

FILE

2011 MAR 29 P 3:51

PUBLIC UTILITIES
COMMISSION

March 29, 2011

HAND DELIVER

The Honorable Chair and Members of the
Hawaii Public Utilities Commission
465 South King Street
Kekuanaoa Building, Room 103
Honolulu, HI 96813
Attention: Kaiulani Kidani Shinsato, Esq.

Re: Docket No. 2007-0008 – In the Matter of Public Utilities
Commission Instituting a Proceeding to Examine Hawaii's
Renewable Portfolio Standards Law, Hawaii Revised Statutes
("HRS") §§ 269-91 – 269-95, as Amended by Act 162, Session
Laws of Hawaii 2006: Kauai Island Utility Cooperative's ("KIUC")
2010 Annual Renewable Portfolio Standards ("RPS") Status Report

Dear Commissioners and Commission Staff:

Please find enclosed KIUC's Annual RPS Status Report for the year ending
December 31, 2010 ("2010 RPS Report").

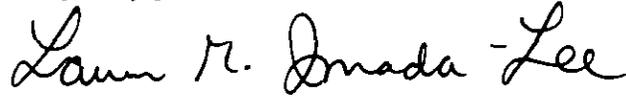
As shown in the attached 2010 RPS Report, renewable energy resources
and energy savings supplied 12.39% of KIUC's net electricity sales during the
2010 calendar year. This exceeds the year 2010 RPS goal of 10.0% to be
achieved by each electric utility as established by HRS § 269-92(a)(1), as
amended.

The attached 2010 RPS Report also includes a breakdown of the
renewable energy resources on Kauai comprising the 12.39% RPS for 2010 and
the RPS reached in 2004, 2005, 2006, 2007, 2008, and 2009. Also included in
said report is a discussion of KIUC's commitment to continue to increase the
growth of renewable energy and energy savings on Kauai.

The Honorable Chair and Members of the
Hawaii Public Utilities Commission
March 29, 2011
Page 2

We thank you for your consideration of this matter. If you should have any questions, please do not hesitate to contact the undersigned.

Very truly yours,



Kent D. Morihara
Kris N. Nakagawa
Lauren M. Imada-Lee

Morihara Lau & Fong LLP
Attorneys for Kauai Island Utility
Cooperative

Enclosure

cc: Consumer Advocate
Ms. Darcy Endo-Omoto
Mr. Dean Matsuura
Mr. Jay Ignacio
Mr. Edward Reinhardt
Thomas W. Williams, Jr., Esq.
Craig I. Nakanishi, Esq.
Mr. David Bissell
Mr. Timothy Blume
Mr. Warren S. Bollmeier, II
Mr. Henry Q. Curtis

**Kauai Island Utility Cooperative
Renewable Portfolio Standards (RPS) Status Report
Year Ending December 31, 2010**

KIUC RPS Results for 2010

Kauai Island Utility Cooperative (KIUC) achieved a Renewable Portfolio Standard (RPS) percentage of 12.39% for calendar year 2010. This essentially exceeds the State of Hawaii's 2010 RPS requirement of meeting 10% of its net electricity sales with electrical energy generated and/or displaced by renewable resources.¹ In addition to meeting the 2010 required RPS percentage of net electricity sales, KIUC has also met the requirement that at least 50% of its RPS be met by electrical energy generated using renewable energy as the source.²

KIUC met the electrical energy needs of its customers with a combination of KIUC-owned fossil fueled generation, KIUC-owned renewable generation, and non-firm (100% renewable) power purchases.³ In addition to this generated electricity, Solar Water Heating (SWH), Photovoltaic (PV) systems, and Demand Side Management (DSM) measures also supplied some of KIUC's consumers' energy needs, while at the same time, displacing fossil-fuel generated power. The portion of the RPS met by electrical energy generated using renewable energy as the source was 33,920 megawatt-hours (MWh), which is greater than 50% of the total 2010 10% RPS requirement of 45,727 MWh.⁴ Exhibit A illustrates how KIUC met the energy needs of its approximately 35,000 members.

¹ Hawaii Revised Statutes (HRS) § 269-92(a)(1).

² HRS § 269-92(b).

³ In 2010, KIUC had four non-firm power purchase contracts to purchase excess electrical power from (i) Gay & Robinson (hydro), (ii) Kauai Coffee (hydro), (iii) Kekaha Agriculture Association (hydro), and (iv) Green Energy Hydro, LLC (hydro). Gay & Robinson shut down its sugar operation in 2009 and as such, did not generate any biomass-fueled energy in 2010, and is not anticipated to generate any biomass-fueled energy in 2011.

⁴ 45,727 MWh is 10% of KIUC's annual adjusted MWh sales of 457,274 (which is 434,533 MWh of actual sales, adjusted for displacement technologies contribution of 22,741 MWh to the RPS).

KIUC's 2010 RPS Results

In 2010, KIUC achieved a renewable portfolio percentage of 12.39%, which is 0.85% less than KIUC's 2009 renewable portfolio percentage of 13.24%⁵. This is due to the following:

1. Reduced purchased power from Kauai Coffee; and
2. Retirement of past DSM measures reduced the annual benefit and resulting contribution to the renewable portfolio percentage.

KIUC Future RPS Activities

While KIUC exceeded the 2010 RPS goal of 10%, KIUC is committed to increasing the growth of renewable energy and energy savings. To accomplish this, KIUC is undertaking the following:

1. On August 3, 2010, KIUC signed a Purchase Power Agreement (PPA) for 1 MW of photovoltaic (PV) generated electricity from Kapaa Solar LLC. The Commission approved this PPA on March 3, 2011. KIUC estimates that the RPS contribution from the Kapaa Solar facility will be approximately an additional 0.35% for 2011.
2. On October 7, 2010, KIUC signed a PPA for 3 MWs of PV generated electricity from Poipu Solar, LLC. KIUC filed its application seeking Commission approval of this PPA on November 8, 2010, and the docket is currently pending before the Commission. KIUC estimates that the RPS contribution from the Poipu Solar facility will be approximately an additional 1.06% for 2011.
3. On November 24, 2010, KIUC finalized a ten year biodiesel Purchase Agreement with Kauai Farm Fuels, which produces biodiesel from waste vegetable oils. KIUC filed its application seeking Commission approval of this Purchase Agreement on December 9, 2010, and the docket is currently pending before the Commission.
4. On January 10, 2011, KIUC announced of a 1.5 MW battery energy storage system anticipated to be operational in 2011. This battery will assist with the integration of the above-mentioned Poipu Solar PV facility, assist with the continued member build out of PV systems, and provide additional system support.

⁵ KIUC recently discovered an error in its calculation of its 2004 through 2009 RPS percentages (i.e., KIUC had unintentionally "double-counted" a certain amount of the contribution from solar hot water heating). The corrected 2004 through 2009 RPS percentages are as noted in Exhibit A.

5. On January 12, 2011, KIUC announced that it signed a preliminary agreement, with Free Flow Power Corporation, to explore the development of hydroelectric energy projects on Kauai.
6. On January 25, 2011, KIUC signed a PPA with Green Energy Team LLC (Green Energy), pursuant to which Green Energy's proposed biomass-fueled electric generating facility will provide KIUC's electric system with an expected annual net electrical output of 6.7 MW on a 24-hours-per-day, 7-days-per-week basis. KIUC filed its application seeking Commission approval of this PPA on February 15, 2011, and the docket is currently pending before the Commission.
7. KIUC completed a cultural study and collected water flow data for its Upper Waiahi hydro plant. KIUC is now working with Free Flow Power to determine the feasibility of upgrading KIUC's Upper Waiahi hydro plant and other existing hydro plants.

KIUC is also pursuing a long-term water lease from the Department of Land and Natural Resources. With the certainty of resources that this lease can provide, KIUC anticipates making additional capital improvements to the units and water delivery system, which would increase the annual energy produced from this renewable resource.

8. KIUC is having discussions with other parties to bring additional utility scale PV projects online in 2012.
9. KIUC is actively exchanging information with the National Renewable Energy Laboratory (NREL) and meeting with various developers of renewable energy projects. Technologies discussed include, without limitation, wave energy, run-of-river hydro, municipal solid waste, PV, concentrating solar, combined heat and power, and biomass.
10. In 2011, KIUC and the Navy agreed to enter into a Utility Services Agreement which may help facilitate the Kekaha landfill gas project and other energy efficiency opportunities.
11. KIUC has begun an early stage evaluation of an opportunity for integrating a biomass boiler into existing infrastructure at KIUC's Port Allen Generation Station.
12. In addition to large utility-scale renewable energy projects, KIUC also recognizes the importance of small-scale PV, SWH, and DSM systems in meeting future RPS goals. To this end, KIUC is also continuing its residential energy efficiency programs, commercial retrofit program, and its SWH programs.

Conclusion

KIUC achieved a RPS percentage of 12.39% in 2010, which surpasses (by 2.39%) the 10% by 2010 RPS requirement. KIUC recognizes the benefits that renewable energy and energy savings provide to the visitors, residents, and commercial sectors of Kauai, as well as the positive impact on global environmental, societal, and economic issues. As such, KIUC will continue to evaluate, promote, and incorporate renewable energy and energy savings to meet the needs of its members, the Kauai community, and the State.

Exhibit A

	2004	2005	2006	2007	2008	2009	2010
	MWh						
1. Net Fossil Generation	412,793	413,355	419,451	441,154	417,986	399,325	400,307
2. Net Renewable Generation							
KIUC Hydro	1,664	4,232	4,561	928	7,968	7,454	7,874
Gay & Robinson	2,844	3,501	3,921	2,845	2,385	3,548	3,415
Kauai Coffee	29,199	28,292	25,613	20,612	22,149	21,597	18,113
KAA	2,070	3,468	3,024	2,079	3,106	4,111	4,330
Green Energy Hydro						5	187
Total Renewable Generation	<u>35,796</u>	<u>37,491</u>	<u>37,120</u>	<u>26,462</u>	<u>35,607</u>	<u>36,714</u>	<u>33,920</u>
						436,039	434,227
3. Conserved Energy (Displaced Sales)							
Customer Renewable Generation	90	130	202	524	3,924	5,023	5,830
Demand Side Management (DSM)	19,037	20,855	21,349	21,361	19,233	19,217	18,911
Total Conserved Energy	<u>19,127</u>	<u>20,985</u>	<u>21,551</u>	<u>21,885</u>	<u>23,157</u>	<u>24,240</u>	<u>22,741</u>
4 Total Sales							
Direct KIUC Sales	448,923	448,811	452,080	466,896	453,791	436,273	434,533
Displaced Sales due to SWH, PV, DSM	19,127	20,985	21,551	21,885	23,157	24,240	22,741
Total Sales	<u>468,050</u>	<u>469,796</u>	<u>473,631</u>	<u>488,781</u>	<u>476,948</u>	<u>460,513</u>	<u>457,274</u>
5. Renewable Generation + Conserved Energy	54,923	58,476	58,671	48,347	58,764	60,954	56,661
Percent of Total Sales supplied by Renewables and Conserved Energy	11.76%	12.45%	12.39%	9.89%	12.32%	13.24%	12.39%