed on April 28, 2014, in Docket No. 2012-0036, which states that:

New transmission projects must consider non-transmission alternatives - New, replacement or upgrade high-voltage transmission projects generally represent significant, fumpy capital investments that will be given careful scrutiny. Non-transmission alternatives (NTAs) such as local peaking or back-up generators, energy storage, demand response and smart grid resources are technically and commercially viable alternatives and must be evaluated as part of any economic justification for new transmission system projects.

November 3, 2022 Letter, at 3.

November 3, 2022 Letter, at 3.

#### 2. GHG Emissions.

As it relates to factors identified HRS § 269-6(b),<sup>22</sup> Hawaiian Electric submitted its GHG Analysis on November 16, 2022. The Company states that:

The GHG emissions analysis includes in- and out-of-state GHG emissions from all stages of the Project's lifecycle. The upstream stages include component production and transportation of the new equipment, as well as their construction and installation. The operations stage accounts for operation and maintenance ("O&M") activities of the new equipment. The downstream stages include the end of life treatment for the new equipment following the project's lifetime (20 years).<sup>23</sup>

#### Hawaiian Electric asserts that:

The Project GHG emissions are based on the best reasonably available public data that has undergone scientific peer review and the most current information including emissions factors available to Ramboll at the time the analysis was completed. This information was then localized where practical and where it may have a material impact on the total GHG

- (1) Price volatility;
- (2) Export of funds for fuel imports;
- (3) Fuel supply reliability risks; and
- (4) Greenhouse gas emissions.

The commission may determine that short-term costs or direct costs of renewable energy generation that are higher than alternatives relying more heavily on fossil fuels are reasonable, considering the impacts resulting from the use of fossil fuels. The public utilities commission shall determine whether such analysis is necessary for proceedings involving water, wastewater, or telecommunications providers on an individual basis.

(c) The analysis described in subsection (b) shall not be required for a utility's routine system replacements, such as overhauls and overhead or underground line determinations, or determinations that do not pertain to capital improvements or operations, including but not limited to financing requests.

<sup>22</sup> HRS § 269-6, as amended, on June 24, 2021, states in part that:

<sup>(</sup>b) 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 pertaining to electric or gas 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:

<sup>23</sup> November 16, 2022 Letter, at 1.

emissions, to account for unique location-specific factors applicable to a project on Oʻahu such as additional transportation. Direct GHG emissions were calculated to account for the Project's upstream, O&M, and downstream GHG emissions. The use of a combination of localized peer- reviewed published studies and direct GHG emissions calculations for the Project represents the approach in this GHG analysis.<sup>24</sup>

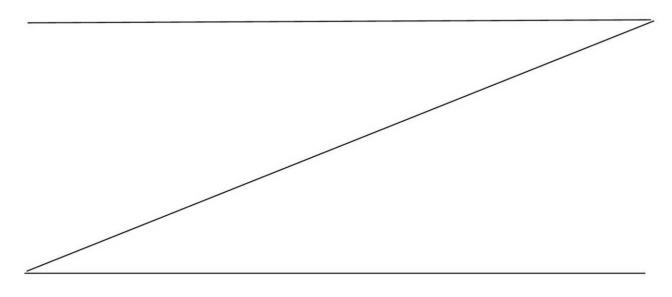
Based on the Company's GHG analysis, the proposed 46 kV line extension would result in an estimated 1.3 metric tons of carbon dioxide equivalents ("MT CO<sub>2</sub>e") emissions from O&M activities and 27 MT CO<sub>2</sub>e for the proposed project's lifecycle and the Consumer Advocate does not have any recommended adjustments to this estimate.

Given the requirements of HRS § 269-6, the Consumer Advocate appreciates the GHG analysis provided. The Consumer Advocate offers that, consistent with the approach of considering the Project and line extension together noted above, there is additional consideration to determine how such emission estimates will be assessed. The Consumer Advocate notes that, as the proposed above-ground 46 kV line extension is a critical and necessary component to the operation of the Kupono Solar Facility, the estimated impact on GHG emissions associated with the facility and the proposed 46 kV line extension should be evaluated and the estimated emissions for the line extension should not be considered separately. It is important to note that the projected net lifecycle GHG emissions reduction associated with the Kupono Solar Facility was estimated at 685,431 MT CO<sub>2</sub>e over the life of the Project.<sup>25</sup> Furthermore, the Kupono Solar Facility is anticipated to provide benefits, such as, increases to renewable energy generation at a fixed price, which will reduce the fossil fuel consumption by existing power plants

November 16, 2022 Letter, at 1-2.

<sup>25</sup> Hawaiian Electric's GHG Analysis dated February 2022, filed on February 7, 2022, as Exhibit 9 of the Application, at 6.

resulting in lower fossil fuel purchases<sup>26</sup> and contribute to the Company's annual Renewable Portfolio Standard ("RPS") goals by an average of 0.89% and 0.67%, to the Company's goals and on a consolidated basis to the Hawaiian Electric Companies' RPS goals, respectively.<sup>27</sup> The anticipated benefits from the Kupono Solar Facility will not be achievable without the interconnection facilities and, thus, even though the line extension will result in an increase in GHG emissions, the Consumer Advocate believes that the proposed Project's estimated GHG impact associated with the interconnection facilities should be considered together with the anticipated GHG emissions impact from the Kupono Solar Facility. If the GHG emissions impact from both the interconnection facilities and the Kupono Solar Facility are considered, the Consumer Advocate believes that the GHG emissions analysis supports approval of the interconnection facilities.



Application, at 9.

The estimated RPS contribution of the Project reflects the change in how the RPS is calculated, based on a percentage of net electricity generation rather than as a percentage of net electricity sales, pursuant to Act 240, Session Laws Hawaii of 2022, that amended HRS § 269-92. (Response to CA-IR-35). Based on the original calculation, the estimated RPS contribution of the Project was an average of 1.11% and 0.85% to the Company's goals and on a consolidated basis to the Hawaiian Electric Companies' RPS goals, respectively. (Application, Exhibit 5)

## III. <u>RECOMMENDATION</u>.

Based upon the above, the Consumer Advocate hereby states that it does not object to a Commission determination that the proposed 46 kV line extension for the Kupono Solar project, be constructed above the ground, pursuant to HRS § 269-27.6(a).

DATED: Honolulu, Hawaii, March 14, 2023.

Respectfully submitted,

By /s/ Dean Nishina
DEAN NISHINA
Acting Executive Director

**DIVISION OF CONSUMER ADVOCACY** 

#### CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing **DIVISION OF CONSUMER ADVOCACY'S STATEMENT OF POSITION FOR THE SECOND PHASE** was duly served upon the following parties electronically to the e-mail addresses below pursuant to HAR §16-601 -21 (d), as modified by Order No. 38270 Setting Forth Public Utilities Commission Electronic Filing and Service Procedures, filed on March 14, 2022.

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

Email: Kevin.Katsura@hawaiianelectric.com

regulatory@hawaiianelectric.com

JOSEPH A. STEWART, ESQ.
BRUCE NAKAMURA, ESQ.
KOBAYASHI, SUGITA & GODA, LLP
999 Bishop Street, Suite 2600
Honolulu, Hawaii 96813

Email: jas@ksglaw.com ban@ksglaw.com

DEAN T. YAMAMOTO
JORDAN A. CHING
YAMAMOTO CALIBOSO HETHERINGTON
A Limited Liability Law Company
1100 Alakea Street, Suite 3100
Honolulu, Hawaii 96813

Email: <u>dyamamoto@ychawaii.com</u> jching@ychawaii.com

Counsel for Kupono Solar, LLC

DATED: Honolulu, Hawaii, March 14, 2023.

/s/ S. Strack

## FILED

2023 Mar 14 PM 16:02

PUBLIC UTILITIES COMMISSION

The foregoing document was electronically filed with the State of Hawaii Public Utilities Commission's Document Management System (DMS).