### HB 1726, HD1



MARY ALICE EVANS

(808) 586-2355

(808) 586-2377

Telephone:

Fax:



## DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

No. 1 Capitol District Building, 250 South Hotel Street, 5th Floor, Honolulu, Hawaii 96813 Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804 Web site: www.hawaii.gov/dbedt

Statement of Richard C. Lim Director

Department of Business, Economic Development, and Tourism before the

### Senate Committee on Energy and Environment

Thursday, March 15, 2012 3 PM State Capitol, Conference Room 225 in consideration of

> HB 1726, HD1 Relating to Energy

Chair Gabbard, Vice Chair English and Members of the Senate Committee on Energy and Environment.

The Department of Business, Economic Development, and Tourism (DBEDT) supports extending the repeal date of the energy systems development special fund to 2015 to match that of the environmental response, energy, and food security tax for the purposes of HB 1726, HD1.

The extension of this source of funding is viewed as a critical tool and important resource for the University of Hawaii's - Hawaii Natural Energy Institute (HNEI) in supporting the State in its efforts towards achieving the goals of the Hawaii Clean Energy Initiative.

Leveraging the resources of this fund with those of the energy security special fund through cooperative efforts provide HNEI and DBEDT the wherewithal to further advance the progress already achieved. This relationship has produced results such as the "Oahu Wind Integration Study," Japan-Hawaii smart-grid demonstration, and Korean smart grid discussions positioning Hawaii as a leading energy test-bed in the Pacific.

Thank you for the opportunity to offer these comments.

# TESTIMONY OF HERMINA MORITA CHAIR, PUBLIC UTILITIES COMMISSION DEPARTMENT OF BUDGET AND FINANCE STATE OF HAWAII TO THE SENATE COMMITTEE ON ENERGY & ENVIRONMENT

MARCH 15, 2012

**MEASURE:** H.B. No. 1726, H.D. 1 **TITLE:** Relating to Energy

Chair Gabbard and Members of the Committee:

### **DESCRIPTION:**

This measure proposes to extend the repeal date for the energy systems development special fund ("Special Fund") and to align it with the repeal date of the environmental response, energy, and food security tax in 2015.

#### **POSITION:**

The Commission supports this measure and would like to offer the following comments for the Committee's consideration.

### **COMMENTS:**

The Hawaii Natural Energy Institute ("HNEI") is responsible for the critical task of administering the Special Fund in order to promote renewable energy research and technology validation in the State. The private-public partnerships developed by HNEI, especially in the area of research covering the validation and integration of clean energy technologies into Hawaii's existing electricity system, provides invaluable support to the Commission in its regulatory proceedings and other related work. It is essential that HNEI be maintained and properly funded so it can continue to support the State in its efforts to achieve maximum penetration of variable generation, while still maintaining the strength and resiliency of Hawaii's electric system.

Thank you for the opportunity to testify on this measure.

Written Testimony Presented Before the Senate Committee on Energy and Environment Thursday, March 15, 2012 at 3:00 pm Conference Room 225

by
Virginia S. Hinshaw, Chancellor
and
Richard Rocheleau, Director
Hawai'i Natural Energy Institute
School of Ocean and Earth Science and Technology
University of Hawai'i at Mănoa

HB 1726, HD1 – RELATING TO ENERGY

Chair Gabbard, Vice-Chair English, and members of the committee:

My name is Richard Rocheleau, Director of the Hawai'i Natural Energy Institute at the University of Hawai'i at Mānoa. I support HB 1726 HD1 which proposes to amend the repeal date of the Energy Systems Development Special Fund to match that of the environmental response, energy, and food security tax.

Section 304A-1891 passed by the Hawai'i State Legislature in 2007 established the Hawai'i Natural Energy Institute (HNEI) in statute, established the Energy Systems Development Special Fund, and directed that it be managed by HNEI; but no funding was provided. ACT 73 passed in 2010 established a barrel tax and authorized that 10 cents of the tax on each barrel be deposited into the Energy Systems Development Special Fund. Due to difficulties with budget authorization, UH/HNEI was not able to access those funds until June 2011. Amending the repeal date will allow critical projects supporting the Hawai'i Clean Energy Initiative (HCEI) goals to continue, consistent with the intent of ACT 73.

Since June 2011, HNEI has worked in close collaboration with DBEDT and other stakeholders to identify and initiate projects with significant potential to reduce the use of fossil fuels in Hawai'i. A description of our current spend plan has been provided in our most recent Annual Report to the Legislature (November 2011).

In addition to their potential to reduce fossil fuel use, the projects selected to date also leverage federal investment, remove roadblocks in programs critical for the success of HCEI, and contribute to programs likely to spur economic development.

Activities funded or in final negotiation using the first year of funds include:

- a) Support for the Programmatic Environmental Impact Statement (PEIS) to evaluate wide-ranging environmental issues associated with island interconnection via undersea cable. Without this financial support from the barrel tax, this critically important effort was stalled and continued delay of the project was likely. Hawaii support for this PEIS incentivized the U.S. Department of Energy to reengage including providing funds for the project. HNEI/UH is currently working with DBEDT and USDOE to develop a detailed scope of work so that work can restart immediately.
- b). In another example, the University of Hawai'i recently received a \$1 million award from US DOE to develop and validate a sophisticated electronic measurement technique which will allow more accurate assessment of the geothermal energy resource, reducing the risk associated with expensive exploratory drilling. Unfortunately, the DOE funding only provided for lease of the equipment and restricted its use to limited sites on the Big Island. As a result of investment from the Energy Systems Development Special Fund (Energy Fund), UH will own this equipment and the resource assessment work will be extended to potential geothermal sites on Maui and O'ahu. This modest investment from the Energy Fund is greatly increasing the likelihood of successful development of geothermal energy, which would reduce fossil fuel use and contribute to workforce development.
- c) In one final example, HNEI and its partners received a \$6 million award from US DOE to develop and demonstrate smart grid inverters that will enable greater penetration of photovoltaic (PV) systems on utility distribution lines, a major barrier to high usage of PV. Unfortunately, the USDOE did not provide sufficient funding in the first year of the project for the full technology development effort putting this project at risk. HNEI used a modest amount from the Energy Fund to restore the budget and allow this valuable, high-visibility project to move forward.

Approximately 85% of the funds from the first year have been encumbered for the three projects described above. New projects that will continue to move us toward the HCEI goals including Grid Integration Studies, Energy Efficiency, Smart Grid Demonstrations, and support for geothermal development and biofuels, are being identified and evaluated for future funding.

The projects funded by the Energy Systems Development Special Fund are advancing new efficient and economic energy technologies and will help ensure that Hawai'i continues to move forward to meet its clean energy goals. I strongly support amending the repeal date of the Energy Systems Development Special Fund to match that of the environmental response, energy, and food security tax. However, it is also important to note that we can only continue the progress if the fund is used for the purposes so clearly identified in ACT 73. I ask that this be considered as other pending legislation is considered.