THE SENATE
TWENTY-SEVENTH LEGISLATURE, 2014
STATE OF HAWAII

S.B. NO. 2932

JAN 23 2014

# A BILL FOR AN ACT

RELATING TO ENERGY STORAGE.

**BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:**

SECTION 1. Since prior to the establishment of the Hawaii clean energy initiative in 2008 and Hawaii clean energy statutory mandates and policy objectives, the State has been committed to transform Hawaii's energy system into one that uses renewable energy and energy-efficiency technologies for a significant portion of its energy needs. This clean energy transformation will help to stabilize and strengthen Hawaii's economy by reducing its dependency on imported fuels and will help protect Hawaii's environment by greatly reducing greenhouse gas emissions.

Similar to the establishment of a renewable energy portfolio standard and an energy-efficiency portfolio standard, an energy storage portfolio standard sets a target of grid-connected energy storage to be achieved in incremental stages, as energy storage programs and technologies can make an increasing contribution to achieving clean energy goals and objectives and can maximize the benefits of clean energy for the people of Hawaii.

The purpose of this Act is to maximize cost-effective energy storage programs and technologies by establishing an energy storage portfolio standard to be achieved by electric utilities.

SECTION 2. Chapter 269, Hawaii Revised Statutes, is amended by adding a new section to be appropriately designated and to read as follows:

"**§269- Energy storage portfolio standards.** (a) On or before September 1, 2014, the public utilities commission shall open a proceeding to establish energy storage portfolio standards that will facilitate increased use of renewable energy and reductions of fossil fuel consumption in the State, while maintaining reliable and affordable electric service to customers. Nothing in this section shall be construed to prevent or delay the commission from reviewing and acting on electric utility requests to approve energy storage projects before or during the course of the proceeding.

(b) For the purpose of energy storage portfolio standards, energy storage shall support the electricity grid, may be centralized or distributed, and shall do one or more of the following when in the best interest of electric customers:



(1) Use mechanical, chemical, or thermal processes to store renewable energy that was generated by a grid-connected renewable energy production facility for use on the grid at a later time;

(2) Store thermal energy for direct use for heating or cooling at a later time in a manner that avoids the need to use electricity at that later time in a facility that is grid-connected; provided that this shall not include solar water heating;

(3) Use mechanical, chemical, or thermal processes to store energy generated from grid-connected resources for use at a later time or to provide ancillary services to the grid; or

(4) Notwithstanding anything in this section, for the purpose of energy storage portfolio standards, energy storage may include a system, with or without vehicles, primarily designed for use in transportation, but which is also used to store and transmit energy to and from the electric grid in a manner consistent with paragraphs (1), (2), and (3).

(c) The energy storage portfolio standards shall be designed to achieve the State's statutory clean energy goals and



increase or maintain electric system reliability and affordability; provided that the commission shall establish interim goals for energy storage to be achieved by 2017, 2022, and 2027, or alternative years as determined by the commission, and may also adjust the energy storage portfolio standards by rule or order to maximize the effectiveness of energy storage programs and technologies that are in the best interests of electric customers and to preserve the electric utilities' flexibility to utilize firm renewable energy as it becomes available.

(d) By rule or order, the public utilities commission shall establish penalties for electric utilities for failure to comply with the energy storage portfolio standards and may establish electric utility incentives for performance in achieving or exceeding energy storage portfolio standards.

(e) The public utilities commission shall evaluate the energy storage portfolio standards every five years, beginning two years after the first portfolio target year, and may revise the standards, based on the best information available at the time, to determine if the energy storage portfolio standards established by this section remain effective, desirable, and achievable.



The commission shall report its findings and revisions to the energy storage portfolio standards, based on its own studies and other information, to the legislature no later than twenty days before the convening of the regular session of 2017, and every five years thereafter."

SECTION 3. New statutory material is underscored.

SECTION 4. This Act shall take effect upon its approval.

INTRODUCED BY: _____

# S.B. NO. 2932

**Report Title:**
Energy Storage Portfolio Standards; Public Utilities Commission

**Description:**
Establishes energy storage portfolio standards that will facilitate increased use of renewable energy and reductions of fossil fuel consumption in Hawaii, while maintaining reliable and affordable electric service. Requires the public utilities commission to evaluate the energy storage portfolio standards every five years.

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