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PUBLIC UTILITIES  
COMMISSION

March 30, 2006

Ms. Brooke K. Kane  
Public Utilities Commission  
Kekuanaoa Building  
465 South King Street, Room 103  
Honolulu, Hawaii 96813

RE: Kauai Island Utility Cooperative  
2005 Renewable Portfolio Standards Status Report

Dear Ms. Kane:

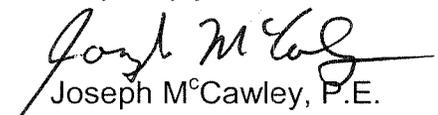
Enclosed please find Kauai Island Utility Cooperative's (KIUC) Renewable Portfolio Standards (RPS) Status Report for the year ending December 31, 2005.

As shown in this report, renewable energy resources supplied 13.9% of KIUC's net electricity sales during the 2005 calendar year. This represents an increase over KIUC's 2004 RPS of 13.2% and exceeds the 8% RPS goal established by Hawaii Revised Statutes §269-92(1), as amended.

As an informal filing, this report includes a breakdown of the renewable energy resources on Kauai comprising the 13.9% RPS for 2005 and the RPS reached in 2003 and 2004. Also included is a discussion of KIUC's commitment to continue to increase the growth of renewable energy on Kauai.

Thank you for your consideration. If you should have any questions, please call me at (808) 246-8205.

Very truly yours,

  
Joseph M. Cawley, P.E.  
Manager, Regulatory & Legislature Affairs

Enclosure

cc: Consumer Advocate  
Mr. Nate Kawakami  
David Proudfoot, Esq.

# **Kauai Island Utility Cooperative Renewable Portfolio Standards (RPS) Status Report Year Ending December 31, 2005**

## **KIUC RPS Results for 2005**

Kauai Island Utility Cooperative (KIUC) is pleased to have achieved a Renewable Portfolio Standard (RPS) percentage of 13.9 % for calendar year 2005. This exceeds the RPS goal of 8.0% established for 2005 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) measures 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 2005 RPS Results**

In 2005, KIUC achieved a RPS percentage of 13.9 %, which represents an increase in KIUC's 2004 RPS of 13.2%. This increase was due to the following:

1. KIUC experienced an 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 2005, KIUC's total power purchases from G&R, Kauai Coffee, and ADC were comparable to 2004 and accounted for nearly half of our RPS percentage. However, this amount 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. KIUC experienced an increase in energy savings as result of its Demand Side Management, Solar Hot Water, and Net Energy Metering programs.

<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 2005 RPS goal of 8.0%, the Company is committed to increasing the growth of renewable energy. 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 recently selected four projects to pursue purchase power agreements. If all four projects are implemented as proposed, KIUC could obtain an additional 187,526 MWh's of renewable energy each year.
2. KIUC has started its Integrated Resource Planning (IRP) process. The 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 the units' 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 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 2006, KIUC implemented a zero-interest loan program for solar hot water systems. KIUC is also continuing its Residential Energy Conservation Program, Commercial Retrofit Program, and its \$800 rebate for SWH systems.

## **Conclusion**

KIUC is very pleased to have achieved a RPS percentage of 13.9%, which exceeded the 8% RPS target for 2005. 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

	<b>2003</b>	<b>2004</b>	<b>2005</b>
	<u>MWh</u>	<u>MWh</u>	<u>MWh</u>
1. Net Fossil Generation	405,825	412,793	413,335
2. Net Renewable Generation			
KIUC Hydro	558	1,684	4,232
Gay & Robinson	2,521	2,844	3,501
Kauai Coffee	20,331	29,199	26,292
ADC	2,080	2,070	3,466
Waste Oil	N.A.	257.	409
Total Renewable Generation	<u>25,490</u>	<u>36,053</u>	<u>37,900</u>
3. Conserved Energy (Displayed Sales)			
Solar Water Heating (SWH)	7,387	7,558	7,659
Photovoltaic (PV)	66	90	130
Demand Side Management (DSM)	N.A.	19,037.	20,855
Total Conserved Energy	<u>7,453</u>	<u>26,685</u>	<u>28,644</u>
4. Total Sales			
Direct KIUC Sales	431,315	446,923	448,611
Displaced Sales due to SWH, PV, DSM	7,453	26,685	28,644
Total Sales	438,768	<u>473,608</u>	<u>477,255</u>
5. Renewable Generation + Conserved Energy	32,943	62,738	66,544
Percentage of Total Sales supplied by Renewable and Conserved Energy	<b>7.5%</b>	<b>13.2%</b>	<b>13.9%</b>