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BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF HAWAII

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PUBLIC UTILITIES COMMISSION

In the Matter of the Docket for	)	PUC Docket 03-0253
	)	
HAWAIIAN ELECTRIC COMPANY (HECO)	)	
	)	
re: Integrated Resource Planning	)	
	)	

LIFE OF THE LAND'S

RESPONSE TO COMMISSION INQUIRY re EPACT 2005

&

CERTIFICATE OF SERVICE

HENRY Q CURTIS
VICE PRESIDENT FOR CONSUMER ISSUES
LIFE OF THE LAND

76 North King Street, Suite 203
Honolulu, HI 96817
phone: 808-533-3454
henry@lifeoftheland.net

Aloha Commissions,

By way of background:

In response to the Arab Oil Embargoes, Congress adopted the **Public Utility Regulatory Policies Act (PURPA) of 1978**. PURPA promoted the development of non-utility cogeneration and renewable energy facilities. PURPA also promoted (1) the conservation of energy supplied by electric utilities; (2) optimal efficiency of electric utility facilities and resources, and (3) equitable rates for electric consumers.

PURPA contained ten national standards: (1) Cost of Service; (2) Declining Block Rates; (3) Time-of-Day Rates; (4) Seasonal Rates; (5) Interruptible Rates; (6) Load Management Techniques; (7) Integrated Resource Planning; (8) Investments in Conservation and Demand Management; (9) Energy Efficiency Investments in Power Generation and Supply; and (10) Consideration of the effects of wholesale power purchases on utility cost of capital; effects of leveraged capital structures on the reliability of wholesale power sellers; and assurance of adequate fuel supplies.

The Energy Policy Act of 1992 (EPACT 2002). EPACT 1992 amended PURPA to encourage competition in several ways. It creates a new class of power company, the exempt wholesale generator, that can compete against electric utilities to supply electricity. In addition, owners of transmission lines are required to let any electric generator use the lines at an approved and published price. In compliance with EPACT, the Federal Energy Regulatory Commission issued orders 888 and 889, which permitted utilities access to the transmission grid to enhance the sale and purchase of energy for resale. They do not apply to the retail or end-user customer.

The Energy Policy Act of 2005 (EPACT 2005) is <u>a 1700 page, 230,000 word law</u> which added five new national standards to PURPA: (11) Net Metering; (12) Fuel Diversity; (13) Fossil Fuel Generation Efficiency; (14) Smart Metering; and (15)

Interconnection.

PURPA Section 111(d)(11): "Net Metering: Each electric utility shall make available upon request net metering service to any electric consumer that the electric utility serves. For purposes of this paragraph, the term 'net metering service' means service to an electric consumer under which electric energy generated by that electric consumer from an eligible on-site generating facility and delivered to the local distribution facilities may be used to offset electric energy provided by the electric utility to the electric consumer during the applicable billing period." [16 U.S.C. 2621(d)(11)]

PURPA Section 111(d)(12): "Fuel Sources: Each electric utility shall develop a plan to minimize dependence on 1 fuel source and to ensure that the electric energy it sells to consumers is generated using a diverse range of fuels and technologies, including renewable technologies." [16 U.S.C. 2621(d)(12)]

PURPA Section 111(d)(13): "Fossil Fuel Generation Efficiency: Each electric utility shall develop and implement a 10-year plan to increase the efficiency of its fossil fuel generation." [16 U.S.C. 2621(d)(13)]

PURPA Section 111(d)(14): "Time-Based Metering and Communications (A) Not later than 18 months after the date of enactment of this paragraph, each electric utility shall offer each of its customer classes, and provide individual customers upon customer request, a time-based rate schedule under which the rate charged by the electric utility varies during different time periods and reflects the variance, if any, in the utility's costs of generating and purchasing electricity at the wholesale level. The time-based rate schedule shall enable the electric consumer to manage energy use and cost through advanced metering and communications technology." Standard 14 describes three different types of time-based rate structures which are summarized as follows: Time of Use Pricing ("TOU"); Critical Peak Pricing ("CPP"); and Real

Time Pricing ("RTP").

PURPA Section 111(d)(15): "Interconnection: Each electric utility shall make available, upon request, interconnection service to any electric consumer that the electric utility serves. For purposes of this paragraph, the term "interconnection service" means service to an electric consumer under which an on-site generating facility on the consumer's premises shall be connected to the local distribution facilities. Interconnection services shall be offered based upon the standards developed by the Institute of Electric and Electronics Engineers: IEEE Standard 1547 for Interconnection Distribution Resources with Electric Power Systems, as they may be amended from time to time. In addition, agreements and procedures shall be established whereby the services offered shall promote current best practices of interconnection for distributed generation, including but not limited to practices stipulated in model codes adopted by associations of state regulatory agencies. All such agreements and procedures shall be just and reasonable, and not unduly discriminatory or preferential." [16 U.S.C. 2621(d)(15)]

PURPA directs each State regulatory authority to make a determination concerning whether or not it is appropriate to implement such standards to carry out the purposes of PURPA. PURPA outlines the procedural requirements for such consideration and determination. PURPA requires that the determination shall be: (1) in writing; (2) based on findings included in such determination and upon evidence presented at the hearing, and (3) available to the public.

Hawai`i Public Utilities Commission ("Commission")

By Commission letter dated August 9, 2006, the Commission directed Hawaiian Electric Company (HECO), the Consumer Advocate (CA) and Life of the Land (LOL) to "provide a statement describing your position, if any, on whether the commission should adopt, modify, or decline to adopt in whole or in part, the standards

articulated above [Standards No. 12: Fuel Diversity and No. 13: Fossil Fuel Generation Efficiency] as well as procedural comments and suggestions as to how this issue should be considered in this docket or in a separate proceeding."

Life of the Land 's Position

In the PUC Docket investigating Distributed Generation, Life of the Land suggested using the Herfindahl-Hirschman Index (**HHI**) (sum of squares method) to determine the extent to which Hawaii relies on one fuel source or a diversity of fuel choices. Life of the Land favors lowering the HHI, to diversify the risk.

We raised the issue of the underlying fuel in HECO's Proposed 2009 Power Plant. If one uses 3 barrels of coal and 2 barrels of biomass to create 5 barrels of ethanol, then the original fuels, and not the resultant fuel need to be included in the HHI.

The weakness in the federal standard is what is meant by a diverse range of fuels is. We do not believe that naphtha, diesel and bunker fuel should be counted as three distinct fuels. Rather we believe the categories should be (a) fossil fuel; (b) photovoltaic (solar electric); (c) solar water heaters/solar thermal; (d) wind; (e) ocean wave; (f) ocean thermal; (g) energy efficiency; etc.

Regarding Fossil Fuel Generation Efficiency, it is unclear if EPACT2005 is calling for one standard or separate standards for baseload, cycling and peaking units. In any case, we favor replacing all fossil fuel generators with renewable units.

These issues (portfolio diversification, power plant efficiency) should be resolved in HECO's IRP-3. Currently, taxpayers subsidize ratepayers leading to distorted decisions. By internalizing externalities, by looking at the combined ratepayer/taxpayer costs of different technologies, we plan to show in HECO IRP-3 that several renewable technologies are cheaper than the fossil fuel counterparts.

CERTIFICATE OF SERVICE

I hereby certify that I have filed a copy of Life of the Land's Position re EPACT 2005 upon the following parties by mailing a copy to each of the parties listed below, and an email copy was sent to the Commission and to each party listed below. These two actions occurred early on Wednesday, January 31, 2007.

William A. Bonnet
Vice President, Government and Community Affairs
HAWAIIAN ELECTRIC COMPANY
P. O. Box 2750
Honolulu, HI 96840

Catherine Awakuni
Executive Director
DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS
DIVISION OF CONSUMER ADVOCACY
335 Merchant Street, Suite 326
Honolulu, HI 96813

DATED: January 31, 2007

Henry Q Curtis

Henry Q Curtis
Vice President for Consumer Affairs