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JOSEPH P. VIOLA Vice President Regulatory Affairs

March 7, 2017

2011 MAR -7 P 3: 48

PUBLIC UNLITIES 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. Hawaii 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.

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

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

<sup>&</sup>lt;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.