



February 28, 2022

The Honorable Chair and Members of the  
Hawai'i Public Utilities Commission  
465 South King Street, First Floor  
Kekuanaoa Building  
Honolulu, Hawai'i 96813

Dear Commissioners:.

Subject: Docket No. 2018-0088  
Instituting a Proceeding to Investigate Performance-Based Regulation  
Hawaiian Electric Companies' Annual Pilot Update Report

Pursuant to Decision and Order No. 37507 (“D&O 37507”), issued in the subject proceeding on December 23, 2020, the Hawaiian Electric Companies<sup>1</sup> respectfully submit their first annual Pilot Update Report.<sup>2,3</sup>

The first annual Pilot Update Report is also submitted pursuant to the following decisions and orders:

- eBus Make-Ready Infrastructure Pilot – Decision and Order No. 37769 (“D&O 37769”), issued on May 7, 2021, in Docket No. 2020-0098<sup>4</sup>
- EV Tariff Pilot – Decision and Order No. 38157 (“D&O 38157”), issued on December 30, 2021, in Docket No. 2020-0152<sup>5</sup>

Very truly yours,

/s/ Dean K. Matsuura

Dean K. Matsuura  
Director, Regulatory Rate Proceedings

Enclosure

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<sup>1</sup> The “Hawaiian Electric Companies” or “Companies” refers collectively to Hawaiian Electric Company, Inc., Maui Electric Company, Limited, and Hawai'i Electric Light Company, Inc.

<sup>2</sup> See D&O 37507 at 175-176, 218, 222.

<sup>3</sup> The Companies are submitting this Pilot Update Report in advance of the March 31 deadline in order to allow additional time for the Commission's and the Consumer Advocate's review prior to the filing of the Companies' Spring Revenue Report.

<sup>4</sup> See D&O 37769 at 38 and 40-41.

<sup>5</sup> See D&O 38157 at 41 and 47.

# Hawaiian Electric Companies' Annual Pilot Update

## I. Introduction

The Hawaiian Electric Companies<sup>1</sup> respectfully submit this Pilot Update covering active pilot projects in calendar year 2021. This submission is made in compliance with Decision and Order No. 37507 (“D&O 37507”), issued on December 23, 2020, in Docket No. 2018-0088.<sup>2</sup>

This Pilot Update is also submitted in compliance with the following decisions and orders:

- Decision and Order No. 37769 (“D&O 37769”), issued on May 7, 2021, in the eBus Make-Ready Infrastructure Pilot proceeding, Docket No. 2020-0098<sup>3</sup>
- Decision and Order No. 38157 (“D&O 38157”), issued on December 30, 2021, in the Electric Vehicle Tariff Pilot proceeding, Docket No. 2020-0152<sup>4</sup>

D&O 37769 and D&O 38157 state that while a Pilot Update will not be required in 2021, the Companies will be required to file a Pilot Update in 2022 that reflects all pilots approved in 2021.<sup>5</sup>

The Companies are submitting this Pilot Update Report in advance of the March 31 deadline in order to allow additional time for the Commission’s and the Consumer Advocate’s review prior to the filing of the Companies’ Spring Revenue Report.

The Charge Ready Hawai‘i Pilot Project was approved in Decision and Order No. 38194, issued on January 24, 2022 in Docket No. 2020-0202 and will be reported on in the 2023 annual Pilot Update report.

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<sup>1</sup> The “Hawaiian Electric Companies” or “Companies” refers collectively to Hawaiian Electric Company, Inc., Maui Electric Company, Limited, and Hawai‘i Electric Light Company, Inc.

<sup>2</sup> See D&O 37507 at 175-176, 218, 222.

<sup>3</sup> See D&O 37769 at 38 and 40-41.

<sup>4</sup> See D&O 38157 at 41 and 47.

<sup>5</sup> See D&O 37769 at 38, and D&O 38157 at 41.

## II. Background

As part of the Performance-Based Regulation (“PBR”) Framework, D&O 37507 established a Pilot Process to incent the development of innovative projects and programs.<sup>6</sup> The Commission stated that it included a Pilot Process “to foster innovation by establishing an expedited implementation process for pilots that test new technologies, programs, business models, and other arrangements.”<sup>7</sup> According to the Commission, “this is intended to support initiatives by the Companies to test new programs and ideas quickly and elevate any successful pilots for consideration of full-scale implementation.”<sup>8</sup>

In Order No. 37865, issued on July 9, 2021, in Docket No. 2018-0088, the Commission approved the Companies’ proposed Pilot Process filed with the Commission on April 30, 2021, and directed the Companies to file a finalized Pilot Process consistent with the order. Order No. 37865 also directed the Companies to begin the Workplan process described in D&O 37507,<sup>9</sup> following the filing of the finalized Pilot Process.

On July 28, 2021, the Companies filed their final Pilot Process in Docket No. 2018-0088 and initiated stakeholder engagement to develop a Workplan.

Through numerous conferences held with stakeholders from August to October 2021, the Companies developed their Innovation Pilot Framework (“IPF”) Workplan to identify broad Areas of Collaboration under which the Companies may propose specific pilot projects for the Commission’s review and approval.

On November 12, 2021, the Companies filed their IPF Workplan in Docket No. 2018-0088, subject to further Commission guidance. The Workplan is envisioned to inform the

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<sup>6</sup> See D&O 37507 at 16.

<sup>7</sup> *Id.* at 166.

<sup>8</sup> *Id.*

<sup>9</sup> See D&O 37507 at 171-172.

Pilot Process over the next three years and will be used to guide the development of pilot concepts. It is anticipated that the Workplan will be revised over time to reflect stakeholder input and lessons learned during the Implementation Phase of the Pilot Process.

In accordance with the Pilot Process, the Companies will file Notices of Intent for the Commission’s review and approval. The Companies will report on approved pilots in the required annual pilot updates.

### III. In-Flight Pilots Status

In total, there were two active pilots in calendar year 2021. The eBus Make Ready Infrastructure Pilot (referred to as the “Charge Up eBus Pilot” or “eBus Pilot”) was approved on May 7, 2021. The Schedule EV-J and EV-P tariff application was approved on December 30, 2021. A detailed report for each of these pilots is attached hereto as follows:

Att. #	Pilot Description
1	eBus Make Ready Infrastructure Pilot
2	Schedule EV-J and EV-P Tariff

As explained in Attachment 1, following the pilot’s May 2021 approval, the Hawaiian Electric Companies commenced the eBus ramp-up phase. The Companies launched the implementation phase, including customer enrollment, after the Final Program Design 30-day review period ended on February 6, 2022. The first annual eBus Pilot Update, attached hereto, reflects on the work completed prior to the start of the customer enrollment period, which commenced on February 7, 2022.

Although the Schedule EV-J and EV-P tariff application was approved in December 2021, the new Schedule EV-J and EV-P rates are targeted to take effect in mid-March 2022, pursuant to D&O 38157. Because the new EV pilot rates are not yet effective, the Companies

have limited updates for the 2022 Pilot Update report. The Companies anticipate reporting on all the conditions established in D&O 38157 in the 2023 annual Pilot Update report.

#### IV. Costs and Revenues

D&O 37507 requires the Companies to “submit the annual costs and revenues (if any) associated with any implemented pilot project as part of the Pilot Update, which will be reviewed in the spring of each year as part of the Commission’s review of the Companies’ Spring Revenue Report.”<sup>10</sup> D&Os 37769 and 38157 also require the Companies report on pilot costs and revenues (if applicable).

Below is the breakdown of the annual recorded Pilot Project costs net of revenues as of December 31, 2021 for the two active pilot projects in 2021 included in this 2022 annual Pilot Update report.

<b>Recoverable Pilot Project Costs Net Of Revenue</b>	Hawaiian Electric	Hawai‘i Electric Light	Maui Electric
eBus Make Ready Infrastructure Pilot	\$43,339	\$26,003	\$17,336
Schedule EV-J and EV-P Tariff	-	-	-
Pilot Process Cost Recovery – Annual Net Costs	\$43,339	\$26,003	\$17,336
<b>Pilot Process Cost Recovery – Annual Net Costs including revenue taxes</b>	\$47,565	\$28,539	\$19,027

The eBus Pilot costs consist of outside consulting service expenses 1) to support the development of the Final Program Design Report (filed on January 7, 2022 in Docket No. 2020-0098), and 2) to draft a drawing template for Make-Ready Infrastructure. See Attachment 1 for further detail, including the allocation of the costs by company. No eBus customers were enrolled during the ramp-up phase, and no revenues were collected in 2021.

For the Schedule EV-J and EV-P tariffs, no customers have been enrolled to date, and no costs or revenues were incurred or collected in 2021. See Attachment 2.

<sup>10</sup> D&O 37507 at 219.

Annual 2021 Pilot Process costs, net of revenues, will be submitted for Commission review and approval in the 2022 Spring Revenue Report<sup>11</sup> to request recovery via the RBA rate adjustment, effective June 1, 2022.

## V. Annual Cap

D&O 37507 established an annual cost recovery cap of \$10 million, and each of the pilots count toward the cap under the Pilot Process.<sup>12</sup> Order No. 37865, in approving the Pilot Process, clarified that the reference to the “deferral of all pilot project costs” should refer to the “total annual expenditures,” i.e., the pilot project’s cost for that year, rather than the total cost for the entire project.<sup>13</sup> The Companies will track all pilot project costs and related revenues (if any) and report the total annual net expenditures for the portfolio of pilots in each pilot update.

## VI. Conclusion

The Companies continue to develop pilot projects under the IPF Workplan, for subsequent submittals as Notices of Intent, for the Commission’s review and approval. The Companies continue to discuss specific pilot concepts with appropriate stakeholders and are committed to working with stakeholders throughout the Implementation Phase of the IPF. The Companies will report on the approved pilots in the annual pilot updates in accordance with the Pilot Process.

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<sup>11</sup> Transmittal No. 22-01 (Spring Revenue Report), RBA Rate Adjustment Tariff Filing, to be filed by March 31, 2022 at Schedule G.

<sup>12</sup> The Companies may seek to extend or expand a pilot’s scope (including potential modifications) by submitting a request to the Commission no later than one year prior to the scheduled termination of the pilot. Requests to proceed with a pilot or annual portfolio of pilots in excess of the \$10 million cap must be expressly approved by the Commission.

<sup>13</sup> Order No. 37865 at 10 (emphasis original).

## Charge Up eBus Annual Pilot Update

### Introduction

The Hawaiian Electric Companies’<sup>1</sup> annual Charge Up eBus Pilot Update Report (“eBus Pilot Update”) is submitted in compliance with: 1) Decision and Order No. 37507 (“D&O 37507”) issued on December 23, 2020 in Docket No 2018-0088, and 2) Decision and Order No. 37769 (“D&O 37769”) issued on May 7, 2021 in Docket No. 2020-0098, which approved the eBus Make-Ready Infrastructure Pilot (referred to as the “Charge Up eBus Pilot” or “eBus Pilot”), subject to certain conditions.<sup>2</sup>

D&Os 37507 and 37769 require the Companies to report on:

- Implementation schedules and progress relative to the pilot’s objective and key performance metrics;
- Pilot impacts on underserved communities;
- Pilot costs and revenues (if applicable), including cost analysis per subscriber, quantitative and qualitative benefits (for both pilot participants and non-participants), and an NPV analysis;
- Qualitative description of the pilot and customer benefits; and
- Any proposed changes to material aspects of the pilot, such as program pricing, terms or conditions, eligibility requirements, changes to the implementation schedule, or program cancellations (including reason for the cancelation).<sup>3</sup>

D&O 37769 additionally requires the Companies to report on:

1. any costs incurred as a result of the Pilot to upgrade distribution network capacity (as indicated in CA-SIR-1.a); data regarding grid services, to the extent available (response to CA-SIR-2.a ); and participant service areas, type of service provided, and intensity and range of eBus use (in number of days per week a participating eBus was used), as provided by Pilot participants;

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<sup>1</sup> The “Hawaiian Electric Companies” or “Companies” refers collectively to Hawaiian Electric Company, Inc., Maui Electric Company, Limited, and Hawai’i Electric Light Company, Inc.

<sup>2</sup> See D&O 37507 at 175-176, 218, 222 and D&O 37769 at 38, 40-41. Although D&O 37507 requires that the annual Pilot Update be filed by March 31 of each year, the Companies are submitting this report in February 2022 to allow additional time for the Commission’s and the Consumer Advocate’s review in advance of the Spring Revenue Report.

<sup>3</sup> See D&O 37507 at 175-176 and D&O 37769 at 40-41.

2. GHG emissions specific to the Pilot in the annual report required by Decision and Order No. 36220 in Transmittal No. 18-06, in accordance with the annual reporting requirements established for the E-Bus-J and E-Bus-P tariffs.<sup>4</sup>

The Companies address each of these requirements in turn, as applicable. This report reflects on the work completed prior to the start of the customer enrollment period, which commenced on February 7, 2022. As such, certain implementation metrics are not available at this time.

### eBus Pilot Objectives

The Companies' application filed on July 10, 2020 in Docket No. 2020-0098 ("Application") included the following proposed objectives:

- Develop ways for the Companies to support make-ready infrastructure by learning how to streamline workflows, understand resource needs for charging, and track the costs of infrastructure to develop sound cost estimates for future deployment;
- Enable and accelerate the electrification of bus fleets in the Hawaiian Electric Companies' service territories by understanding customer behaviors and enable customers to transition faster; and
- Improve renewable energy integration through bus charging on the eBus tariff.<sup>5</sup>

### eBus Pilot Implementation Schedule

The eBus Pilot includes three phases: 1) Ramp up, during which the Companies will develop documentation for implementation and solicit customer interest, 2) Implementation, during which the Companies will confirm customer eligibility, as well as design, construct, and install make-ready infrastructure, and 3) Data collection to support the final report.

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<sup>4</sup> See D&O 37769 at 41.

<sup>5</sup> See Application at 21-22.



Following the approval of the eBus Pilot in May 2021, the Hawaiian Electric Companies commenced the ramp-up phase, and initiated outreach and education efforts including press announcements, social media posts, print media, media interviews, webpage launch, and direct stakeholder engagement through meetings, emails, and webinars. Four webinars in 2021 attracted over 140 participants. During 2022, outreach will continue to build awareness and interest, but also include a focus on direct engagement throughout the customer journey.

During the ramp-up phase, the Companies also defined processes and policies for implementation, which are reflected in the Final Program Design Report filed on January 7, 2022 in Docket No 2020-0098, in compliance with D&O 37769. After the Commission’s and the Consumer Advocate’s 30-day review ended on February 6, 2022, the Companies launched the implementation phase, which encompasses Stage 1 and Stage 2, as illustrated in Figure 1.

**Figure 1: Customer Journey**



### Participants & Metrics

Eligible participants for the eBus Pilot include bus operators with Class 5-8 buses on O’ahu, Maui, and Hawai’i Island. The Hawaiian Electric Companies have engaged with potential participants and stakeholders in designing the eBus Pilot and the application process in a way that will generate interest and build a meaningful pipeline for participation. A number of factors including funding, procurement processes, and bus build timelines may limit bus operations, data collection, and findings within the 36-month pilot period. Although eligibility

requirements call for pilot applicants to procure or convert an eBus subsequent to the eBus Pilot's approval, applicants that procured or contracted for the conversion of an eBus during the period between the PUC Application filing date and the eBus pilot's approval are not precluded from participating in the pilot. Such applicants will be considered on a case-by-case basis.

Participant metrics are currently not available due to the recent launch of the implementation phase in February 2022. Future pilot updates will include metrics such as the number of applications, enrollment, type and quantity of eBuses and charging equipment, and utilization.

### Costs & Revenues

In accordance with the Pilot Process approved by the Commission in Order No. 37865, innovation pilot project costs are treated as deferred costs and recovered the following year, subsequent to the Commission's annual Spring review.<sup>6</sup> The eBus Pilot budget of \$4.25 million included \$213,420 of budgeted outside contract services for the ramp-up phase. During the ramp-up phase, the Companies developed many specific design aspects of the eBus Pilot including processes, customer materials, and agreements with the assistance from these outside contract services.

Approximately \$55,000 was expensed for outside consulting services in 2021 to support the development of the Final Program Design Report (filed on January 7, 2022 in Docket No. 2020-0098). This included overall project management for the ramp-up phase, creating a deployment schedule, developing program processes, and providing input to documents such as the Participation Agreement and Handbook. Approximately \$31,000 in additional outside consulting services were expensed to draft a drawing template containing the primary elements

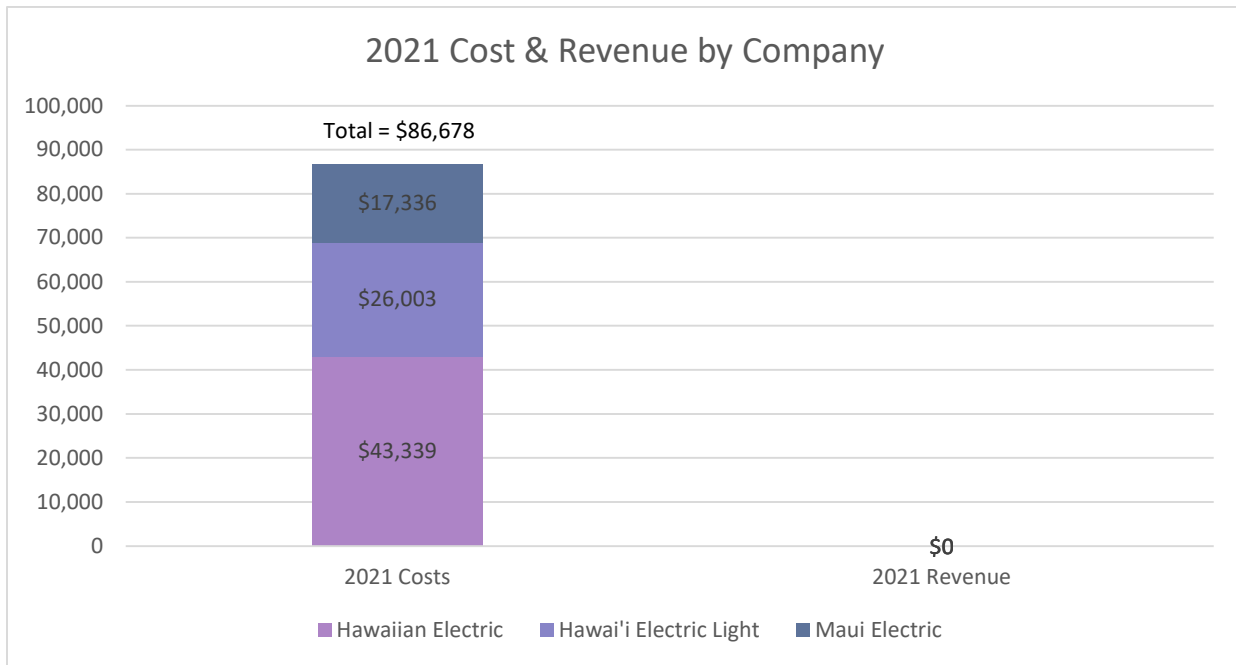
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<sup>6</sup> See Order No. 37865, issued on July 9, 2021 in Docket No. 2018-0088, at 8-11.

that will be common across most Make-Ready Infrastructure designs for future use by design consultants. This template will be finalized in 2022.

The breakdown of recorded 2021 expenses totaling \$86,678 is shown in Figure 2. Consistent with the budget proposed in Docket No. 2020-0098, ramp-up expenses are split 50% Hawaiian Electric, 30% Hawai'i Electric Light, and 20% Maui Electric (Maui Island) based on estimated eBus Pilot participation. During the implementation phase, the Companies will allocate site-specific expenses based on program uptake across the islands while remaining within the approved cap. No customers were enrolled during the ramp-up phase, and no revenues were collected in 2021.

**Figure 2: 2021 Cost and Revenue by Company**



### Benefits & Impact to Underserved Communities

The eBus Pilot provides an important piece in accelerating the electrification of the bus sector and will result in broader ongoing benefits to all ratepayers. eBus charging during the day facilitates greater use of renewable energy and reduces the use of diesel overall, helping the State

achieve carbon emission reduction goals. Furthermore, the reduction in tailpipe emissions benefits riders, drivers, and communities that the buses operate in. Transit and school bus services in particular serve a wide range of communities, bringing clean transportation options to those that may otherwise be impacted by poor air quality conditions due to their proximity to high-traffic roadways or industrial zones.

Going forward, greenhouse gas emission analyses will be included in the annual report required by Decision and Order No. 36220 in Transmittal No. 18-06, in accordance with the annual reporting requirements established for the E-Bus-J and E-Bus-P tariffs.

### Proposed Changes

There are no proposed changes to material aspects of the eBus Pilot, including program pricing, terms or conditions, changes to the implementation schedule, or program cancellations at this time. In accordance with Order No. 38213, the Hawaiian Electric Companies will engage with the Consumer Advocate to better understand and address the comments filed by the Consumer Advocate on January 31, 2022 in Docket No. 2020-0098.<sup>7</sup>

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<sup>7</sup> See Order No. 38213, *Accepting Hawaiian Electric's Final Program Design Report*, issued on February 4, 2021, at 9-10.

## Schedule EV-J and EV-P Tariff Annual Pilot Update

### I. Summary of EV Tariff Pilot Status

On December 30, 2021, the Commission issued Decision and Order No. 38157 (“D&O 38157”) in Docket 2020-0152, approving the proposed Schedules EV-J and EV-P and directed the Companies to submit updated tariff sheets, targeting an effective date of mid-March 2022. In accordance with the Commission’s directive, the Companies filed updated tariff sheets for Schedules EV-J and EV-P on February 1, 2022, with a proposed effective date of March 18, 2022. As further set forth in D&O 38157, the Companies will include an update on the reporting conditions established therein as part of the ongoing Pilot Update filings established in the approved Pilot Process.<sup>1</sup> Because the tariff is not yet effective, the Companies have no additional update for Schedules EV-J and EV-P for the 2022 report. The Companies anticipate reporting on all the conditions established in D&O 38157 in the 2023 annual Pilot Update report.

### II. Costs and Revenues

No customers were enrolled in Schedules EV-J and EV-P, and no costs or revenues were incurred or collected in 2021.

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<sup>1</sup> See D&O 38157 at 41-44, and 47.

**CERTIFICATE OF SERVICE**

I hereby certify that copies of the foregoing document, together with this Certificate of Service, were duly served on the following parties and participants, by having said copies delivered by electronic service.

<b>Party</b>	<b>Electronic Service</b>	<b>Hand Delivery</b>	<b>U.S Mail</b>
Division of Consumer Advocacy Department of Commerce and Consumer Affairs 335 Merchant Street, Room 326 Honolulu, Hawai‘i 96813  dnishina@dcca.hawaii.gov consumeradvocate@dcca.hawaii.gov	1		
Henry Curtis Life of the Land Vice President for Consumer Issues P.O. Box 37158 Honolulu, Hawai‘i 96837-0158  henry.lifeoftheland@gmail.com	1		
Chris DeBone Distributed Energy Resources Council of Hawaii President Hawaii Energy Connection 99-1350 Koaha Pl. Aiea, HI 96701  chris@hawaiienergyconnection.com	1		
Beren Argetsinger Tim Lindl Keyes & Fox LLP 580 California Street, 12th Floor San Francisco, CA 94104  Attorneys for HAWAII PV COALITION  bargetsinger@keyesfox.com tlindl@keyesfox.com steven.rymsha@sunrun.com	1		

Party	Electronic Service	Hand Delivery	U.S Mail
<p>Hannah Polikov Coley Girouard Advanced Energy Economy 1000 Vermont Ave., Third Floor Washington DC, 20005</p> <p>hpolikov@aee.net cgirouard@aee.net</p>	1		
<p>Melissa Miyashiro, Chief of Staff Blue Planet Foundation 55 Merchant Street, 17th Floor Honolulu, Hawai‘i 96813 melissa@blueplanetfoundation.org</p> <p>Isaac H. Moriwake Kylie W. Wager Cruz Earthjustice 850 Richards Street, Suite 400 Honolulu, Hawai‘i 96813 imoriwake@earthjustice.org kwager@earthjustice.org</p> <p>Attorneys for BLUE PLANET FOUNDATION</p>	1		
<p>Duane W.H. Pang 530 South King Street, Room 110 Honolulu, Hawai‘i 96813</p> <p>Attorneys for CITY AND COUNTY OF HONOLULU</p> <p>eyarbrough@honolulu.gov mele.coleman@honolulu.gov dpang1@honolulu.gov</p>	1		

Party	Electronic Service	Hand Delivery	U.S Mail
<p>Elizabeth Strance Malia A Kekai County of Hawai'i 101 Aupuni Street, Suite 325 Hilo, Hawai'i 96720</p> <p>Attorneys for COUNTY OF HAWAI'I</p> <p>Malia.Kekai@hawaiiicounty.gov Kris.mayes@asu.edu katharine.batten@asu.edu</p>	1		
<p>Rocky Mould Hawai'i Solar Energy Association Executive Director P.O. Box 37070 Honolulu, Hawai'i 96817</p> <p>rmould@hsea.org</p>	1		
<p>Douglas A. Codiga Mark F. Ito Topa Financial Center 745 Fort Street, Suite 1500 Honolulu Hawai'i 96813</p> <p>Attorneys for ULUPONO INITIATIVE LLC</p> <p>dcodiga@schlackito.com mito@schlackito.com</p>	1		

DATED: Honolulu, Hawai'i, February 28, 2022

/s/ Tyler Oya  
Tyler Oya  
HAWAIIAN ELECTRIC COMPANY, INC.  
Regulatory Affairs



## Kawata, Kyle

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**From:** puc@hawaii.gov  
**Sent:** Monday, February 28, 2022 3:30 PM  
**To:** Kawata, Kyle  
**Subject:** Hawaii PUC eFiling Confirmation of Filing

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Your eFile document has been filed with the Hawaii Public Utilities commission on 2022 Feb 28 PM 15:28. The mere fact of filing shall not waive any failure to comply with Hawaii Administrative Rules Chapter 6-61, Rules of Practice and Procedure Before the Public Utilities Commission, or any other application requirements. Your confirmation number is KYLE22152802499. If you have received this email in error please notify the Hawaii Public Utilities Commission by phone at 808 586-2020 or email at hawaii.puc@hawaii.gov.