



JOSEPH P. VIOLA  
Vice President  
Regulatory Affairs

March 7, 2017

FILED

2017 MAR -7 P 3:49

PUBLIC UTILITIES  
COMMISSION

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, 2016 for Hawaiian Electric Company, Inc., Hawai'i Electric Light Company, Inc. and Maui Electric Company, Limited.

Sincerely,

Attachment

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

# 2016 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, 2016**

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.<sup>1</sup>

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 25.8% in 2016. In accordance with present RPS guidelines, this RPS does not include the electrical energy savings from energy efficiency and solar water heating technologies. The 25.8% RPS was achieved in 2016 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.<sup>2</sup>

The Hawaiian Electric Companies continued to increase their renewable energy portfolio. In calendar year 2016, new Net Energy Metering installations totaled 65.9 MW, new Standard Interconnection Agreement installations totaled 13.8 MW, new Feed-In Tariff installations totaled 10.6 MW, new Customer Self Supply installations totaled .03 MW and new Customer Grid Supply installations totaled 8.7 MW for the Hawaiian Electric Companies. The total amount of electrical energy generated using renewable energy sources, including customer-sited, grid-connected technologies, increased by 202,345 megawatt-hours in 2016, a 9.7% 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

---

<sup>1</sup> 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).

<sup>2</sup> 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.

Hawaiian Electric Companies submitted the updated Power Supply Improvement Plan (PSIP) on December 23, 2016.<sup>3</sup> The update outlines a plan with specific near-term actions to accelerate the achievement of Hawai'i's 100 percent Renewable Portfolio Standards (RPS) by 2045. The Hawaiian Electric Companies look forward to working together with all stakeholders to help Hawai'i achieve these important objectives.

---

<sup>3</sup> On December 23, 2016 the Companies filed the PSIP Update Report: December 2016 in Docket No. 2014-0183 pursuant to Commission's Order No. 33975, as modified by Order No. 34103.

**2016 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, 2016**  
*(In Net Megawatt Hours)*

	2016				2015
	Hawaiian Electric	Hawai‘i Electric Light	Maui Electric	TOTAL	TOTAL
<b>Electrical Energy Generated Using Renewable Energy Sources</b>					
Biomass (including municipal solid waste) <sup>1</sup>	418,735		4,383	<b>423,118</b>	<b>416,716</b>
Geothermal <sup>1</sup>		260,116		<b>260,116</b>	<b>230,495</b>
Photovoltaic and Solar Thermal <sup>1</sup>	53,723	4,071	9,078	<b>66,872</b>	<b>51,212</b>
Hydro <sup>1</sup>		54,108	968	<b>55,076</b>	<b>73,098</b>
Wind <sup>1</sup>	233,531	145,691	277,456	<b>656,678</b>	<b>612,782</b>
Biofuels	37,491		984	<b>38,475</b>	<b>53,412</b>
Customer-Sited, Grid-Connected <sup>2</sup>	548,562	114,784	119,438	<b>782,785</b>	<b>643,060</b>
<b>TOTAL</b>	<b>1,292,042</b>	<b>578,770</b>	<b>412,308</b>	<b>2,283,120</b>	<b>2,080,775</b>
<b>TOTAL SALES</b>	<b>6,660,195</b>	<b>1,067,398</b>	<b>1,117,742</b>	<b>8,845,336</b>	<b>8,956,498</b>
<b>RPS PERCENTAGE</b>					
(Not Counting Energy Efficiency and Solar Water Heating)	<b>19.4%</b>	<b>54.2%</b>	<b>36.9%</b>	<b>25.8%</b>	<b>23.2%</b>

<sup>1</sup> Renewable electrical energy generated is based on recorded data from FIT contracts and Independent Power Producers with PPAs.

<sup>2</sup> Renewable electrical energy generated by customer-sited, grid-connected technologies is based on known system installations for 2016 including Net Energy Metering (“NEM”) installations, non-NEM systems, and 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.