Testimony Presented Before the House Committee on Finance Wednesday, April 6, 2022 at 1:30 p.m. By
Richard Rocheleau, Director Hawai'i Natural Energy Institute
And
Michael Bruno, PhD
Provost
University of Hawai'i at Mānoa

SB 2510 SD2 HD1 – RELATING TO RENEWABLE ENERGY

Chair Luke, Vice Chair Yamashita, and members of the committee:

SB 2510 SD2 HD1 amends Hawaii Revised Statutes, Section 226-10 to accelerate research and development of firm renewable energy and to increase research and development on energy production. SB 2510 SD2 HD1 also amends Hawaii Revised Statutes, Section 226-18 to decrease the state's reliance on energy imports, to require the balancing of grid resources to achieve an affordable, equitable, resilient, low greenhouse emissions energy system.

The Hawai'i Natural Energy Institute supports the objectives noted above but does have concerns regarding the language in Section 2 a(4) which seeks to reduce greenhouse gases by, among other actions, ensuring that all new utility scale electricity generation projects shall be renewable. While we agree with the intent of this language, we believe it may be too restrictive and may, contrary to intent, slow the reduction of greenhouse gas emissions from the grid. Specifically, detailed modeling of grid operations shows that the availability of small fossil-fuel generators that run sparingly can, under some circumstances, improve grid reliability and allow reduced usage and even faster retirement of aging oil units resulting in a net system wide fossil fuel reduction.

While these flexible firm units should be required to operate using cost-effective renewable fuels whenever they are available; operation using fossil fuels when they are not may still move us toward our low GHG objectives and improve reliability.

We therefore respectfully recommend that the language in this section be amended as follows

On page 5, lines 12-16: (4) Reduction, avoidance, or sequestration of greenhouse gas emissions from energy supply and use[; and], <u>including but</u> not limited to ensuring that all new utility scale electricity generation projects shall be renewable **capable**;

For consistency, we recommend the following

On page 7, lines 4-6; <u>and reduce reliance on imports, and that electrical energy</u> services shall be renewable **capable**.

and, on page 8, lines13-17: (5) Ensure, to the extent that new supply-side resources are needed, that the development or expansion of energy systems uses the least-cost energy supply [option] grid resources options that are not fossil fuels renewable capable, and maximizes efficient technologies;

Thank you for the opportunity to provide this testimony on SB 2510 SD2 HD1.