Powering Past Coal Task Force - Master Schedule

Summary

This document is a master schedule to provide a common operating picture of the overall progress to replace the electricity currently provided by the coal plant. On the next page, the grey line items are PUC approved measures. Lines beneath these may be projects or initiatives that fall under each PUC docket. Colored boxes indicate key milestones or project commercial operation dates.

Purpose

On March 30, 2021, by Executive Order 21-01, Governor David Ige established the Powering Past Coal Task Force to convene stakeholders to increase transparency, coordination, collaboration, and urgency to timely facilitate, coordinate, and align the reviews and approvals needed for the measures and projects that the PUC approved to replace the electricity and grid stability currently provided by Hawai‘i’s last coal-fired power plant, located on O‘ahu.

To achieve the Task Force objectives, a primary activity of the Task Force is to develop and maintain a Master Schedule, as shown on next page, which provides a timeline and status summary of the measures and projects needed to replace the coal plant with renewable energy.

These measures and projects will collectively support O‘ahu’s transition away from fossil fuels.

The coal plant’s generation capacity is 180 MW and in 2020 it provided 16% of O‘ahu’s electrical energy; notably, providing more energy during peak and non-daylight hours. It has been operating since 1992.

The Task Force is chaired by the Chief Energy Officer of the Hawai‘i State Energy Office and includes members from State and City and County of Honolulu government, the Hawai‘i State Legislature, Hawaiian Electric, renewable energy development companies, and energy-related public interest groups.

The Task Force is not a policy-making or decision-making body and does not pursue statutory or administrative rule changes.

Terms and Abbreviations Used

COD - Commercial Operations Date - Target date for a project to begin commercial operations.

COIF - Company Owned Interconnection Facilities

Force Majeure - Contract clause that removes liability to parties for unavoidable and unexpected events that prevent parties from fulfilling contractual obligations (e.g., unforeseen supply shortages or natural disasters).

GCOD - Guaranteed Commercial Operations Date - Contractually binding date for a project to begin commercial operations.

HECO - Hawaiian Electric Company - The only electric utility servicing the island of O‘ahu, part of Hawaiian Electric.

IRS - Interconnection Requirements Study - A study to establish the requirements for interconnection of a Generating Facility with the HECO’s Distribution System

MW - Megawatt - Measurement of power, capacity, or demand. Represented below as generating capacity of a project.

PPA - Power Purchase Agreement - A contract for an electric utility to purchase energy and or capacity from a commercial source (e.g., utility scale solar project) at a predetermined price or based on pre-determined pricing formulas.

PUC - Hawai‘i Public Utilities Commission

RPS - Renewable Portfolio Standard - A goal for the percentage of electricity sales in Hawai‘i to be derived from renewable energy sources.

Utility RPS - The percentage of a utility's electricity sales that comes from renewable energy. In the case of Hawaiian Electric, its Utility RPS is a combination of the three electric utilities servicing O‘ahu, Maui County (Maui, Moloka‘i, Lāna‘i), and Hawai‘i island: respectively, Hawaiian Electric Company (HECO), Maui Electric Company (MECO), and Hawai‘i Electric Light Company (HELCO).

Schedule Legend (Updated January 2022)

Green = On Target to Meet GCOD

Yellow = At Risk of Meeting GCOD

Red = Will Not Meet GCOD

Disclaimer: The information represented below is public and can be found within the PUC dockets. The project schedule is evolving—what is represented on the next page is subject to future additions and changes. For the most up-to-date information on the status of each project, HSEO recommends referencing the PUC dockets and/or appropriate agencies regarding the status of their approvals. Additional information can be found in the individual PUC dockets and on the project webpages, all of which are linked within the schedule on the next page.

Publish Date: April 2022, Questions can be sent via email to Monique Schafer, Monique.m.schafer@hawaii.gov, at the Hawai‘i State Energy Office.

Url: https://energy.hawaii.gov/ppctf

Hawai‘i RPS = 100% renewable energy for electricity consumption by 2045

The coal plant is planned for retirement on SEPTEMBER 1, 2022, as indicated by the vertical black line in the Master Schedule. State law prohibits the use of coal for power generation in Hawai‘i after December 31, 2022.
### Powering Past Coal Task Force - Master Schedule

#### DCCD Projects (Stage 1 and 2)

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### Capacity Based Renewable Energy (CBRE) - Model Solar

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*These measures are not currently items that are Task Force priority; however, they play an important role in ensuring O'ahu meets the production capacity requirements necessary to retire the coal plant and meet renewable energy goals. Measures may be brought to the Task Force should the need arise.*
2021.4.30

**Powering Past Coal Task Force – Master Schedule Detailed**

### Project Task Updates

**Power (Coal & Nuclear)**

**1.01.02.02**

**Mililani Solar (Stage 1)**

- **Power**: Complete
- **Cost**: Budget
- **Transportation & Delivery**: Complete

**Facts & Timeline**
- PV Farm is 100% delivered and 100% installed
- Remaining energy storage components and auxiliary tracking panels 100% installed

**Commissioning**
- Mechanical completion of the facility accounted for 14-24.
- Installation of BES equipment completed in March.
- IRR completion of the facility accounted for March and commissioning commenced.

**Commissioning**
- Mechanical completion of the facility accounted for 14-24.

**2.01.02.02**

**Wai‘anae Solar (Stage 1)**

- **Power**: Complete
- **Cost**: Budget
- **Transportation & Delivery**: Complete

**Facts & Timeline**
- PV Farm is 100% delivered and 100% installed.
- Remaining energy storage components and auxiliary tracking panels 100% installed.
- Battery electronics. Anticipated delivery for all units 5-26-20. Wai‘anae working closely with shipper to prioritize spots for batteries on sevons.
- Delivery delayed associated with the battery components related to shipping building or Port of Long Beach are receiving an additional four-week delay, New COD now 10-14-20.

**Commissioning**
- Mechanical completion of the facility completed for 14-24.

**2.01.03.02**

**Wai‘anae Solar (Stage 1)**

- **Power**: Complete
- **Cost**: Budget
- **Transportation & Delivery**: Complete

**Facts & Timeline**
- PV Farm is 100% delivered and 100% installed.
- Remaining energy storage components and auxiliary tracking panels 100% installed.
- Battery electronics. Anticipated delivery for all units 5-26-20. Wai‘anae working closely with shipper to prioritize spots for batteries on sevons.
- Delivery delayed associated with the battery components related to shipping building or Port of Long Beach are receiving an additional four-week delay, New COD now 10-14-20.

**Commissioning**
- Mechanical completion of the facility completed for 14-24.

**3.01.02.02**

**Kapolei Energy Storage (KES) (Stage 1)**

- **Power**: Complete
- **Cost**: Budget
- **Transportation & Delivery**: Complete

**Facts & Timeline**
- PV Farm is 100% delivered and 100% installed.
- Remaining energy storage components and auxiliary tracking panels 100% installed.
- Battery electronics. Anticipated delivery for all units 5-26-20. Wai‘anae working closely with shipper to prioritize spots for batteries on sevons.
- Delivery delayed associated with the battery components related to shipping building or Port of Long Beach are receiving an additional four-week delay, New COD now 10-14-20.

**Commissioning**
- Mechanical completion of the facility completed for 14-24.

**3.01.03.02**

**Kapiolani Solar 1 (Stage 1)**

- **Power**: Complete
- **Cost**: Budget
- **Transportation & Delivery**: Complete

**Facts & Timeline**
- PV Farm is 100% delivered and 100% installed.
- Remaining energy storage components and auxiliary tracking panels 100% installed.
- Battery electronics. Anticipated delivery for all units 5-26-20. Wai‘anae working closely with shipper to prioritize spots for batteries on sevons.
- Delivery delayed associated with the battery components related to shipping building or Port of Long Beach are receiving an additional four-week delay, New COD now 10-14-20.

**Commissioning**
- Mechanical completion of the facility completed for 14-24.

**4.01.02.02**

**Mountain View Solar (Stage 2)**

- **Power**: Complete
- **Cost**: Budget
- **Transportation & Delivery**: Complete

**Facts & Timeline**
- PV Farm is 100% delivered and 100% installed.
- Remaining energy storage components and auxiliary tracking panels 100% installed.
- Battery electronics. Anticipated delivery for all units 5-26-20. Wai‘anae working closely with shipper to prioritize spots for batteries on sevons.
- Delivery delayed associated with the battery components related to shipping building or Port of Long Beach are receiving an additional four-week delay, New COD now 10-14-20.

**Commissioning**
- Mechanical completion of the facility completed for 14-24.

**4.01.03.02**

**Wai‘anae Solar 1 (Stage 1)**

- **Power**: Complete
- **Cost**: Budget
- **Transportation & Delivery**: Complete

**Facts & Timeline**
- PV Farm is 100% delivered and 100% installed.
- Remaining energy storage components and auxiliary tracking panels 100% installed.
- Battery electronics. Anticipated delivery for all units 5-26-20. Wai‘anae working closely with shipper to prioritize spots for batteries on sevons.
- Delivery delayed associated with the battery components related to shipping building or Port of Long Beach are receiving an additional four-week delay, New COD now 10-14-20.

**Commissioning**
- Mechanical completion of the facility completed for 14-24.

**5.01.02.02**

**Wai‘anae Solar 2 (Stage 2)**

- **Power**: Complete
- **Cost**: Budget
- **Transportation & Delivery**: Complete

**Facts & Timeline**
- PV Farm is 100% delivered and 100% installed.
- Remaining energy storage components and auxiliary tracking panels 100% installed.
- Battery electronics. Anticipated delivery for all units 5-26-20. Wai‘anae working closely with shipper to prioritize spots for batteries on sevons.
- Delivery delayed associated with the battery components related to shipping building or Port of Long Beach are receiving an additional four-week delay, New COD now 10-14-20.

**Commissioning**
- Mechanical completion of the facility completed for 14-24.

**5.01.03.02**

**Kapiolani Solar 2 (Stage 3)**

- **Power**: Complete
- **Cost**: Budget
- **Transportation & Delivery**: Complete

**Facts & Timeline**
- PV Farm is 100% delivered and 100% installed.
- Remaining energy storage components and auxiliary tracking panels 100% installed.
- Battery electronics. Anticipated delivery for all units 5-26-20. Wai‘anae working closely with shipper to prioritize spots for batteries on sevons.
- Delivery delayed associated with the battery components related to shipping building or Port of Long Beach are receiving an additional four-week delay, New COD now 10-14-20.

**Commissioning**
- Mechanical completion of the facility completed for 14-24.

**6.01.02.02**

**Maui Solar (Stage 1)**

- **Power**: Complete
- **Cost**: Budget
- **Transportation & Delivery**: Complete

**Facts & Timeline**
- PV Farm is 100% delivered and 100% installed.
- Remaining energy storage components and auxiliary tracking panels 100% installed.
- Battery electronics. Anticipated delivery for all units 5-26-20. Wai‘anae working closely with shipper to prioritize spots for batteries on sevons.
- Delivery delayed associated with the battery components related to shipping building or Port of Long Beach are receiving an additional four-week delay, New COD now 10-14-20.

**Commissioning**
- Mechanical completion of the facility completed for 14-24.

**6.01.03.02**

**Maui Solar (Stage 2)**

- **Power**: Complete
- **Cost**: Budget
- **Transportation & Delivery**: Complete

**Facts & Timeline**
- PV Farm is 100% delivered and 100% installed.
- Remaining energy storage components and auxiliary tracking panels 100% installed.
- Battery electronics. Anticipated delivery for all units 5-26-20. Wai‘anae working closely with shipper to prioritize spots for batteries on sevons.
- Delivery delayed associated with the battery components related to shipping building or Port of Long Beach are receiving an additional four-week delay, New COD now 10-14-20.

**Commissioning**
- Mechanical completion of the facility completed for 14-24.
### 2023-06-22

**Battery Bonus Program**
- **PUC Decision:** Order批准 Decision and Order on 4-25-23 for HECO to implement a Schedule Dispatch Program (SDP) for commercial and residential rooftop photovoltaic systems. The program incentivizes new and existing SDP tariffs.
- **Utility:** HECO submits SDP tariffs.
- **Date:** June 2023 Program Development Begins

### 2023-06-02

**Grid Islander 1 - Phase 1**
- **Engineering/Design:** Project completed by Hawaiian Electric, Quantum MW design complete.
- **Engineering teams are hired.
- **Construction:** HECO deadline.
- **Testing:** HECO deadline.
- **Commission:** Nov 22
- **Anticipated to be online Dec 22.

### 2023-05-29

**Grid Islander 2 - Phase 1**
- **Engineering/Design:** 2023 Engineering/Design review completed by Hawaiian Electric, Company submitting 2023 design from previous.
- **Construction:** HECO deadline.
- **Testing:** HECO deadline.
- **Anticipated to be online Oct 22.

**Hawaii Power Move Program**
- **Capacity Limit:** 100 MW.
- **Current Status:** Project is anticipated to be online by Oct 22.
- **Utility:** Hawaiian Electric.

**Power Move - Commercial Battery Storage Reserve Pilot**
- **Capacity:** 60 MW.
- **Implementation:** July 2023.
- **Utility:** Hawaiian Electric.

### 2023-05-01

**Energy Efficiency - Load Management**
- **General Energy Efficiency Programs for Demand Side Management**
- **Average Total Reduction of 30 to 40 MW per year.

### 2023-04-29

**Oahu**
- **Forecast:** 3-5% reduction in demand.
- **Utility:** Hawaiian Electric.

### 2023-04-23

**Hawaii Energy Efficiency Program**
- **Capacity Limit:** 100 MW.
- **Current Status:** Project is anticipated to be online by Oct 22.
- **Utility:** Hawaiian Electric.

### 2023-04-22

**Schedule Dispatch Program**
- **PUC Decision:** Order on 4-25-23 for HECO to implement a Schedule Dispatch Program (SDP) for commercial and residential rooftop photovoltaic systems. The program incentivizes new and existing SDP tariffs.
- **Utility:** HECO submits SDP tariffs.
- **Date:** June 2023 Program Development Begins

### 2023-04-21

**PUC Budget Number:**

### 2023-04-20

**Utility:** Hawaiian Electric.

### 2023-04-19

**Hawaii Grid Resilience Program**
- **Benefit:** Reduces customer outage time.
- **Utility:** Hawaiian Electric.

### 2023-04-18

**Programs that incentivize residential, commercial, and industrial energy savings through rebate schedules.**
- **Utility:** Hawaiian Electric.

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