

CA-IR-2

Ref: HECO T-1, Page 13.

Mr. Joaquin states, “The Kamoku 46 kV Underground Alternative Expanded fully addresses the Koolau/Pukele Overload Situation (2005) and the Pukele Substation Reliability Concern in the long term . . . This alternative has limitations in addressing the other concerns in the long-term and near-term.”

- a. If the Honolulu Power Plant were retired in the near future, would HECO still recommend the Kamoku 46 kV Underground Alternative – Expanded alternative in the instant docket? Explain.
- b. What project or projects does HECO anticipate it will need to pursue if the Honolulu Power Plant is retired in the near future? Provide copies of all documentation to support the response.

HECO Response:

- a. A response to this question would be dependent on factors such as the timing and certainty of the retirement of the Honolulu Power Plant (defining what is meant by “near future”). The Honolulu Power Plant should not be retired, even if plans are developed to retire the facilities, until replacement generation and transmission facilities are in place. If the Honolulu Power Plant were retired, the Downtown Line Overload situation would be accelerated from occurring near the end of the 20-year planning period to the year 2006, thus the Kamoku 46kV Underground Alternative – Expanded would not be adequate to resolve this issue. As stated in HECO T-4 (page 26), HECO does not have plans to retire the Honolulu Power Plant. In addition, the long-term integrated resource plan covering the years 2006-2025 is currently being studied in HECO’s IRP-3 process and the base assumption is that the Honolulu Power Plant will continue to operate through 2025.
- b. HECO has already studied several plans, as shown in Exhibit 5, page 5, without the Kamoku 46kV Underground Alternative – Expanded, which could include the Kamoku

138kV Underground Alternative, the School-Pukele 138kV Alternative and the Halawa-School #2 with a 46kV network Alternative. If the Kamoku 46kV Underground Alternative – Expanded is already installed or in the process of being installed and plans are made that include retirement of the Honolulu Power Plant, HECO would perform a study as part of the planning for the retirement, which would incorporate the assumption that the 46kV Underground Alternative is installed. For example, the Kamoku 46kV Underground Alternative – Expanded is similar to the 46kv Network Alternative, which was studied for the East Oahu Transmission problems, and resolves the Koolau-Pukele Line Overload Situation and the Pukele Substation Reliability Concern. However, as stated on page 58 of Exhibit 5, the 46kV Network shifts load from the Pukele Substation to the Downtown Substations and accelerates the Downtown Overload Situation. Therefore, the installation of the Halawa-School #2 was recommended with the 46kV Network Alternative to resolve the Downtown Overload Situation. This is an example of one possible option if the Kamoku 46kV Underground Alternative – Expanded were installed and the Honolulu Power Plant were retired. HECO would perform an additional 20-year planning study to analyze other possible options to address the Downtown Overload Situation and Downtown Substation Reliability Concern.