Testimony Presented to the

Senate Committees on Energy, Economic Development and Tourism,
and Higher Education

Monday, February 3, 2020 at 2:45 p.m.
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SB 2547 - RELATING TO REWEWABLE ENERGY

Chairs Wakai and Kim, Vice Chairs Taniguchi and Kidani, and members of the committees:

The Hawai'i Natural Energy Institute (HNEI) supports the intent of this bill, provided its passage does not impact the priorities as identified by our Board of Regents' Approved Budget. As such, HNEI's offers the following comments.

SB 2547 would require HNEI to conduct a feasibility study on the State's ability to achieve its renewable energy goals by 2045, and would appropriate funds for the study.

HNEI has a history of supporting the Hawai'i PUC, conducting independent analysis to provide perspective and insight into some of the decisions the PUC must make. As part of that support, HNEI has conducted analyses and assessments to inform the PUC's evaluation of the renewable portfolio standards, most recently in supporting the report that was submitted by the PUC to the 2019 Legislature. This report, required every five years under HRS Section 269-95, includes assessments of the effectiveness and achievability of the RPS targets. The 2019 report found that achieving the 2020 target was very likely, and the 2030 target likely based on current utility plans. The report also stated that it was not possible to determine the achievability of the 2040 and 2045 targets due to several uncertainties (See report excerpt on the following page of this testimony).

It has been approximately 15 months since the latest PUC RPS report. While there has been substantial development by the utility toward the 2030 goals, HNEI believes that many of the uncertainties described in the report have not become certain. Should this more forward looking study be requested by the legislature, it is important that key uncertainties whose resolution could significantly impact the achievability of meeting the RPS targets be fully evaluated and potential steps for resolution identified.

If this study is performed by HNEI, funding for the study could be accommodated through HNEI's barrel tax allocation and may not require an additional appropriation.

Again, thank you for the opportunity to comment on SB 2547.

- From PUC Report to the 2019 Legislature on Hawaii's Renewable Portfolio Standards (p. 11):

The achievability of the 2020 and 2030 RPS is dependent on several utility-scale renewable energy projects at identified sites that have been approved or are under construction. While uncertainty remains regarding whether many of the proposed projects will ultimately reach commercial operations, each being subject to several contingencies, including obtaining necessary permits, approvals by the Commission, and successful financing and project implementation.

Achievability of the 2040 and 2045 RPS is not possible to determine with certainty at this time for several reasons including:

- The long timeframe presents uncertainties regarding the amount of growth in electricity demand. Since the RPS requirements are expressed in terms of percentages of electricity sales, the amount of required renewable resources depends on uncertain future economic trends.
- Since the RPS percentage requirements are significantly higher for 2040 (70%) and 2045 (100%), the ability of the utility systems to accommodate increasing proportions of variable utility-scale generation and distributed generation becomes an increasingly important consideration.
- Achievement of the longer-term RPS depends, in part, upon development of renewable resources that are not currently proposed, known, or sited.
- Community acceptance regarding the siting of renewable energy resources and the potential impacts of unforeseen technological advancements are also key uncertainties in determining 2040 and 2045 RPS achievability.

An effort is made in this Report to make reasonable considerations regarding incorporation of renewable generation on each utility system. This Report does not, however, attempt to resolve these uncertainties. Several significant challenges in achieving the longer-term RPS requirements are discussed in a later section of this Report.