



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

Dear Commissioners:

Subject: Docket No. 2022-0212 – Innovative Pilot Process
Hawaiian Electric Companies' Data Analytics Clearinghouse Pilot Status Update

The Hawaiian Electric Companies¹ respectfully provide the Hawai'i Public Utilities Commission ("Commission") a status update on the Data Analytics Clearinghouse Pilot ("Pilot") and notify the Commission that the Companies do not intend to request an extension of the Pilot beyond the current February 28, 2025 Pilot end date.

Background

Decision and Order No. 37507 ("D&O 37507"), requires the Companies to submit requests to extend and/or expand pilot projects one year prior to the scheduled termination of the pilot.² On February 28, 2024, one year prior to the Pilot's current end date, the Companies filed a Motion for Enlargement of Time ("Motion"), seeking an extension of time to file a request to extend the Pilot. Order No. 40648 ("Order 40648") granted the Companies' Motion for Enlargement of Time, extending the procedural deadline for the Companies to submit a request to extend the Pilot to August 30, 2024.³ Herein, the Companies provide the Commission a Pilot status update and inform the Commission that they do not intend to request to extend this Pilot.

Discussion

In their Motion, the Companies stated that they require more time to evaluate the Clearinghouse usage during Program Increments 5 and 6 of the Pilot in order to meaningfully assess whether an extension and/or expansion of the Pilot is useful and desirable in the interests of the Pilot stakeholders who have expressed interest in using the Data Analytics Clearinghouse (including the Clearinghouse Portal, Collaboration Workspace, and Delta Sharing capabilities).⁴ The Companies further discussed that they will evaluate the Pilot throughout the upcoming Program Increments of the Pilot, particularly the Minimal Viable Products and Early Life Support phases that are scheduled in 2024.⁵

¹ Hawaiian Electric Company, Inc., Maui Electric Company, Limited, and Hawai'i Electric Light Company, Inc. are collectively referred to as the "Hawaiian Electric Companies" or "Companies."

² D&O 37507 at 180-181.

³ Order 40648 at 1-2.

⁴ Motion at 3.

⁵ *Id.*

Since the filing of their Motion, the Companies have: (1) released two core capabilities and three packaged products to the Pilot participants;⁶ (2) hosted Pilot participant workshops; (3) performed periodic Pilot assessments, and (4) have collected participant feedback.

The core capability released is the Collaboration Workspace supported by an Azure Databricks cloud-based application. The Pilot participants have been provided credentials, training guides, and twice a month workshops to ensure that they have been able to access the workspace and have had the opportunity to use the application to review, interact and download data from an anonymized Advanced Metering Infrastructure (“AMI”) dataset. As of December 2023, the anonymized AMI dataset contained over 340,000 service locations (72% of total locations) that represented roughly 28% of the reported energy billed to customers.

The second capability released is the Clearinghouse Portal that provides PowerBI interactive dashboard visuals of the AMI dataset enhanced with additional descriptive features, such as descriptions of the site type that are accessed from a website portal providing high-level insights to the data without the need for query and visualization. All participant groups have been provided access and demonstrations of the curated products which include Consumption Patterns, Equity & Inclusion and Benchmarking Consumption Patterns.

The Companies tested the Delta Sharing capability and found that the tool is relevant for Pilot participants who want direct access to the data and who are also able to provide their own storage for the AMI dataset and compute resources for analytics. There has not yet been a participant that has developed a specific use case for this functionality.

The Pilot has successfully demonstrated the functionality of a shared collaborative platform capable of performing queries on the AMI anonymized dataset enhanced with useful research features of island, census tract, rate schedule, and PV program of public research interest. The majority of the Pilot participants have demonstrated the ability to access the Pilot products and have discussed their potential use cases to utilize the AMI data. Pilot participants have expressed to the Companies that the Pilot has been a valuable introduction to the skills, knowledge, systems, and data augmentation for their agencies to effectively work with extremely large data sets for public research.

The Companies have collected participant feedback and in response to that feedback, the Companies have assisted participants with collaboration workspace demonstrations including the use of python libraries and how to add files and share workbooks with team members, among other things.

During participant workshops, Pilot participants in their initial assessments have identified a desire for additional datasets (such as weather, property value bins, census

⁶ The Pilot participants include the City & County of Honolulu, the County of Hawaii, and Hawaii Energy.

demographics, etc.), access to identifiable government accounts, additional data tagging, and billing data for potential additional use cases. It is the Companies understanding that Pilot participants also face challenges related to staffing limitations that impede making use of current and future datasets in the Clearinghouse.

Based on Pilot progress, experience, participant feedback, and lessons learned to date, the Companies have determined that an extension of the Pilot would not be useful and is not required to address the limitations of the participants to address the challenges of using AMI data for public research purposes. The issues for each public research agency can be addressed during the normal course of collaboration between the agencies and the Companies utilizing the infrastructure that has already been developed under the Pilot. As a result, the Companies do not intend to request an extension of the Pilot beyond the current February 28, 2025 Pilot end date.

Collective participant feedback has indicated that participants desire ongoing access to the data and functionality provided by the Pilot, especially the storage and compute capabilities of the collaborative workspace and overall portal for dashboard presentation. Whether the portal and Collaboration Workspace will be maintained beyond the end of the Pilot and how the overall operations of the Clearinghouse can be maintained has yet to be determined.⁷ The Companies will continue to evaluate the participant needs based on feedback and support their use cases as possible. It is the Companies understanding that it is unlikely that the challenges each agency faces in using the data for public research purposes will be complete by the end of the Pilot and the Companies can provide the status of the progress and any outstanding needs in the Annual Pilot Update and/or Final Report.

Conclusion

The Pilot is on schedule and is expected to achieve the primary objectives (including enabling efficient access to critical and voluminous data, enabling data sharing and collaboration capabilities, collecting participant feedback, estimating costs for maintaining the data sharing capabilities, and lessons learned) within the current February 2025 Pilot end date. The Companies are committed to sustaining core functionality and collaborative efforts through next year until more specific operational support can be assessed and determined. The Companies

⁷ In any event, regardless of whether or not the portal or Collaboration Workspace is maintained beyond the February 2025 Pilot end date, the Companies will comply with the AMI data requirements set forth in Order No. 37146, issued May 21, 2020 in Docket No. 2018-0141. Order 37146 (at 16) requires the Companies to provide Hawaii Energy all data from advanced meters under the same terms they provide Hawaii Energy data from traditional meters, and finds that it is in the public interest for public entities to have ready access to aggregated, anonymized, customer electricity usage data.

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will continue to support participants in developing their use cases and will provide discussion of specific use cases and lessons learned in the Annual Pilot Update and/or Final Report.

Sincerely,

/s/ Joel Wasson

Joel Wasson
Manager, Enterprise Data & Analytics