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November 22, 2004

Public Utilities Commission  
465 S. King Street, Rm 103  
Honolulu, HI 96813

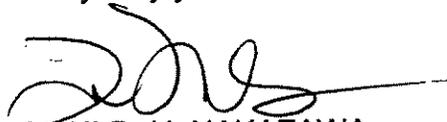
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PUBLIC UTILITIES  
COMMISSION

Re: Docket No. 03-0371, In the Matter of Public Utilities Commission  
Instituting a Proceeding to Investigate Distributed Generation in Hawai'i

Dear Commissioners:

Attached please find the County of Kaua'i's (COK) responses to the information requests (IRs) of the commission, dated October 28, 2004. As noted in the responses, the COK has been working in cooperation with the Kaua'i Island Utility Cooperative (KIUC), and has adopted KIUC responses by reference in its IR responses.

Very truly yours,

  
LANI D. H. NAKAZAWA  
County Attorney

LDHN:jg

encs.

cc: All parties

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PUBLIC UTILITIES  
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BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF HAWAII

In the Matter of	)	Docket No. 03-0371
	)	
PUBLIC UTILITIES COMMISSION	)	
	)	
Instituting a Proceeding to Investigate	)	
Distributed Generation in Hawai'i.	)	
	)	
	)	
	)	

COUNTY OF KAUA'I'S RESPONSES  
TO INFORMATION REQUESTS OF THE  
PUBLIC UTILITIES COMMISSION

AND

CERTIFICATE OF SERVICE

The County of Kaua'i (Kaua'i County) submits the following in response to  
the Information Requests (IRs) of the Public Utilities Commission.

Dated: Līhu'e, Kaua'i, Hawai'i, November 22, 2004.




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LANI D. H. NAKAZAWA  
CHRISTIANE L. NAKEA-TRESLER  
Attorneys for the County of Kaua'i

## **Statutory Authorizations**

**PUC-IR-1** Do Hawaii electric utilities have authority under existing statutes and franchises to own distributed generation either directly or through an affiliate? If yes, please identify the specific statutes and franchises which authorize such activity. If no, please describe whether existing laws should be altered to permit utility ownership (either directly or through an affiliate) and if so, what changes are needed?

**Response:** The COK agrees with KIUC's response to this IR.

In addition, The COK has reviewed Act 165, Session Laws of Hawai'i 1967, which granted KIUC a franchise for the island of Kaua'i, and cannot find any language that prohibits its from owning DG either directly or through an affiliate. Section 2 of the Act, entitled "Franchise," states that "(t)he cooperation is hereby granted the right, authority and privilege to manufacture, sell, furnish and supply electric light, electric current or electric power on the island of Kaua'i, State of Hawai'i, for lighting the streets, roads, public and private buildings and property, or for motive power, or for any other purpose which it may deem advisable, and from time to time for the purposes above mentioned to construct, maintain, and operate suitable poles, lines, wires, cables, lamps, lamp posts, conductors, conduits and such other appliances and appurtenances as may from time to time be necessary or convenient for the transmission, or supply of electricity to consumers thereof, under, along, upon and over the streets, sidewalks, road squares, bridges, alleys and lanes on said island, and to connect the same wires, lines and conductors with any manufactory, private or public buildings, lamps, lamp posts or other structure or object and the place or source or supply."

However, if KIUC decides to own DG, the COK agrees that its participation should be done in a manner that is "not unduly or unreasonably preferential, discriminatory or anti-competitive." In this regard, the Commission should adopt rules and guidelines to guarantee the integrity of the process and that KIUC should remain under Commission oversight.

**Sponsor:** Glenn Sato

**PUC-IR-2** Are there any changes required to existing statutes, rules, or regulations to facilitate non-utility ownership of distributed generation (“DG”) facilities?

**Response:** The COK agrees with KIUC’s response to this IR.

**Sponsor:** Glenn Sato

**PUC-IR-3** What is the impact of Hawaii's net energy metering law, codified at Hawaii Revised Statutes ("HRS") § 269-101-111, (and recently amended this past legislative session to allow eligible systems of up to 50 kilowatts ("kW") to sell excess energy to the utility) on customer decisions to invest in DG? Should the existing 50 kW size limitation be increased to facilitate DG? Should the existing net energy metering law be expanded to include technologies other than those specified in the statute? Please identify any other changes that should be made to net metering laws, and why?

**Response:** The COK agrees with KIUC's response to this IR. The COK notes that if all forms of DG are to be promoted, including fossil fuel, the 50 kW size limitation may be too small.

**Sponsor:** Glenn Sato

## **Definition of Distributed Generation**

**PUC-IR-4** Should the Commission define distributed generation — and if so, how should it be defined? Should the definition be flexible or specific as to size and technology? Should the definition identify “eligible” technologies — and if so, how would such a list be derived? Or should the definition be sufficiently flexible to apply to a range of DG technologies, both those currently feasible as well as those not yet developed?

**Response:** The COK agrees with KIUC’s response to this IR.

**Sponsor:** Glenn Sato

**PUC-IR-5** Should the definition of distributed generation include DER, “distributed energy resources” and other demand side technologies or systems?

**Response:** The COK agrees with KIUC’s response to this IR.

**Sponsor:** Glenn Sato

**PUC-IR-6** Should the Commission draw a distinction between “small scale” DG and other DG resources and if so, why? How should “small scale” DG be defined? What benefits can small scale DG offer (e.g. firm power, increased reliability, reduce transmission constraints) and what impacts does it have on the system?

**Response:** The COK agrees with KIUC’s response to this IR.

**Sponsor:** Glenn Sato

**Additional Information on “Viable and Feasible DG” for Hawaii**

**PUC-IR-7** Please comment on HECO's listed criteria (see e.g. Seki Testimony at 20) for determining whether a DG technology is “viable and feasible” for Hawaii. Should other factors be considered as well?

**Response:** The COK agrees with KIUC's response to this IR. It also notes that HECO's listed criteria is a starting point for determining whether a DG technology is “viable and feasible,” but other factors should be considered as well, including supply reliability, supply diversity, fuel diversity, transmission and distribution (T & D) benefits and economic impacts. (Friedman testimony.)

**Sponsor:** Glenn Sato

**PUC-IR-8** Have the “multiple benefits” of DG cited in Life of the Land’s testimony (Wooley at 2) ever been quantified for Hawaii as they have in the other states mentioned in the testimony and if so, where can this information be found?

**Response:** The COK does not have information sufficient to respond to this IR.

**Sponsor:** Glenn Sato

**PUC-IR-9** Please identify any additional information provided in response to any party's Information Requests or filed in other dockets that provides further documentation or evidence of:

- a. whether there are transmission, distribution generation constraints which could be served by DG;
- b. the extent to which load growth is driving the need for distribution system enhancements;
- c. where DG should be located to be most effective (and documentation for this conclusion); and
- d. the availability or feasibility of alternative technologies.

**Response:** The COK agrees with KIUC's response to this IR. However, the COK notes that in the next three to four years, KIUC must begin the permitting process for its next generating unit (required in 2012). DG considerations should be examined at that time. The consideration could include analyses to determine which locations in KIUC's electric system, if any, could benefit from DG.

**Sponsor:** Glenn Sato

**PUC-IR-10** Please identify with specificity the type and size of DG that can be currently deployed in Hawaii to maximize the benefits and minimize costs.

**Response:** The COK defers to the KIUC response to this IR.

**Sponsor:** Glenn Sato

**PUC-IR-11** Identify with specificity existing environmental requirements which would impact the installation of DG and how this would occur? Are there any other regulatory requirements — e.g., Building Codes or zoning laws that would impact installation of DG and if so, identify these with specificity.

**Response:** The COK defers to KIUC's response to this IR. With regard to Kaua'i County planning requirements, however, a DG installation would be impacted by Title IV, Chapter 8 of the Kaua'i County Code (Comprehensive Zoning Ordinance). Under that law, DG is only permitted in the limited industrial and general industrial categories, as described in Article 6, Section 8-6.3. Private and public utilities and facilities are permitted in the Residential, Resort, Commercial (neighborhood commercial and general commercial), Agriculture and Open districts via a special use permit that must be approved by the County Planning Department. The applicable sections are Residential (Section 8-3.4), Resort (Section 8-4.4), Commercial (Section 8-5.4), Agriculture (Section 8-7.3) and Open (Section 8-8.3). A use permit in a Residential district requires County Planning Commission approval pursuant to Section 8-19.6. A use permit in the Resort district (see Section 8-4.6(a)(3) and (a)(4)) is dependent on a combination of factors including density, constraints and Special Treatment districts, that determine whether the approvals come from the Planning Department (Class III) or the Planning Commission (Class IV). A use permit in the Commercial District is determined by the size of the parcel. (See Section 8-19).

**Sponsor:** Glenn Sato

## **Impacts of Distributed Generation**

Identify the impacts of DG on the distribution system with reference to the following specific questions.

**PUC-IR-12** What are the beneficial impacts of DG on the transmission and distribution ("T&D") system and more importantly, how may they be quantified and assessed for value?

**Response:** The COK agrees with the KIUC response to this IR.

**Sponsor:** Glenn Sato

**PUC-IR-13** What are the limits to the level of DG that the grid can absorb without adverse impacts? Please identify studies or other documentation in support of your response.

**Response:** The COK defers to the KIUC response to this IR.

**Sponsor:** Glenn Sato

**PUC-IR-14** What are the limits of bi-directional power?

**Response:** The COK defers to the KIUC response to this IR.

**Sponsor:** Glenn Sato

**PUC-IR-15** Should the design of new distribution feeders consider DG?

**Response:** The COK defers to KIUC's response to this IR as regarding technical issues, but from the policy perspective, the design of all new distribution feeders should consider DG to the extent feasible.

**Sponsor:** Glenn Sato

**PUC-IR-17** Should utilities be offered incentives to facilitate DG?

**Response:** The COK believes that incentives to facilitate DG may be appropriate, provided that the incentives offered to KIUC are meaningful given its status as a cooperative. The incentives could include mechanisms to allow KIUC to coordinate with any customer/member interested in DG prior to committing to a DG system. This will allow a customer/member to obtain information regarding the benefits or detriments associated with DG in a cooperative (as opposed to an investor-owned utility) environment and may ensure that the subsidization of any benefits by other KIUC member/owners does not occur. As noted in our response to PUC-IR-5, DER and other demand side technologies or systems should be included in the definition of distributed generation. In the case of DSM technologies or systems, a small incentive might be enough to trigger affirmative action by the customer, which would lower energy demand, thus postponing or deferring a new generating unit.

**Sponsor:** Glenn Sato

**PUC-IR-18** How can utility distribution practices be modified to enable DG to provide distribution deferral and be compensated for it?

**Response:** The COK agrees with KIUC's response to this IR.

**Sponsor:** Glenn Sato

## **Ownership**

**PUC-IR-19** If utilities are permitted to own distributed generation through affiliates, are any changes required to existing statutes, rules and regulations governing affiliates to guard against cross subsidization, to protect ratepayers and ensure competition between affiliates and non-affiliates on equal footing? Please identify potentially applicable statutes, rules and regulations and specify necessary changes.

**Response:** No changes are required, since current law, for example, Hawai'i Revised Statutes section 269-19.5 provides sufficient guidelines to protect against cross-subsidization.

**Sponsor:** Glenn Sato

## Interconnection

**PUC-IR-20** What costs are associated with DG interconnection to the distribution grid?

- a. If a utility overhead line is fully depreciated and upgrades or replacements are needed for distribution interconnection, does the DG customer pay for the upgrade replacement cost?
- b. Should a DG customer be required to pay for distribution system upgrades that would have otherwise occurred in the absence of a DG interconnection?
- c. Should subsequent DG customers on a particular feeder line be responsible for costs applied to the first DG customer on the line? If so, what type of crediting mechanism should be put in place for the first customer?
- d. What mechanism should be used for recovery of these costs (*i.e.*, fixed vs. demand charges, marginal cost vs. average cost, etc...)

**Response:** KIUC's responses to this IR describe the current charges and practices of the utility. However, if the Commission determines that certain, or all forms of DG should be encouraged, changes to the charges and practices may be necessary to achieve the Commission's objectives.

**Sponsor:** Glenn Sato

**PUC-IR-21** Should HECO's, HELCO's and MECO's Rule 14.H on interconnection specific to distributed generation be modified to further facilitate or encourage distributed generation? If so, please identify with specificity those aspects of Rule 14.H that must be changed? Should the same interconnection rules for distributed generation apply to both the HECO companies and KIUC?

**Response:** The COK is not familiar with the cited rule, but any programs for the HEI companies, if applied to KIUC, may require modification to take into consideration KIUC's status as a cooperative, to ensure that the interests of the members are protected. However, we also note that the concerns regarding system impacts are similar between KIUC and the HEI companies.

**Sponsor:** Glenn Sato

**PUC-IR-22** What has been the experience of the parties to date with interconnecting distributed generation facilities under either HECO's, HELCO's or MECO's Rule 14.H?

**Response:** The COK agrees with KIUC's response, as we have no experience with interconnection to the systems of the HEI companies on Kaua'i.

**Sponsor:** Glenn Sato

## **Rate Structure and Cost Recovery**

**PUC-IR-23** Is the current allocation of distribution charges between customer, demand and usage charges adequate or should it be modified to accommodate DG? What is the appropriate allocation between utilities and ratepayers of revenues foregone as a result of the deployment of DG?

**Response:** KIUC's Rider S Standby Tariff, which has a mechanism to charge a customer for standby and other auxiliary services, was instituted many years ago, and may not correctly reflect an accurate allocation and collection of distribution charges. The cost of service study being conducted by KIUC should provide more information to determine if modifications are required to accommodate DG. The cost of service study should also examine the changes that have occurred from the utility's change from an investor -owned utility to a member-owned cooperative. The Commission and the Consumer Advocate should analyze this information closely. In addition allocations should be structured to promote public or member policy, such as the promotion of renewables.

**Sponsor:** Glenn Sato

**PUC-IR-24** Should credits be offered to customers or third parties that can defer the need for localized distribution expenditures. If yes, how should these credits be awarded, calculated and administered? And how should the cost of any credits or incentives be allocated and recovered by the distribution company?

**Response:** The COK recommends the consideration of monetary incentive rebates rather than credits be offered to customers or third parties where the need for localized distribution expenditures can occur. The proper inclusion of DG in the integrated resource planning process will serve to support DG implementation. The consumer DG market would benefit from monetary incentives, which could be recovered through similar recovery of DSM incentives.

**Sponsor:** Glenn Sato

**PUC-IR-25** How can services be identified for unbundling and how should rates be calculated? Please comment on the viability of the Consumer Advocate's proposal for unbundling (Consumer Advocate Testimony, Witness Herz at 60-63). Will unbundling rates ensure that the utility recovers its cost of service from the customer benefiting from DG and does not shift costs to other ratepayers? (See, e.g., Witness Herz, testimony at 23, 60)

**Response:** The COK agrees with KIUC and the Consumer Advocate that a cost of service study is an appropriate mechanism to identify and quantify each utility's costs to provide services to a DG customer. Unbundling may be one of the methods employed to ensure appropriate cost recovery if properly applied to the cooperative setting.

**Sponsor:** Glenn Sato

**PUC-IR-26** Should the commission consider decoupling revenues from sales so that the utility is indifferent to installation of DG that has the effect of reducing sales?

**Response:** The COK believes the Commission should consider decoupling revenues from sales. The Performance Based Ratemaking Workshop scheduled for November 22-23, 2004 may provide information for the parties to consider.

**Sponsor:** Glenn Sato

**PUC-IR-27** Should the electric utilities institute termination charges (exit fees) for customers who install distributed generation and if so how should they be designed?

**Response:** Exit fees could allow utilities to shield existing customers from the burden of stranded costs. However, in calculating or levying exit fees, the utility should not be allowed to include costs which are attributable to the utilities' failure to include DG considerations in their planning. To this end, the COK recommends that the Commission closely scrutinize the utilities' capital plans to ensure the plans take into consideration DG considerations.

**Sponsor:** Glenn Sato

**PUC-IR-28** Should standby rates similar to those implemented by HELCO (see Decision and Order No. 18575, filed on June 1, 2001, in Docket 99-0207) be adopted by HECO or MECO? Is the flat fee standby charge used by KIUC an appropriate approach for other utilities? Or should the Commission repeal and prohibit standby charges?

**Response:** The COK has no position with regard to standby rates of the HEI companies, as long as the rates or the ratemaking methodologies are not applied across-the-board to KIUC without consideration of KIUC's coop status. As stated in response to PUC-IR-23, changes to KIUC's standby rider may be required to accurately reflect costs and additional considerations such as the promotion of public or member policy. The COK does not advocate either flat fees or the repeal or ban of standby charges.

**Sponsor:** Glenn Sato

**PUC-IR-29** Please provide comments on the issues below related to standby service proposals.

- a. To the extent that standby rates are implemented (for those utilities that do not have them) or modified, should demand subscription or non-firm standby rates be included? Please comment on the viability and desirability of a non-firm or "best efforts" standby service (see e.g. County of Maui testimony, Witness Lazar at 78)

**Response:** The COK presently does not have sufficient information to have an opinion on this matter. The COK recommends that the Commission convene a workshop covering this as other subject matters such as micro-grids, impact fees, and virtual power plants, featuring Mr. Lazar and other experts.

- b. Should regulated utilities be required to charge themselves or their affiliates the same standby charges with respect to the regulated utility or affiliate owned, operated and maintained distributed generation facilities?

**Response:** With the objective of promoting a level playing field, the COK believes that it is appropriate for regulated utilities to charge themselves or their affiliates the same standby charges as imposed on similarly-situated and conditioned providers or customers of non utility-owned DG.

- c. Should standby rates be the same for all Hawaii electric utilities including KIUC?

**Response:** The COK does not believe that standby rates, if allowed, should be the same for all electric utilities in Hawai'i. It is reasonable to assume that standby rates should be based on specific costs of doing business, which may vary from utility to utility. In addition, public policy or member policy (in the case of KIUC) could require modification of the rates to promote the policy.

- d. Should supplemental service be distinguished from stand-by service and if so, should supplemental service continue to be charged at the otherwise applicable tariff?

**Response:** See the COK's response to PUC-IR-23.

**Sponsor:** Glenn Sato

**PUC-IR-30** Please describe the electric utilities' current policies regarding "hook up fees" or impact fees. Should existing policies regarding hook up fees be revised so as to remove barriers to development of distributed generation? Please comment on the County of Maui's proposal regarding impact fees. (see discussion County of Maui Testimony; e.g., Kobayashi at 12; Lazar at 18-19, 33)

**Response:** The COK defers to KIUC to describe its current policies regarding hook up or impact fees. The COK recommends a workshop wherein the County of Maui can fully explain its proposal regarding impact fees in more detail and the conditions that would dictate the application of such fees.

**Sponsor:** Glenn Sato

**PUC-IR-31** Should a systems benefit charge be adopted to recover costs of distributed generation? If yes, how should such a charge be established?

**Response:** The COK agrees with KIUC's response to this IR.

**Sponsor:** Glenn Sato

**PUC-IR-32** Will an inverted block rate design (see e.g. County of Maui, Witness Kobayashi at 12, Lazar at 86) result in better allocation of costs of new DG facilities? What are other benefits of inverted block rate design (if any) with respect to promoting DG?

**Response:** The COK supports the County of Maui's suggestion for an inverted block rate design, but also recognizes that an inverted block rate design provides more of an incentive to customers to be more efficient. We are unsure if the design would result in better allocation of costs of new DG facilities. This is also a potential workshop topic.

**Sponsor:** Glenn Sato

**PUC-IR-33** How should costs associated with distributed generation be recovered?

- a. How should the costs of fuel purchased for utility owned, customer site DG facilities be handled? Should it be included in the energy rate adjustment clause applicable to all customers or recovered in some other manner?

**Response:** If a utility-owned and customer-sited DG facility provided all power produced directly to the grid, the cost of fuel should be handled the same way it is presently, via the fuel adjustment clause applicable to all customers. However, if the power is provided to the customer at a reduced rate, the fuel price risk should be borne directly by the utility and the customer.

- b. Should regulated utilities be permitted to include in their regulated rates the cost of distributed generation equipment and its maintenance?

**Response:** If utilities are permitted to own and operate DG units, they should be permitted to include the cost of DG equipment and maintenance in their rates only if all power is provided to the grid and not at a subsidized cost to the customer.

**Sponsor:** Glenn Sato

## **Integrated Resource Plan Process**

**PUC-IR-34** How should the existing IRP process and the deployment of DG be synchronized to maximize the benefits of DG?

**Response:** The COK agrees with KIUC's response to this IR.

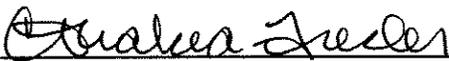
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Dated: LThu'e, Kaua'i, Hawaii, November 22, 2004.

  
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