



UNIVERSITY OF HAWAII SYSTEM

Legislative Testimony

Testimony Presented Before the
House Committee on Energy & Environmental Protection
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SB 2510 SD2 – RELATING TO RENEWABLE ENERGY

Chair Lowen, Vice Chair Marten, and members of the committee:

SB 2510 SD2 proposes to establish specific mandates for the minimum percentages of annual firm renewable energy generation and maximum energy contribution of any individual technology on each of the island grids. Such mandates have the stated intention of achieving “greater diversification of renewable energy generation to include intermittent and firm renewable generation to improve reliability and achieve one hundred per cent renewable energy objectives.” These mandates also have the intention of providing “reliable replacement of fossil fuel generation with firm renewable generation.” SB 2510 SD2 also appropriates funds out of the energy systems development special fund for the Hawai'i Natural Energy Institute (HNEI) to conduct a study to update, on a regular basis, the minimum percentage of firm generation and the maximum proportion of any one renewable energy source on each island. HNEI respectfully offers the following comments on this bill.

- 1) Consistent with our statutory role, HNEI collaborates with and provides analysis and technical assistance to key energy stakeholders including the Hawaii Public Utilities Commission, the Hawai'i State Energy Office, and the Hawaiian Electric Company (HECO) to help address these issues. If so directed, HNEI would enthusiastically work in collaboration with these and other stakeholders to develop a suite of energy options that addresses the issues identified in SB2510 SD2.
- 2) HNEI currently has sufficient funds from its Barrel Tax allocation to conduct this study and does not need a separate appropriation. We believe that a direct request for HNEI to utilize funds from its allocation of the barrel tax would be a more efficient process than a separate appropriation.
- 3) HNEI **supports the intent** of this bill and recognizes the need to cost-effectively develop sufficient, locally-sourced firm renewable generation to ensure we can meet our goal of 100% renewable goals while maintaining required grid reliability. HNEI analysis

to date confirms that very significant amounts of firm **capacity** and energy will be required to reach our 100% renewable goals and to ensure grid reliability. The economic dispatch of this firm capacity will vary significantly depending on the quantity and characteristics of all the energy resources on the grid. While recognizing the need to identify and incentivize the development of these firm resources, we are concerned that a legally-binding fixed minimum percentage of renewable energy from firm generation is overly prescriptive at this time and could prevent the development of cost-effective reliable energy systems.

4) Given the desire to include all islands and considering the rapidly changing cost and availability of the various renewable energy sources we respectfully suggest amending the timeline for HNEI's study. We respectfully suggest that a preliminary report be submitted to the legislature twenty days prior to the convening of the regular session of 2023 with a final report to be submitted twenty days ahead of the 2024 legislature with updates to be submitted every two years thereafter.

Thank you for the opportunity to provide this testimony on SB 2510 SD2.