

**UNIVERSITY OF HAWAI'I SYSTEM** 

Legislative Testimony

Written Testimony Presented to the Senate Committee on Ways and Means Thursday, February 27, 2020 at 10:35 a.m. By Richard Rocheleau, Director Hawai'i Natural Energy Institute And Michael Bruno, PhD Provost University of Hawai'i at Mānoa

SB 2547 SD1 - RELATING TO REWEWABLE ENERGY

Chair Dela Cruz, Vice Chair Keith-Agaran, and members of the committee:

The Hawai'i Natural Energy Institute (HNEI) supports this bill, provided that its passage does not impact the priorities as set forth by the University of Hawai'i Board of Regents Approved Budget. HNEI also provides the following comments.

SB 2547 SD1 would require HNEI to conduct a feasibility study on the State's ability to achieve its renewable energy goals by 2045.

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. A more forward looking study, as contemplated by this bill, is important to fully evaluate the key uncertainties whose resolution could significantly impact the achievability of meeting the longer-term RPS targets and identify potential steps for their resolution.

Again, thank you for the opportunity to provides comment on SB 2547 SD1.

- 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.