

STATE OF HAWAII PUBLIC UTILITIES COMMISSION

REPORT TO THE LEGISLATURE PURSUANT TO S.R. 207, S.D. 1 (2021)

DECEMBER 2021

Background

During the 2021 legislative session, the Hawaii Senate passed Senate Resolution 207, Senate Draft 1. The resolution requested, among other actions, that the Public Utilities Commission ("Commission") submit a report to the Legislature, no later than thirty days prior to the convening of the Regular Session of 2022, to include:

- (1) Findings, updates, and recommendations following the Commission's April 2021 status conference addressing circumstances specific to Maui;
- (2) Recommendations and proposed legislation amending section 269-146, Hawaii Revised Statutes, to ensure that the Commission has discretion in determining how the Hawaii electricity reliability surcharge should be assessed to reduce potential risks to ratepayers and that customers are not forced to bear the cost burden for the establishment of the Hawaii Electricity Reliability Administrator;
- (3) Findings and updates from the Governor's task force addressing the retirement of the AES Coal Plant by 2022 and any Commission updates or insights in response thereto; and
- (4) Further recommendations, including any proposed legislation, concerning any of the foregoing

The Commission has provided responses to these requests below, noting that any recommendations pursuant to request (4) are integrated with the other responses, rather than included in a separate section.

I. Findings, updates, and recommendations following the Commission's April 2021 status conference addressing circumstances specific to Maui

Hawaiian Electric filed its Kahului Plant Transition Plan ("Transition Plan") with the Commission on April 5, 2021, in Docket No. 2021-0024. In the document, Hawaiian Electric reported its plans surrounding the retirement of the Kahului Power Plant ("KPP"), including the following:

- "The Stage 1 and Stage 2 RFP projects will provide capacity and energy replacement and grid services"
- "The K3 and K4 generating units of KPP will be converted and repurposed to synchronous condensers to replace critical voltage support service and synchronous inertial response provided by KPP, among other essential grid services"
- "The Waena Switchyard project will maintain functionality and reliability of the transmission system serving Maui in the absence of KPP, avoid circuit overloads, and reliably integrate new renewable resources"
- "Contingency plans that include DER grid service programs and a review of generator maintenance schedules as needed"¹

¹ Transition Plan, filed on April 5, 2021, in Docket No. 2021-0024, pg. 3.

Hawaiian Electric reported that overall, the KPP transition is estimated to lower a typical customer bill by \$3.78 per month over the next 20 years, including \$1.45 per month due to the Stage 1 and 2 projects and \$2.33 per month saved by the Waena Switchyard and synchronous condenser projects.

On April 13, 2021, the Commission convened Hawaiian Electric, the Consumer Advocate, and other stakeholders in a Status Conference to discuss Hawaiian Electric's Transition Plan, receive an update from Hawaiian Electric and Clearway Energy Group on the status of the Mililani I Solar and Waiawa Solar projects, and receive an update from the Hawaii State Energy Office regarding the Powering Past Coal Task Force.

As reported by Hawaiian Electric at the Status Conference, the Transition Plan includes a diverse range of projects that are intended to fulfill four prerequisites for the retirement of KPP: (1) Replace capacity; (2) Replace voltage support; (3) Relieve resulting transmission congestion; (4) Provide sufficient grid-forming capability.

At the Status Conference, Hawaiian Electric provided the following timeline for the diverse portfolio of projects that is intended to fulfill the prerequisites to retiring KPP:



Figure 01. KPP Transition Plan – Timeline

Source: Hawaiian Electric Status Conference Presentation, filed on April 12, 2021 in Docket 2021-0024

Following the Status Conference, the Commission issued information requests to Hawaiian Electric, in order to better understand the Company's plans surrounding the KPP retirement, the use of demand response and distributed energy resources, outage mitigation measures, and other matters. The Commission also enhanced the Company's reporting requirements, and is now receiving monthly updates on all projects.

The Commission has approved all of the projects above the timeline in Figure 01, including Paeahu Solar, AES Kuihelani Solar, Pulehu Solar, Kamaole Solar, and Kahana Solar. Together, these projects will provide 175 MW of renewable energy generation, along with

700 MWh of battery energy storage. While these projects have experienced delays, the Commission is working to expedite project schedules where possible. Additionally, the Commission approved the Waena Switchyard and Synchronous Condenser project, which according to Hawaiian Electric, "will maintain functionality and reliability of the transmission system serving Maui in the absence of KPP, avoid circuit overloads, and reliably integrate new renewable resources."²

On December 6, 2021, Hawaiian Electric filed its Kahului Power Plant Transition Plan Update in Docket No. 2021-0024. The filing provides updates on the planned capacity replacement projects, as well as mitigation plans to address potential energy reserve margin shortfalls that may arise due to project delays, decision-making timelines, force majeure claims, supply chain issues, and other issues that have arisen for projects.

The Company identifies four primary mitigation options, including additional grid services, adjustments to planned maintenance schedules, temporary distributed generation, and as a last resort, continued operation of KPP. The Company also states its intention to file a draft RFP by the end of January 2022 that seeks grid services up to 30 MW with at least a four-hour duration, "should the Maui system need additional capacity due to unexpected project delays or cancellations, generating unit outages or higher than anticipated demand."³ The Commission is currently in the process of reviewing this update and will follow up for additional information from and provide further direction to the Company. The Commission intends to pursue a multi-pronged approach to replacing capacity from KPP, including energy efficiency, time-varying rates, demand response programs, and aggregated grid services from distributed energy resources.

The Commission is committed to accelerating the transition to renewable energy, reducing delays to fossil fuel replacement and reliability enhancing projects, and delivering maximum cost savings to ratepayers in an expeditious manner. The Commission will continue to work with Hawaiian Electric, developers, and stakeholders to ensure that the residents of Maui are provided with reliable and affordable service throughout the retirement of the KPP facility.

II. Recommendations and proposed legislation amending section 269-146, Hawaii Revised Statutes, to ensure that the Commission has discretion in determining how the Hawaii electricity reliability surcharge should be assessed to reduce potential risks to ratepayers and that customers are not forced to bear the cost burden for the establishment of the Hawaii Electricity Reliability Administrator

The Commission is committed to creating a regulatory environment that fosters improvement in the interconnection process, while mitigating risks to ratepayers and facilitating achievement of the State's energy goals. As a component of these pursuits, the Commission is currently in the process of preparing for the establishment of a Hawaii Electricity Reliability Administrator ("HERA"). The Commission has drafted a Request for Qualifications ("RFQ") to solicit input from qualified entities on the Commission's functional

² Transition Plan, p. 3.

³ Kahului Power Plant Transition Plan Update, filed in Docket No. 2021-0024 on December 6, 2021, p. 4

and organizational plan for working with an entity to serve under contract as the HERA, and plans to release this RFQ in January 2022.

In order to ensure that utility customers are not forced to bear the cost burden for the establishment of a HERA, the Commission recommends that the Legislature consider amending Section 269-146, HRS, to ensure that the Commission has sufficient discretion in determining how the Hawaii electricity reliability surcharge should be assessed. Most of the current statutory language seems to provide the Commission with such discretion, notably in subsection (d), where it is stated that the Commission may determine whether utilities may recover costs from ratepayers.

However, the Commission is concerned that the language in subsection (a) may restrict the ability of the Commission to determine the appropriate assessment of the surcharge. Therefore, the Commission recommends that the Legislature amend the first sentence in subsection (a) as follows:

"(a) The commission may require, by rule or order, that [all] any utilities, persons, businesses, or entities connecting to the Hawaii electric system, or any other user, owner, or operator of any electric element that is a part of an interconnection on the Hawaii electric system shall pay a surcharge that shall be collected by Hawaii's electric utilities."

The Commission believes that with this amendment, Section 269-146 would provide the Commission with the necessary authority to determine the appropriate assessment of the surcharge and ensure that the burden of this surcharge does not fall to ratepayers.

III. Findings and updates from the Governor's task force addressing the retirement of the AES Coal Plant by 2022 and any Commission updates or insights in response thereto

Through Executive Order 21-01, Governor Ige established the Powering Past Coal Task Force ("PPCTF"). According to the Executive Order, the purpose of the PPCTF, chaired by Chief Energy Officer Scott Glenn, is to:

"convene stakeholders to increase transparency, coordination, collaboration, and urgency to timely facilitate, coordinate, and align project development and reviews by Hawaiian Electric, state, and county agencies for those measures anticipated to provide electricity for O'ahu to replace the coal plant's electricity, including the Stage 1 and 2 renewable energy projects for which power purchase agreements (PPAs) have been approved by the Public Utilities Commission."

The PPCTF serves to enhance collaboration across the electricity space by bringing together a wide range of stakeholders, such as state and county agencies, established community and environmental advocacy groups, Hawaiian Electric, and developers. The PPCTF has met once a month since March 31, 2021.

To achieve its objectives, a primary activity of the PPCTF is to develop and maintain a Master Schedule, which provides a timeline and status summary of the measures and projects needed to replace the coal plant with renewable energy. The current version of this schedule, updated monthly, as well as past versions of the schedule, can be viewed at https://energy.hawaii.gov/ppctf/master-schedule.

The PPCTF has been successful in improving coordination between state and local agencies that are involved throughout the inception and review of renewable energy projects, from project proposals to permitting and regulatory approval. These meetings have surfaced a number of questions, issues, and potential solutions by bringing together this diverse stakeholder group.