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March 18, 2005

HAND DELIVER

Public Utilities Commission  
Kekuanaoa Building  
465 South King Street, Room 103  
Honolulu, Hawaii 96813  
Attn: Kevin M. Katsura, Esq.

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PUBLIC UTILITIES  
COMMISSION  
FILED

RE: Kauai Island Utility Cooperative  
2004 Renewable Portfolio Standards Status Report

Dear Commissioners and Staff:

Enclosed please find Kauai Island Utility Cooperative's ("KIUC") Renewable Portfolio Standards (RPS) Status Report for the year ending December 31, 2004.

As shown in this report, renewable energy resources supplied 13.2% of KIUC's net electricity sales during the 2004 calendar year, which represents a significant increase in KIUC's 2003 RPS of 7.5% and exceeds the 7% RPS goal established by Hawaii Revised Statutes §269-92(1), as amended.

As an informational filing, this report includes a breakdown of the renewable energy resources on Kauai comprising the 13.2% RPS for 2004 and the RPS reached for 2003, together with a discussion of KIUC's commitment to continue to increase the growth of renewable energy on the island of Kauai.

Thank you for your consideration. If you should have any questions, please call Joseph M<sup>c</sup>Cawley at (808) 246-8205 or me at 528-4200.

Very truly yours,



Kent D. Morihara

enclosure

cc (w/encl.): Consumer Advocate  
Mr. Dutch Achenbach  
Mr. Michael Yamane  
Mr. Jeffrey Deren  
Dave Proudfoot, Esq.

**Kauai Island Utility Cooperative  
Renewable Portfolio Standards (RPS) Status Report  
Year Ending December 31, 2004**

**KIUC RPS Results for 2004**

Kauai Island Utility Cooperative (KIUC) is pleased to have achieved a Renewable Portfolio Standard (RPS) percentage of 13.2 % for calendar year 2004. This exceeds the RPS goal of 7.0% established for 2004 under S.B. 2474 HD2.

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<sup>1</sup>. In addition to this generated electricity, Solar Water Heating (SWH), Photovoltaic (PV) systems, and Demand Side Management (DSM) also supplied some our members' energy needs. Exhibit 1 illustrates how KIUC met the energy needs of its approximately 30,000 members. The SWH, PV, and DSM impacts are also reflected in Exhibit 1.

**KIUC's 2004 RPS Results**

In 2004, KIUC achieved a RPS percentage of 13.2 %, which represents a significant increase in KIUC's 2003 RPS of 7.5%. This increase was due to the following:

1. KIUC experienced a significant 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 2004, KIUC purchased significantly more renewable energy from G&R, Kauai Coffee, and ADC. However, this increase may not be sustainable 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. 2004 was the first year that KIUC included energy conserved through KIUC-installed DSM measures.
4. Additionally, 2004 was the first year that KIUC included the energy produced from the burning of waste oil at the Port Allen Power Plant.

<sup>1</sup> 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).

## **KIUC Future RPS Activities**

While KIUC exceeded the 2004 RPS goal of 7.0%, the Company is committed to increasing the growth of renewable energy. To accomplish this, KIUC is undertaking the following:

1. KIUC has retained a consulting firm to evaluate the technical, economic, social, and environmental feasibility of renewable energy technologies on Kauai. An interim report was submitted in August 2004 with the final report due in March 2005. Results of the study will be used in KIUC's next Integrated Resource Plan which is anticipated to start in the first quarter of 2005.
2. KIUC has revised its Integrated Resource Plan Framework to incorporate a cooperative perspective. The proposed framework modifies the requirement that KIUC choose the "least cost" option for meeting future electrical demand and gives KIUC greater flexibility in choosing renewable energy alternatives. The proposed framework is currently being reviewed by the HPUC. Approval is anticipated in the third quarter of 2005.
3. KIUC is currently upgrading the Upper and Lower Waiahi hydro plants. The scope of work includes the installation of a new runner at the lower plant, installation of a new exciter at the upper plant, tunnel and ditch maintenance, and reconductoring of the transmission line between the units and Kapaia Power Station switchyard. These improvements will increase the units' efficiency and reliability which will increase the annual energy produced.

Additionally, KIUC is pursuing a long-term water lease from the Department of Land and Natural Resources. If granted KIUC will make additional capital improvements to the units and water delivery system, which should 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 Kauai County continue to explore mutual opportunities to develop renewable sources such as municipal solid waste, landfill gas, and photovoltaics.

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. In 2005, KIUC will continue its Residential Energy Conservation Program, Commercial Retrofit Program, and its \$800 rebate for SWH systems.

Additionally in 2005, KIUC will implement a SWH loan program and a pilot rebate program for energy efficient appliances.

### **Conclusion**

KIUC is very pleased to have achieved a RPS percentage of 13.2%, which exceeded the 7% RPS target for 2004. KIUC recognizes the benefits that renewable energy provides to the visitors, residents, and commercial sectors of Kauai. As such, KIUC will continue to evaluate, promote, and incorporate renewable energy to meet the needs of its members, the Kauai community, and the State.

Exhibit 1

	<u>2003</u> MWh	<u>2004</u> MWh
1. Net Fossil Generation	405,825	412,793
2. Net Renewable Generation		
KIUC Hydro	558	1,684
Gay & Robinson	2,521	2,844
Kauai Coffee	20,331	29,199
ADC	2,080	2,070
Waste Oil	N.A.	257
Total Renewable Generation	<u>25,490</u>	<u>36,053</u>
3. Conserved Energy (Displayed Sales)		
Solar Water Heating (SWH)	7,387	7,558
Photovoltaic (PV)	66	90
Demand Side Management (DSM)	N.A.	19,037
Total Conserved Energy	<u>7,453</u>	<u>26,685</u>
4. Total Sales		
Direct KIUC Sales	431,315	446,923
Displaced Sales due to SWH, PV, DSM	7,453	26,685
Total Sales	<u>438,768</u>	<u>473,608</u>
5. Renewable Generation + Conserved Energy	32,943	62,738
Percentage of Total Sales supplied by Renewable and Conserved Energy	<b>7.5%</b>	<b>13.2%</b>