



## HAWAII RENEWABLE PORTFOLIO STANDARD SUMMARY

**A. SUMMARY:** In June 2004, Hawaii moved from a program based on aggressive goals and voluntary compliance to an enforceable program. The renewable portfolio standard (RPS) requires that 20 percent of net electricity sales come from renewable energy by 2020. The requirement applies to all electric utility companies selling electricity for consumption in the state. In addition to renewable energy technologies, energy efficiency, conservation, and combined heat and power are eligible to meet up to 50 percent of the targets. In June 2006, the Hawaii legislature made modifications to the RPS, including changes to the requirement ramp up, eligible technologies, definition of cost-effective resources, and making compliance with the targets enforceable with penalties.

### **B. AUTHORIZING LEGISLATION/REGULATION**

**1. Legislative/Regulatory Intent:** “The legislature finds that the key to achieving sustainability lies in economic diversification, export expansion, and import substitution. In the energy context, import substitution may be achieved by increasing the use and development of renewable energy resources found in Hawaii, such as wind, solar, ocean thermal, wave, and biomass resources. In addition, developing Hawaii’s renewable energy resources offers important job creation, environmental protection, and energy security benefits.”

“The purpose of this Act is to decrease Hawaii’s need to import large amounts of oil, and increase import substitution, economic efficiency, and productivity, by increasing the use and development of Hawaii’s renewable energy resources through a partnership between the State and the private sector.”

**2. Applicable Legislation/Regulation:**

6/04 – [Act 95, SLH 2004](#) (SB 2474 SD3 HD2)

6/06 – [Act 162, SLH 2006](#) (SB 3185 SD2 HD2 CD1), makes modifications to original RPS

Hawaii RPS codified as [Hawaii Revised Statutes §269-91 to 95](#)

**3. Date Enacted:** 6/2/2004

**4. Date Effective:** 6/2/2004

## C. RULEMAKING

### 1. Implementing/rulemaking Authority: Hawaii Public Utilities Commission (PUC)

### 2. Rulemaking Completed to Date:

7/05 – PUC releases Second concept paper on RPS regulations [“Proposals for Implementing Renewable Portfolio Standards in Hawaii”](#)

9/05 – PUC releases technical paper [“Planned Computer Simulations Facilitating the Analysis of Proposals for Implementing the Renewable Portfolio Standards Provision in Hawaii”](#)

1/07 – PUC issues [Order No. 23191](#), Instituting a proceeding to examine RPS

12/07 – PUC issues [Decision and Order No. 23912](#), adopting Framework for RPS

## D. TARGETS AND TIMETABLES

### 1. Brief Overview: The schedule applies to the net sales of each retailer. Each of Hawaii’s four electric utilities is required to increase their use of renewable energy from 10 percent in 2010 to 20 percent by 2020.

### 2. Schedule

Date	Percent of Net Sales from Renewable Energy
12/31/2010	10 %
12/31/2015	15 %
12/31/2020	20 %

### 3. Treatment of Existing Capacity: Generation from existing renewable energy resources—which accounted for about 8.2 percent of power sales statewide in 2003—can be counted in meeting the annual requirements.

### 4. Sunset Provisions: The determination of whether the annual requirements sunset after 2020 is not specified in statute or regulation. However, electric utilities are only required to file annual RPS reports through 2021.

## E. DEFINITION OF ELIGIBLE RESOURCES AND TECHNOLOGIES

### 1. Eligible Resources:

- Wind,
- Solar energy,
- Hydropower,
- Biogas, including landfill and sewage-based digester gas,
- Geothermal resources,
- Ocean water, currents and waves,
- Biomass, including biomass crops agricultural and animal residues and wastes, and municipal solid waste,

- Biofuels, or fuels derived from organic sources,
  - Hydrogen fuels derived from renewable energy sources,
  - Electrical energy generated using renewable energy as the source,
  - Electrical energy savings brought about by the use of renewable displacement or off-set technologies, including solar water heating, seawater air conditioning district cooling systems, solar air conditioning and customer-sited, grid connected renewable energy systems,
  - Electrical energy savings brought about by the use of energy efficiency technologies, including heat pump water heating, ice storage, ratepayer-funded energy efficiency programs, and use of rejected heat from co-generation and combined heat and power systems, excluding fossil-fueled qualifying facilities that sell electricity to electric utility companies, and central station power projects,
  - Renewable fuels co-fired with fossil fuels.
- 2. Special Incentives:** By statute, the PUC has the authority to “establish standards for each utility that prescribe what portion of the RPS shall be met by specific types of renewable electrical energy resources,” and to develop incentives for electric utilities to exceed their targets or meet them ahead of time. However, the PUC has opted not to do so thus far.
- 3. Exclusions:** Combined heat and power systems explicitly exclude fossil-fueled qualifying facilities that sell electricity to electric utility companies, and central station power projects.
- 4. Treatment of Self Generation:** Act 216 specifies that customer-sited, grid connected renewable energy systems are an eligible renewable electrical energy sources.

In a separate section of Act 272, SLH 2001 and modified by Act 99 SLH 2004, the legislature provided that each utility shall develop a standard contract to allow for net metering from its customers, buying available renewable energy until the total equals 0.5 percent of the systems peak demand. Accounting shall be monthly and such customer shall not receive any special additional charges.

- 5. Rules Governing Location of Generating Facilities:** The geographic eligibility of renewable energy facilities is not specified in statute or rule. However, with an isolated transmission system and no renewable energy credit trading system, only in-state generation would appear to be eligible.
- 6. Eligibility of Green Pricing:** Not specified in statute or rule.

## F. COVERED UTILITIES

- 1. Covered utilities:** Each electric utility company that sells electricity for consumption in the state is required to meet the RPS.

- 2. Share of state sales/capacity/delivered power:** The legislation requires all four utilities in the state to meet the RPS; therefore, 100 percent of total state electric sales are covered.
- 3. Apportionment of obligation among utilities:** Each utility must meet the annual requirements by insuring that the appropriate percentage of their net retail sales derives from eligible resources. An electric utility company and its electric utility affiliates may aggregate their renewable portfolios in order to achieve the annual requirement. (i.e. the Hawaiian Electric Company affiliates—Hawaiian Electric, Maui Electric, and Hawaii Electric Light Company—may add together their renewable energy generation to meet the requirement. Kauai Island Utility Cooperative must meet the standard on its own.)
- 4. Exemptions by customer class:** None

#### **G. COST AND CONTRACT PROVISIONS**

- 1. Cost Cap for Utilities:** The PUC shall determine if an electric utility company is unable to meet the RPS dues to reason beyond the reasonable control of an electric utility, including “inability to acquire sufficient renewable electrical energy due to the lapsing of tax credits related to renewable energy;” and “inability to acquire sufficient cost effective renewable electrical energy.” According to the RPS legislation, “Cost-effective” means the “ability to produce or purchase electric energy or firm capacity, or both, from renewable energy resources at or below avoided costs consistent with the methodology set by the PUC in accordance with section 269-27.2.” If the determination is made, the PUC may provide the utility with a waiver from a penalty.
- 2. Cost Cap for Customer:** None specified
- 3. Cost Recovery Mechanism:** Recovery of cost is through customer rates, as authorized by the PUC. Per statute, the PUC is also instructed to ensure that the electric utility companies' opportunity to earn a fair rate of return is not diminished.
- 4. Supply Contract Requirements:** None specified.
- 5. Special Funds:** None

## **H. COMPLIANCE AND ENFORCEMENT**

- 1. Certification, Tracking and Trading Mechanisms:** The PUC is responsible for tracking and ensuring compliance with the RPS. Compliance with the RPS is achieved through the generation or purchase of electric power from a renewable energy facility, or electrical energy savings brought about by the use of renewable displacement or off-set technologies, or energy efficiency technologies. Compliance is verified via annual reports (and, if necessary, compliance plans) submitted by electric utilities to the PUC. The use of unbundled renewable energy credits is not permitted.
- 2. Flexibility Mechanisms:** A utility and its affiliates may aggregate their renewable portfolios to achieve the annual requirements.
- 3. Penalties:** If the PUC determines that an electric utility failed to meet the RPS, after a hearing, the utility shall be subject to penalties to be established at the discretion of the PUC. The PUC also has the power to waive a financial penalty if it determines that an electric utility cannot meet the annual requirements to due reasons beyond the utility's reasonable control.
- 4. Treatment of Emissions Allowance or reduction credits:** Not applicable as a renewable energy credits trading system does not currently exist.
- 5. Escape Clauses:** The PUC has the authority to waive penalties if it determines that an electric utility cannot meet the annual requirements to due reasons beyond the reasonable control of the electric utility. Events or circumstances that are outside of an electric utility's reasonable control include: a. weather-related damage; b. natural disasters, c. mechanical or resource failures; d. failure of renewable electrical producers to meet contractual obligations to the electric utility; e. labor strikes or lockouts; f. actions of government authorities that adversely affect the generation, transmission, or distribution of renewable electrical energy under contract to an electric utility; g. inability to acquire sufficient renewable electrical energy due to lapsing of tax credits related to renewable energy development; h. inability to obtain permits or land-use approvals for renewable electrical energy projects; i. inability to acquire sufficient cost-effective renewable electrical energy; j. substantial limitations, restrictions, or prohibitions on utility renewable electrical energy projects; and k. other events and circumstances of a similar nature.

## **I. ADMINISTRATION**

### **1. Administering Entities and Contact Information:**

Hawaii Public Utilities Commission  
465 South King Street, Room 103  
Honolulu, Hawaii 96813  
Phone: (808) 586-2020  
Web site: <http://www.hawaii.gov/budget/puc/>

## **J. REPORTING REQUIREMENTS and PROGRAM STATUS**

- 1. Reporting Requirements for Retailers:** Beginning June 30, 2008, and ending in 2021, each electric utility shall annual file an annual RPS report with the PUC. Each annual report must include the utility's total renewable energy generation for the reporting year, and whether the utility expects to meet, exceed, or fall short of the RPS. At the PUC's discretion, an electric utility may also be required to file and obtain PUC approval of a compliance plan, which is intended to promote communication, transparency, cooperation, and accountability with respect to meeting the RPS.
- 2. Reporting Requirements for Administrative Entities:** The legislation requires the PUC, beginning in 2009, to conduct a peer-reviewed study every five years and to report to the legislature and recommend whether or not to revise the RPS. These studies shall include "findings and recommendations regarding implementation costs on utilities and consumers, utility system reliability and stability, costs and availability of appropriate renewable energy resources and technologies, permitting approvals, effects on the economy, balance of trade, culture, community, environment, land and water, climate change policies, demographics, and other factors deemed appropriate by the PUC."
- 3. Cost Information:** The first compliance year of the RPS is not until 2010, so no actual cost data is available.