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February 23, 2007

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Public Utilities Commission Kekuanaoa Building 465 South King Street, Room 103 Honolulu, Hawaii 96813 Attn: Stacey K. Djou, Esq.

Kaiulani K. Shinsato, Esq.

RE:

Kauai Island Utility Cooperative

2006 Renewable Portfolio Standards Status Report

Dear Commissioners and Staff:

Enclosed pleased find Kauai Island Utility Cooperative's (KIUC) Renewable Portfolio Standards (RPS) Status Report for the year ending December 31, 2006.

As shown in this report, renewable energy resources and energy savings supplied 13.92% of KIUC's net electricity sales during the 2006 calendar year. As you will note, this exceeds the RPS percentage of 10.0% to be achieved by December 31, 2010 for each electric utility pursuant to Hawaii Revised Statutes §269-92, as amended.

As an informational filing, this report includes a breakdown of the renewable energy resources on Kauai comprising the 13.92% RPS for 2006 and the RPS reached in 2003, 2004, and 2005. Also included is a discussion of KIUC's commitment to continue to increase the growth of renewable energy and energy savings on Kauai.

Thank you for your consideration. If you should have any questions, please call me at (808) 246-8223.

Very truly yours,

Timothy Blume

Regulatory Affairs Supervisor

Enclosure

cc (w/ encl.): Consumer Advocate

Mr. Nate Kawakami David W. Proudfoot, Esq.

Kauai Island Utility Cooperative Renewable Portfolio Standards (RPS) Status Report Year Ending December 31, 2006

KIUC's RPS Results for 2006

Kauai Island Utility Cooperative ("KIUC") achieved a Renewable Portfolio Standard ("RPS") percentage of 13.92% for calendar year 2006. This exceeds the RPS percentage of 10.0% to be achieved by December 31, 2010 for each electric utility pursuant to Hawaii Revised Statutes §269-92.

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. In addition to this generated electricity, Solar Water Heating ("SWH"), Photovoltaic ("PV") systems, and Demand Side Management ("DSM") measures also supplied some of our members' energy needs. Exhibit 1 illustrates how KIUC met the energy needs of its approximately 34,500 members. The SWH, PV, and DSM impacts are also reflected in Exhibit 1.

Reasons for KIUC's 2006 RPS Results

In 2006, KIUC achieved a RPS percentage of 13.92%, which is nearly the same as KIUC's 2005 RPS percentage of 13.94%. This was due to the following:

- 1. KIUC experienced a slight increase in hydro generation from its Upper and Lower Waiahi hydro plants. This was the result of improvements that increased the units' reliability.
- 2. In 2006, KIUC's total power purchases from Gay & Robinson, Kauai Coffee, and Agricultural Development Corp.² were comparable to 2005 and accounted for nearly half of KIUC's RPS percentage. However, this amount may not be sustainable on a continuous basis, as it was the result of factors outside of KIUC's control such as the availability of bagasse and run-of-river water flows.
- 3. KIUC experienced a slight increase in energy savings as a result of its SWH, DSM and Net Energy Metering ("NEM" programs. The number of NEM installations increased significantly from 15 in 2005 to 41 in 2006.

¹ KIUC has three non-firm power purchase contracts to purchase excess electrical power from Gay & Robinson (bagasse), Kauai Coffee (hydro), and Agribusiness Development Corp. (hydro).

² ld.

KIUC's Future RPS Activities

KIUC is committed to increasing the growth of renewable energy and energy savings. To accomplish this, KIUC is undertaking the following:

- 1. In December 2005, KIUC released a Request For Proposal for renewable energy-only projects. KIUC received 20 proposals and selected four projects to pursue purchase power agreements. One project has failed due to the logistics of importing a solid biomass fuel. However, if the remaining three projects are implemented as proposed, KIUC could obtain an additional 140,532 MWh's of renewable energy annually for an extended period, depending on the life of each project and subsequent additions to KIUC's portfolio of purchase power agreements and KIUC-owned generation.
- 2. KIUC is currently developing its third Integrated Resource Plan ("IRP"). This IRP will determine the optimal mix of supply-side and demand-side options to meet our electrical needs. KIUC will consider a variety of renewable and demand-side options in its IRP.
- 3. KIUC is currently collecting water flow data for its Upper Waiahi hydro plant. This data will be used to determine if additional capacity can be added. Additionally, capital improvements are planned for the Upper and Lower Waiahi hydro plants. These improvements will increase each unit's efficiency and reliability, which will increase the annual energy produced.
 - KIUC is also pursuing a long-term water lease from the Department of Land and Natural Resources. Upon receiving this lease, KIUC anticipates making additional capital improvements to the units and water delivery system, which should further increase the annual energy produced.
- 4. KIUC is actively exchanging information and meeting with various developers of renewable energy projects. Technologies discussed include wave energy, run-of-river hydro, municipal solid waste, photovoltaic, wind, combined heat and power, and biomass. KIUC anticipates these contacts will result in the development of renewable energy projects in the near and upcoming future.
 - Additionally, KIUC and the County of Kauai continue to explore mutual opportunities to develop renewable sources such as municipal solid waste, landfill gas, and photovoltaics.
- 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. In 2006, KIUC implemented a zero-interest loan program for SWH systems. KIUC is also continuing its residential

energy efficiency programs, commercial retrofit program, and its SWH rebate and loan programs.

Conclusion

KIUC achieved a RPS percentage of 13.92% in 2006. KIUC recognizes the benefits that renewable energy and energy savings provide to the visitors, residents, and commercial sectors of Kauai. 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 1

		2003	2004	2005	2006
		MWh	MWh	MWh	MWh
and the second s	(A) Net Fossil Generation	405,825	412,793	41(3,355)	113/7/6/17
	Net Renewable Generation				
(B)	KIUC Hydro	558	1,684	4,232	4,587
(O)	Gay & Robinson	2,521	2,844	3,501	3,943
(<u>0</u>)	Kauai Coffee	20,331	29,199	26,292	25,759
(E)	ADC	2,080	2,070	3,466	3,042
(F)	Waste Oil	Ą.Z	257	409	325
(G)=(B)+(C)+(D)+(E)+(F)	Total Renewable Generation	25,490	36,053	37,900	37,656
	Conserved Fneray (Displaced Sales)				
(H) <u>(</u>	Solar Water Heating (SWH)	7,387	7,558	7,659	7,831
Ē	Net Energy Metering	99	06		202
(r)	Demand Side Management (DSM)	N.A.	19,037	20,855	21,349
(K)=(H)+(I)+(J)	Total Conserved Energy	7,453	26,685	28,644	29,382
	· Total Sales				
(L)	Direct KIUC Sales	431,315	446,923	448,611	452,080
(M)	Displaced Sales due to SWH, PV, DSM	7,453	26,685	28,644	29,382
(N)=(L)+(M)	Total Sales	438,768	473,608	477,255	481,462
(∅)≒(ଔ)+(K)· Renewa	Renewable Generation +*Conserved Energy	32,943	(02,7/38	66 544	67 (033)
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(P)=(O)/(N):	Percent of Total Sales supplied by Renewables	7,51%	13,25%	(3.94%	13,92%
	and Conserved Energy				