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STATE OF HAWAII DEPARTMENT OF EDUCATION

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> Date: 03/20/2019 Time: 03:15 PM Location: 414

Committee: Senate Education

Senate Energy, Economic Development, and

Tourism

Department: Education

Person Testifying: Dr. Christina M. Kishimoto, Superintendent of Education

Title of Bill: HB 1583, HD2 RELATING TO ELECTRIC GRID RESILIENCY.

Purpose of Bill: Requires the Department of Education to establish a pilot program in 4

schools to install renewable energy systems capable of providing backup power in the event of a natural disaster or other similar

emergency. Requires the Public Utilities Commission to consider in its

current and ongoing proceedings ways to incentivize the

implementation of renewable energy systems in public schools.

(HB1583 HD2)

Department's Position:

The Department of Education (Department) provides the following comments on HB 1583, HD2.

The Department will complete a pilot project at 3633 Waialae Avenue by the end of March 2019. The pilot project seeks to determine the feasibility and economic viability of solar renewable energy, battery backup, and diesel fuel generator system at a Department facility.

Following analysis and testing of this pilot project, the Department will be able to report to the Legislature on the lessons learned from this micro-grid pilot project.

This pilot program was funded by energy efficiency savings accrued in the past three years, pursuant to Section 36-41, Hawaii Revised Statutes. The Department estimates funding for an additional pilot requires approximately \$3 million per site to implement. As a result, additional pilots for four schools will require \$12 million in funding.

Renewable energy and battery backup is not economically feasible to provide backup electrical power at emergency shelters. The amount and cost for batteries would be cost prohibitive.

To ensure backup electrical power beyond a few hours requires either diesel or natural gas generators. For this reason, the current Department pilot uses a diesel generator for electrical backup of critical systems.

Thank you for the opportunity to provide testimony on this measure.

The Hawaii State Department of Education seeks to advance the goals of the Strategic Plan which is focused on student success, staff success, and successful systems of support. This is achieved through targeted work around three impact strategies: school design, student voice, and teacher collaboration. Detailed information is available at www.hawaiipublicschools.org.



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Testimony of the Department of Commerce and Consumer Affairs

Before the
Senate Committee on Education
and
Senate Committee on Energy, Economic Development, and Tourism
Wednesday, March 20, 2019
3:15 p.m.
State Capitol, Conference Room 414

On the following measure: H.B. 1583, H.D. 2, RELATING TO ELECTRIC GRID RESILIENCY

Chairs Kidani and Wakai and Members of the Committees:

My name is Dean Nishina, and I am the Executive Director of the Department of Commerce and Consumer Affairs' (Department) Division of Consumer Advocacy. The Department offers comments on this bill.

The purpose of this bill is to require the Department of Education to establish a pilot program in which various schools are provided with renewable energy systems that are capable of providing backup power in the event of a natural disaster or other similar emergency. The measure also requires the Public Utilities Commission (Commission) to consider ways to incentivize the implementation of these systems. The effective date of this measure has been changed to July 1, 2050.

The need for Hawaii to evaluate its existing electric grids and their ability to withstand a natural disaster or similar emergency is clear. The ability of a microgrid or a distributed energy system to provide possible solutions is one reason why the

Testimony of DCCA H.B. 1583, H.D. 2 Page 2 of 2

Commission has opened Docket No. 2018-0163, which is investigating the establishment of a microgrid tariff. The role that microgrids and distributed systems can play in addressing emergency situations are also being considered in the Integrated Grid Planning proceedings (Docket No. 2018-0165). In addition, the appropriate pricing for services to the grid by distributed energy systems and/or microgrids will be a major focal point in the market track phase in the distributed energy systems proceeding, Docket No. 2014-0192. Furthermore, in Docket No. 2018-0088, the Commission is investigating Performance Based Regulation, and the Department and others have recommended that resiliency must be included in any Performance Based Regulation framework.

Thus, the Department appreciates the Legislature's recognition reflected in H.D. 2 that certain ongoing Commission proceedings will address the concerns raised in this measure, as well as the guidance that the Commission should consider ways to encourage the installation of renewable energy systems in public schools to provide backup power if the electric grid is unavailable.

The Department also respectfully raises a possible affordability issue – namely, a renewable energy system that continuously provides backup power for a prolonged or an indefinite time would be very expensive. Accordingly, rather than require "continuous" backup power, it may be reasonable for the Committee to consider some flexibility that allows the evaluation of possible systems that might be designed and the related costs.

Thank you for the opportunity to testify on this bill.

TESTIMONY OF JAMES P. GRIFFIN, Ph.D. CHAIR, PUBLIC UTILITIES COMMISSION STATE OF HAWAII

TO THE
SENATE COMMITTEES ON
EDUCATION
AND
ENERGY, ECONOMIC DEVELOPMENT, AND TOURISM

March 20, 2019 3:15 p.m.

Chairs Kidani, Wakai, and Members of the Committees:

MEASURE: H.B. No. 1583 HD2

TITLE: RELATING TO ELECTRIC GRID RESILIENCY.

DESCRIPTION: Requires the Department of Education to establish a pilot program in 4 schools to install renewable energy systems capable of providing backup power in the event of a natural disaster or other similar emergency. Requires the Public Utilities Commission to consider in its current and ongoing proceedings ways to incentivize the implementation of renewable energy systems in public schools. (HB1583 HD2)

POSITION:

The Public Utilities Commission offers the following comments for consideration.

COMMENTS:

The Public Utilities Commission ("Commission") supports the intent of this bill to increase the resilience of the state in the face of natural disasters and other emergencies. The Commission is currently working with the state's electric utilities and other key stakeholders in several related proceedings to address this issue, including the Hawaiian Electric Companies' integrated grid planning ("IGP") process (see Docket No. 2018-0165), the development of a microgrid services tariff (see Docket No. 2018-0163), and the establishment of performance-based regulatory mechanisms ("PBR") for resilience (see Docket No. 2018-0088).

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The Commission is also working closely with the Public Benefits Fee Administrator ("Hawaii Energy") to design new programs and services funded by the Public Benefits Fee ("PBF"), including program offerings and incentives related to resilience (see Docket No. 2007-0323). Hawaii Energy is currently developing a program plan covering the next three years (i.e., through 2021), which will be submitted for public review and comment in May 2019.

With respect to the requirement that the Commission consider, in current and ongoing proceedings, ways to incentivize these systems, the Commission is appreciative of Legislative guidance on this matter, and will continue to develop appropriate resilience programs and incentives through currently open and active proceedings, including the IGP, microgrid, PBR, and PBF dockets identified above.

Thank you for the opportunity to testify on this measure.



<u>HB-1583-HD-2</u> Submitted on: 3/20/2019 12:51:24 PM

Testimony for EDU on 3/20/2019 3:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Dain Christensen	Individual	Support	No

Comments: