JOSEPH P. VIOLA
Vice President
Regulatory Affairs

February 26, 2016



The Honorable Chairman and Members
of the Hawai'i Public Utilities Commission
Kekuanaoa Building, 1st Floor
465 South King Street
Honolulu, Hawai'i 96813

Dear Commissioners:

Subject: Docket No. 2007-0008
Renewable Portfolio Standards Law Examination

In accordance with Decision and Order No. 23912 and the Framework for Renewable Portfolio Standards, issued December 20, 2007, attached is the Renewable Portfolio Standard Status Report for the year ended December 31, 2015 for Hawaiian Electric Company, Inc., Hawai'i Electric Light Company, Inc. and Maui Electric Company, Limited.

Very truly yours,

Attachment

c: Division of Consumer Advocacy
R.J Hee/T. Blume
H. Curtis
W.S. Bollmeier II

# 2015 Renewable Portfolio Standard Status Report

**Hawaiian Electric Company, Inc.**
**Hawai'i Electric Light Company, Inc.**
**Maui Electric Company, Limited**

**For the Year Ended December 31, 2015**

This report was prepared pursuant to the Framework for Renewable Portfolio Standards, which was adopted by the Hawaii Public Utilities Commission ("Commission") in Docket No. 2007-0008.[1]

Hawaiian Electric Company and its subsidiaries, Hawai'i Electric Light Company and Maui Electric Company (collectively, the "Hawaiian Electric Companies"), have achieved a consolidated Renewable Portfolio Standard ("RPS") of 23.2% in 2015. Unlike previous filings, and in accordance with present RPS guidelines, this RPS does not include the electrical energy savings from energy efficiency and solar water heating technologies. The 23.2% RPS was achieved in 2015 through the use of various renewable energy sources (biomass, geothermal, photovoltaic, hydro, wind, and biofuels) and customer-sited, grid-connected technologies (primarily photovoltaic systems).

On June 8, 2015, Act 097 Relating to Renewable Standards was signed into law. Act 097 increased the 2020 RPS to 30%, kept the 2030 RPS at 40%, added a 2040 RPS of 70%, and added a 2045 RPS of 100%. From January 1, 2015, the electrical energy savings from energy efficiency and solar water heating technologies do not count towards the RPS.[2]

The Hawaiian Electric Companies continued to increase their renewable energy portfolio. In calendar year 2015, new Net Energy Metering installations totaled 75.7 MW, new Standard Interconnection Agreement installations totaled 21.2 MW, and new Feed-In Tariff installations totaled 5.6 MW for the Hawaiian Electric Companies. The total amount of electrical energy generated using renewable energy sources increased by 39,153 megawatt-hours in 2015, a 2.8% increase compared to the previous year. The total amount of electrical energy generated from Customer-Sited, Grid-Connected sources increased by an estimated 128,060 megawatt-hours in 2015, a 24.9% increase compared to the previous year.

Integrating additional amounts of renewable generation must be undertaken in a way that benefits Hawaii's economy and all electric customers, helps maintain affordability of electric rates, and ensures the safety and reliability of service to customers. The Hawaiian Electric Companies are in the process of updating the Power Supply Improvement Plans ("PSIPs") that were filed on August 26, 2014[3] to address the many significant developments that have transpired since the filing. The

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[1] The Framework for Renewable Portfolio Standards was adopted by Decision and Order No. 23912, issued December 20, 2007, and revised by the Commission on December 19, 2008 (Order Relating to RPS Penalties).

[2] On April 25, 2011, Act 010 (Session Laws of Hawai'i 2011) Relating to Renewable Portfolio Standards was signed into law. Act 010 amended the definition of "renewable electrical energy" to include, beginning January 1, 2015, customer-sited, grid-connected renewable energy generation.

[3] On August 26, 2014, PSIPs were filed for Hawaiian Electric, Hawai'i Electric Light, and Maui Electric in Docket Nos. 2011-0206, 2012-0212, and 2011-0092, respectively. On September 12, 2014, the Commission transferred the three PSIPs to Docket No. 2014-0183 by Order Nos. 32291, 32290, and 32289. The Commission initiated Docket No. 2014-0183 to review the PSIPs by Order No. 32257, issued August 7, 2014. On November 4, 2015, the Commission issued Order No. 33320 in Docket No. 2014-0183

updated PSIPs will define a vision for transforming the electric system to meet customer needs, implement the State of Hawaii's energy policy goals, and secure a clean and affordable energy future which will achieve 100% RPS. The Hawaiian Electric Companies look forward to working together with all stakeholders to help Hawai'i achieve these important objectives.

for the Companies to file supplemented, amended, and updated PSIPs on or before April 1, 2016. On February 16, 2016, the Companies submitted the PSIP Update Interim Status Report per Order No. 33320.

# 2015 Renewable Portfolio Standard Status Report

**Hawaiian Electric Company, Inc. ("Hawaiian Electric")**
**Hawai'i Electric Light Company, Inc. ("Hawai'i Electric Light")**
**Maui Electric Company, Limited ("Maui Electric")**

**For the Year Ended December 31, 2015**
*(In Net Megawatt Hours)*

| | 2015 | | | | 2014 |
|---|---|---|---|---|---|
| | Hawaiian Electric | Hawai'i Electric Light | Maui Electric | TOTAL | TOTAL |
| **Electrical Energy Generated Using Renewable Energy Sources** | | | | | |
| Biomass (including municipal solid waste) | 385,846 | | 30,870 | **416,716** | **433,164** |
| Geothermal | | 230,495 | | **230,495** | **255,027** |
| Photovoltaic and Solar Thermal[1] | 40,750 | 2,557 | 7,904 | **51,212** | **44,255** |
| Hydro[1] | | 63,275 | 9,823 | **73,098** | **51,155** |
| Wind[1] | 216,197 | 132,293 | 264,291 | **612,782** | **577,868** |
| Biofuels | 52,424 | | 988 | **53,412** | **37,093** |
| **Subtotal** | 695,218 | 428,620 | 313,877 | **1,437,715** | **1,398,561** |
| **Electrical Energy Savings Using Renewable Displacement Technologies** | | | | | |
| Customer-Sited, Grid-Connected[2] | 464,412 | 89,691 | 88,956 | **643,060** | **514,999** |
| **Subtotal** | 464,412 | 89,691 | 88,956 | **643,060** | **514,999** |
| **TOTAL** | 1,159,630 | 518,311 | 402,833 | **2,080,775** | 1,913,561 |
| **TOTAL SALES** | 6,754,083 | 1,064,785 | 1,137,630 | **8,956,498** | **8,976,242** |
| **RPS PERCENTAGE (Not Counting Energy Efficiency and Solar Water Heating)** | **17.2%** | **48.7%** | **35.4%** | **23.2%** | **21.3%** |

**[1] Renewable electrical energy generated is based on recorded data from FIT contracts and Independent Power Producers with PPAs.**

**[2] Savings from photovoltaic, wind, and hydro systems are based on known system installations for 2015 including Net Energy Metering ("NEM") installations, non-NEM systems, and Smart Power for Schools (formally Sun Power for Schools) installations. Recorded generation data was used when available. For systems where recorded data was not available, estimates were made based on reasonable performance assumptions for typical photovoltaic systems.**