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 NEIL ABERCROMBIE GOVERNOR

> RICHARD C. LIM DIRECTOR

MARY ALICE EVANS DEPUTY DIRECTOR

Telephone: (808) 586-2355 Fax: (808) 586-2377

Statement of **RICHARD C. LIM Director** Department of Business, Economic Development, and Tourism before the **HOUSE COMMITTEE ON CONSUMER PROTECTION AND COMMERCE** Monday, March 25, 2013

Monday, March 25, 2013 3 p.m. State Capitol, Conference Room 325 in consideration of

SB 1040

RELATING TO ELECTRIC SYSTEMS.

Chair McKelvey, Vice Chair Kawakami, and Members of the Committee.

The Department of Business, Economic Development & Tourism (DBEDT) supports SB 1040 to establish a policy for the State of Hawaii to support the implementation of advanced grid modernization technology.

Enabling the Public Utilities Commission to consider the value of improving electrical generation, transmission, and distribution systems and infrastructure may facilitate more robust solutions to provide reliable power and enable the grid to accept increased levels of renewable energy.

DBEDT respectfully defers to the Public Utilities Commission on the development and administration of this regulatory measure.

Thank you for the opportunity to offer comments on SB 1040.



NEIL ABERCROMBIE GOVERNOR

SHAN S. TSUTSUI LT. GOVERNOR

STATE OF HAWAII OFFICE OF THE DIRECTOR DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS

KEALI`I S. LOPEZ

JO ANN UCHIDA TAKEUCHI DEPUTY DIRECTOR

DIRECTOR

335 MERCHANT STREET, ROOM 310 P.O. Box 541 HONOLULU, HAWAII 96809 Phone Number: 586-2850 Fax Number: 586-2856 www.hawaii.gov/dcca

TO THE HOUSE COMMITTEE ON CONSUMER PROTECTION AND COMMERCE

THE TWENTY-SEVENTH LEGISLATURE **REGULAR SESSION OF 2013**

MONDAY, MARCH 25, 2013 3:00 P.M.

TESTIMONY OF JEFFREY T. ONO, EXECUTIVE DIRECTOR, DIVISION OF CONSUMER ADVOCACY, DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS. TO THE HONORABLE ANGUS L. K. MCKELVEY. CHAIR. AND MEMBERS OF THE COMMITTEES

SENATE BILL NO. 1040 - RELATING TO ELECTRIC SYSTEMS.

DESCRIPTION:

This measure proposes to authorize the State of Hawaii Public Utilities Commission ("PUC") to consider the value of implementing advanced grid modernization technologies throughout the State.

POSITION:

The Division of Consumer Advocacy ("Consumer Advocate") strongly supports the measure and offers the following comments.

Senate Bill No. 1040 House Committee on Consumer Protection and Commerce Monday, March 25, 2013, 3:00 p.m. Page 2

COMMENTS:

In achieving the State's ambitious goals under the Hawaii Clean Energy Initiative, the State's various electric utilities will require the installation of many new pieces of hardware, software, and instrumentation that modernizes and improves the systems that deliver electric utility service to customers throughout the State. In assistance of that end, S.B. No. 1040 proposes to allow the PUC to consider the value that various equipment, facilities, processes, products, and systems will have on improving the reliability, resiliency, flexibility, and/or efficiency of the State's electrical generation and delivery infrastructures affected by the higher and higher contributions of renewable energy resources to the State's various electric utility systems. As noted by the PUC in its testimony to this Committee, S.B. No. 1040 clarifies the policy of the State with respect to grid infrastructure improvements and gives the PUC legislative guidance as to its duties and deliberations concerning the implementation of advanced grid modernization technologies throughout the State. As part of the Administration's legislative package for the Twenty-Seventh Legislature of the State of Hawaii, the Consumer Advocate strongly supports the passage of this measure and asks that the Committee approve this bill for consideration by the entire Legislature.

Thank you for this opportunity to testify.

TESTIMONY OF HERMINA MORITA CHAIR, PUBLIC UTILITIES COMMISSION DEPARTMENT OF BUDGET AND FINANCE STATE OF HAWAII TO THE HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE

MARCH 25, 2013 3:00 p.m.

MEASURE: S.B. No. 1040 TITLE: Relating to Electric Systems

Chair McKelvey and Members of the Committee:

DESCRIPTION:

S.B. No. 1040 directs the Public Utilities Commission to consider in its deliberations the value of employing advanced grid modernization technology ("AGMT") to improve and enhance the State's electrical systems and infrastructure. This bill also defines "advanced grid modernization technology" to encompass a host of current and developing technologies and methods to ensure Hawaii's grids continue to respond to evolving energy needs.

POSITION:

The Commission strongly supports S.B. No. 1040 and would like to offer the following comments.

COMMENTS:

S.B. No. 1040 provides valuable legislative guidance and support to the Commission in evaluating the various technologies and methodologies employed by utilities to improve the reliable and efficient operations of Hawaii's electrical grids. AGMT, when appropriately applied, can provide essential grid support capabilities that can drastically improve grid communications, bolster electric system reliability, and support operational efficiencies. Without such technologies and methodologies, the State may be hindered in developing the infrastructure needed to reach its clean energy mandates. The Hawaii Clean Energy Initiative Road Map for 2011 has recognized this point and has noted that

S.B. No. 1040 Page 2

smart grid technologies, as included within AGMT, are "highly critical" early stage technologies needed to enable the State to meet its Renewable Portfolio Standards requirements.¹

Thank you for the opportunity to testify on this measure.

¹ See HCEI Road Map 2011; Braccio and Finch, Booz Allen Hamilton, Inc.; prepared by the National Renewable Energy Laboratory of the United State Department of Energy; August 2011; page 8.





HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE March 25, 2013, 3:00 P.M. Room 325 (Testimony is 1 page long)

TESTIMONY IN STRONG SUPPORT OF SB 1040

Chair McKelvey and members of the Consumer Protection & Commerce Committee:

The Blue Planet Foundation strongly supports SB 1040, authorizing the Public Utilities Commission to consider the value of implementing advanced grid modernization ("smart grid") technology in the State. This measure will provide policy guidance to the Commission to help them weigh the often competing objectives in their deliberations. This measure is not a mandate to build the "smart grid;" it is direction to the Commission to consider its merits in their decision making. We believe enactment of SB 1040 will accelerate Hawaii's transition to a clean energy future.

Hawaii's 1890s style power grid is a barrier to the clean energy revolution. Currently, electricity flows in one direction: from the power plant to your home or business. This is much like television in the 1960s. When you turned on the TV, you watched whatever one of the three networks was broadcasting. You couldn't store the broadcast and you couldn't contribute your own content. That's roughly how our power grid operates today.

To take advantage of distributed and diversified sources like solar, wind, and wave, the grid has to become smarter and have the capacity to store electricity. It will resemble today's Internet— where distributed servers both send and receive packets of information—and less like yesterday's commercial television. Such a self-aware, robust smart grid will instantaneously adjust to shifts in wind strength or cloud cover over solar, balancing energy loads on the other side of the wire and drawing on stored energy when needed.

Senate Bill 1040 requires that the Commission consider the value of modernizing Hawaii's electricity grid to accommodate more clean energy sources. Blue Planet fully supports this policy.

Thank you for this opportunity to testify.