Kaua`i Island Utility Cooperative
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PUBLIC UTILITIES COMMISSION

June 09, 2015

The Honorable Chair and Members of the
Hawaii Public Utilities Commission
465 South King Street
Kekuanaoa Building, Room 103
Honolulu, HI 96813

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's") 2014 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, 2014 ("2014 RPS Report").

As shown in the attached 2014 RPS Report, renewable energy resources and energy savings supplied 22.46% of KIUC's net electricity sales during the 2014 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 2014 RPS Report also includes a breakdown of the renewable energy resources on Kauai comprising the 22.46% RPS for 2014 and the RPS reached in 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012 and 2013. 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.

We thank you for your consideration of this matter. If you should have any questions concerning this report, please call me at (808) 246-8208.

Very truly yours,

Michael V. Yamane, P.E.
Chief of Operations

Enclosure

cc: Kent Morihara
Consumer Advocate (3)
Mr. Joseph Viola
Mr. Dean Matsuura
Mr. Jay Ignacio
Ms. Sharon Suzuki
Thomas W. Williams, Jr., Esq.
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Mr. Henry Q. Curtis

Kauai Island Utility Cooperative
Renewable Portfolio Standards (RPS) Status Report
Year Ending December 31, 2014

KIUC RPS Results for 2014

Kauai Island Utility Cooperative (KIUC or Company) achieved a Renewable Portfolio Standard (RPS) percentage of 22.46% for calendar year 2014. This exceeds the State of Hawaii's 2010 RPS requirement of meeting 10% of KIUC's 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 (13.58% of the 22.46% total).[2]

KIUC met the electrical energy needs of its customers with a combination of Company-owned fossil fueled generation, Company-owned renewable generation, and non-firm (100% renewable) power purchases.[3] In addition to this generated electricity, Photovoltaic (PV) systems and Demand Side Management (DSM) measures, including Solar Water Heating (SWH), also supplied some of KIUC 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 58,392 megawatt-hours, which is greater than 50% of the total 2014 10% RPS requirement of 42,992 megawatt-hours (MWh).[4] Exhibit A, attached hereto, illustrates how KIUC met the energy needs of its approximately 36,000 accounts.

KIUC's 2014 RPS percentage of 22.46% is 3.5% more than KIUC's 2013 RPS percentage of 18.96%. This is due to the following:

1. Production from the 12 MWac KRS2 Koloa Solar project which began operation in July 2014.
2. Significant addition of customer-sited solar systems.
3. Continued success integrating DSM technologies.

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

[2] HRS § 269-92(b).

[3] KIUC has ten non-firm power purchase contracts to purchase electrical power from Gay & Robinson (G&R) (hydro), Kauai Coffee (hydro), Kekaha Agriculture Association (KAA) (hydro), Green Energy Team (hydro), Green Energy Team (biomass), Pioneer (solar), Kapaa Solar (solar), McBryde Resources (solar), MP2 Kaneshiro (solar), and KRS2 Koloa Solar (solar). G&R shutdown its sugar operation in 2009 and as such has not generated any biomass-fueled energy since then.

[4] 42,992 MWh is 10% of KIUC's annual sales of 429,924 MWh.

KIUC Future RPS Activities

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

1. On January 25, 2011, KIUC signed a PPA for the purchase of electricity generated from the 6.7 MW Green Energy Biomass-To-Energy facility. The Commission approved the PPA on October 31, 2011. The project began construction in early 2013 and first produced energy in April 2015. It is expected to begin commercial operation in June 2015. This facility will provide approximately 10-13% of KIUC's current annual energy requirements.

2. On November 29, 2012, the Commission approved KIUC's application to develop a 12 MW PV facility to be located in Anahola. KIUC began construction of this facility in June 2014, and expects to begin producing energy from this facility in July 2015. This facility will provide approximately 5-6% of KIUC's current annual energy requirements.

3. KIUC continues to investigate pumped storage and/or hydroelectric projects that, if successful, could provide greater than 20% of the island's annual electricity requirements. At this time, it is KIUC's intention to finance and own hydroelectric facilities, as such structure will facilitate the lowest possible generation cost to the people of Kauai.

4. KIUC continues its efforts in securing a long-term water lease from the Department of Land and Natural Resources for the Waiahi hydro-electric facilities.

5. 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's 2014 RPS percentage of 22.46% surpasses the 10% by 2010 RPS requirement by 12.46%. With current renewable energy sources and the future activities identified above, KIUC is on target to exceed the 2015 RPS requirement of 15%, even after the January 1, 2015 change that removed Electrical Energy Savings from counting toward the RPS. 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 impacts 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

KIUC RPS Status Report	2005 MWh	2006 MWh	2007 MWh	2008 MWh	2009 MWh	2010 MWh	2011 MWh	2012 MWh	2013 MWh	2014 MWh
1. Net Fossil Generation	413,355	419,451	441,154	417,986	399,325	400,307	392,689	389,180	376,778	360,103
2. Net Renewable Generation / Electrical Energy Generated Using Renewable Energy As Source[1]										
KIUC Hydro	4,232	4,561	926	7,968	7,454	7,896	6,974	7,591	8,063	7,598
Gay & Robinson Hydro	3,501	3,921	2,845	2,385	3,574	3,450	4,871	4,142	3,355	2,878
Kauai Coffee Hydro	26,292	25,613	20,612	22,149	21,756	18,296	21,208	23,038	18,501	18,693
KAA Hydro	3,466	3,024	2,079	3,106	4,141	4,374	5,457	3,775	3,154	4,922
Green Energy Hydro					5	189	407	366	278	200
Pioneer Solar							21	23	22	372
Kapaa Solar							1,468	1,858	1,827	1,759
MP2 Kaneshiro Solar									530	535
McBryde Solar									11,945	11,393
KRS2 Koloa Solar										10,042
Total	37,491	37,120	26,462	35,607	36,930	34,205	40,407	40,793	47,674	58,392
3. Electrical Energy Savings[2]										
From Renewable Displacement or Off-Set Technologies[3]										
Customer Renewable Generation (own use)	121	153	268	1,712	3,316	4,499	5,176	6,925	11,710	16,810
From Use of Energy Efficiency Technologies[4]										
Demand Side Management (DSM)	20,855	21,349	21,361	19,233	19,217	16,911	18,264	24,368	22,441	21,370
Total	20,976	21,502	21,629	20,945	22,533	21,410	23,440	31,293	34,151	38,180
4 Total Sales / Total Electrical Energy Sales / Net Electricity Sales[5]	448,611	452,080	466,896	453,791	436,273	434,533	434,745	433,159	431,478	429,924
5. Total Renewable Electrical Energy (Item 2 Total + Item 3 Total)	58,467	58,622	48,091	56,552	59,463	55,615	63,847	72,086	81,825	96,571
Total / RPS Percentage (Item 5 / Item 4)	**13.03%**	**12.97%**	**10.30%**	**12.46%**	**13.63%**	**12.80%**	**14.69%**	**16.64%**	**18.96%**	**22.46%**
Percent of Net Electricity Sales supplied by Item 2 Above	**8.36%**	**8.21%**	**5.67%**	**7.85%**	**8.46%**	**7.87%**	**9.29%**	**9.42%**	**11.05%**	**13.58%**
Percent of Net Electricity Sales supplied by Item 3 Above	**4.68%**	**4.76%**	**4.63%**	**4.62%**	**5.16%**	**4.93%**	**5.39%**	**7.22%**	**7.91%**	**8.88%**

[1] Renewable electrical energy generated via power purchase agreements with independent power producers is based on recorded data of the energy generated from the power producer facility, which is typically the net electricity energy sold to the utility. Pursuant to the definition of "renewable electrical energy" under HRS Section 269-91, this will not include customer-sited, grid-connected renewable energy generation (i.e., net energy metering, Schedule Q) until January 1, 2015.

[2] Pursuant to HRS Section 269-92(b)(2), beginning January 1, 2015, electrical energy savings shall not count toward the RPS.

[3] Pursuant to HRS Section 269-91, under the definition of "Renewable electrical energy," these types of technologies include solar water heating, sea-water air-conditioning district cooling systems, solar air-conditioning, and customer-sited, grid-connected renewable energy systems. Beginning January 1, 2015, this shall not include electrical energy savings brought about by customer-sited, grid-connected renewable-energy systems.

Pursuant to Section III.A.3. of the RPS Framework: "Electrical energy savings brought about by the use of renewable displacement or off-set technologoes shall be determined using actual recorded energy produced by the displacement or off-set technologies, if that information is available to the utility, and the corresponding estimated electrical savings. Where the recorded energy produced by the displacement or off-set technologies is not available to the utility, as in the case of customer-sited renewable energy systems, the utility may make reasonable estimates of the energy produced by such systems, and provide an explanation of the calculation of the estimates. The electrical energy savings shall be expressed at a comparable level to the electrical energy generated using renewable energy sources (i.e., at the net generation level)."

[4] Pursuant to HRS Section 269-91, under the definition of "Renewable electrical energy," energy efficiency technologies include heat pump water heating, ice storage, ratepayer-funded energy efficiency programs, and use of rejected heat from co-generation and combined heat and power systems, excluding fossil-fueled qualifying facilities that sell electricity to electric utility companies and central station power projects.

Pursuant to Section III.A.4. of the RPS Framework. "Electrical energy savings brought about by the use of energy efficiency technologies shall be determined using the actual gross energy savings (i.e., gross of (including) free-riders) reported by the utility or third-party DSM administrator in its annual DSM program report to the Commission excluding any electrical energy savings brought about by the use of *renewable displacement or off-set technologies. The electrical energy savings shall be expressed at a comparable level to the electrical energy generated using renewable energy sources (i.e., at the net* generation level)."

[5] Pursuant to Section I of the RPS Framework "total electrical energy sales" or "net electricity sales" means the total MWhs of electrical energy sold by a utility to its customers during a given year. KIUC notes that Item 1 (Net Fossil Generation) plus Item 2 (Net Renewable Generation) does not equal Item 4 (Net Electricity Sales). This is because currently and until January 1, 2015, and as required by HRS § 269-91, Item 2 (Net Renewable Generation) does not include customer-sited, grid-connected renewable energy generation (e.g., energy generated and exported to KIUC by NEM, NEM Pilot, and Schedule Q customers). However, KIUC's sales of such customer-sited, grid-connected renewable energy generation are included in Item 4 (Net Electricity Sales).

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PUBLIC UTILITIES COMMISSION

June 15, 2015

The Honorable Chair and Members of the
Hawaii Public Utilities Commission
465 South King Street
Kekuanaoa Building, Room 103
Honolulu, HI 96813

Re: *Revised (page 1 of 3)* included in the Kauai Island Utility Cooperative's ("KIUC's") 2014 Annual Renewable Portfolio Standards ("RPS") Status Report in Accordance with 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

Dear Commissioners and Commission Staff:

Please replace the original first page of the Renewable Portfolio Standards (RPS) Status Report (page 1 of 3), which was filed with the Hawaii Public Utilities Commission "Commission" on June 9, 2015, with the enclosed original and 8 copies. Changes are located under footnote 3.

If you have any questions, please call me at (808) 246-8208.

Very truly yours,

Michael V. Yamane, P.E.
Chief of Operations

Enclosure

cc: Kent Morihara
Consumer Advocate (3)
Mr. Joseph Viola
Mr. Dean Matsuura
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Ms. Sharon Suzuki
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Kauai Island Utility Cooperative
Renewable Portfolio Standards (RPS) Status Report
Year Ending December 31, 2014

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[2] HRS § 269-92(b).

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