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PUBLIC UTILITIES
COMMISSION

The Honorable Chair and Members of the
Hawai'i Public Utilities Commission
465 South King Street
Kekuanao'a Building, First Floor
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, 2019 for Hawaiian Electric.¹

Sincerely,

Kevin M. Katsura
Director
Regulatory Non-Rates Proceedings

Attachment

c: Division of Consumer Advocacy
R.J Hee/T. Blume
H. Curtis

COMMISSION
PUBLIC UTILITIES

¹ "Hawaiian Electric" or "Company" refers to Hawaiian Electric Company, Inc., Hawai'i Electric Light Company, Inc., and Maui Electric Company, Limited. On December 20, 2019, the State of Hawai'i Department of Commerce and Consumer Affairs ("DCCA") approved Hawaiian Electric Company, Inc., Hawaii Electric Light Company, Inc. and Maui Electric Company, Limited's application to do business under the trade name "Hawaiian Electric" for the period from December 20, 2019 to December 19, 2024. See Certificate of Registration No. 4235929, filed December 20, 2019 in the Business Registration Division of the DCCA.

2019 Renewable Portfolio Standard Status Report

Hawaiian Electric For the Year Ended December 31, 2019

This report was prepared pursuant to the Framework for Renewable Portfolio Standards, which was adopted by the Hawai'i Public Utilities Commission ("Commission") in Docket No. 2007-0008.¹

Pursuant to Hawai'i Revised Statutes § 269-92, the Renewable Portfolio Standard ("RPS") requirement, as a percentage of net electricity sales, for year 2020 is 30%, 2030 is 40%, 2040 is 70% and 2045 is 100%.²

Hawaiian Electric has achieved a consolidated RPS of 28.4% in 2019. In accordance with present RPS guidelines, this RPS does not include the electrical energy savings from energy efficiency and solar water heating technologies.³ The 28.4% RPS was achieved in 2019 through the use of diverse renewable energy resources (biomass, photovoltaic, hydro, wind, and biofuels) and customer-sited, grid-connected technologies (primarily photovoltaic systems). There were no contributions to the RPS from geothermal in 2019 as the Puna Geothermal Venture plant on Hawai'i Island remains offline. If the Puna Geothermal Venture plant were not affected by the 2018 lava event and was in normal operation throughout 2019, it would have added an estimated 3.7 percentage points to Hawaiian Electric's 2019 RPS.

Hawaiian Electric continues to increase its renewable energy portfolio. In calendar year 2019, new Net Energy Metering installations totaled 2.1 MW, new Customer Self Supply installations totaled 4.4 MW, new Customer Grid Supply installations totaled 9.1 MW, new Customer Grid Supply Plus installations totaled 6.0 MW, new Smart Export installations totaled 4.7 MW, new Net Energy Metering Plus installations totaled 1.3 MW, new Standard Interconnection Agreement installations totaled 16.6 MW, and new Feed-In Tariff installations totaled 1.5 MW. On O'ahu, four grid-scale PV projects, the 49 MW Kawailoa Solar, the 14.7 MW Lanikuhana Solar, the 45.9 MW Waipio PV, and the 20 MW West Loch Solar, entered into operation on 11/20/2019, 9/19/2019, 9/19/2019, and 11/25/2019, respectively. On Hawai'i Island, the Hamakua Energy Partners facility began using biodiesel produced locally by Pacific Biodiesel Technologies.

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 June 8, 2015, Act 097 Relating to Renewable Standards was signed into law. Act 097 increased the 2020 RPS requirement to 30%, added a 2040 RPS requirement of 70%, and added a 2045 RPS requirement of 100%.

³ On April 25, 2011, Act 010 Relating to Renewable Portfolio Standards was signed into law. Act 010 provided that, as of January 1, 2015, electrical energy savings from energy efficiency and solar water heating technologies do not count towards calculating RPS. It also amended the definition of "renewable electrical energy" to include, beginning January 1, 2015, customer-sited, grid-connected renewable energy generation.

Electrical energy generated using renewable energy resources, including customer-sited, grid-connected technologies, increased by 156,064 megawatt hours in 2019, a 6.7% increase compared to the previous year.



2019 Renewable Portfolio Standard Status Report Hawaiian Electric

For the Year Ended December 31, 2019
(In Net Megawatt Hours)

	2019				2018
	O'ahu	Hawai'i	Maui County	TOTAL	TOTAL
Electrical Energy Generated Using Renewable Energy Sources					
Biomass (including municipal solid waste) ¹	414,357			414,357	389,730
Geothermal ^{1,3}				0	110,089
Photovoltaic and Solar Thermal ¹	194,661	4,224	19,172	218,058	149,148
Hydro ¹		35,414		35,414	62,734
Wind ¹	148,296	142,675	236,916	527,887	602,007
Biofuels	52,645	6,409	942	59,996	62,034
Customer-Sited, Grid-Connected ²	845,669	175,956	202,954	1,224,579	948,484
TOTAL	1,655,627	364,678	459,985	2,480,290	2,324,226
TOTAL SALES	6,563,104	1,049,542	1,127,338	8,739,984	8,688,772
RPS PERCENTAGE					
(Not Counting Energy Efficiency and Solar Water Heating)	25.2%	34.7%	40.8%	28.4%	26.7%

¹ Renewable electrical energy generation is based on recorded data from Feed-In Tariff contracts, Independent Power Producers that have Power Purchase Agreements with Hawaiian Electric, and Hawaiian Electric-owned grid-scale projects such as West Loch PV.

² Renewable electrical energy generation from customer-sited, grid-connected technologies is based on known system installations for 2019 including Net Energy Metering ("NEM") installations and non-NEM systems. 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 systems.

³ Electrical energy generated using geothermal in 2018 was recorded from January 2018 through May 2018. Since June 2018, no geothermal generation has been recorded as the Puna Geothermal Venture plant remains offline due to the lava event in Leilani Estates.