

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

In the Matter of)
)
PUBLIC UTILITIES COMMISSION)
)
Instituting a Proceeding to Investigate)
Distributed Generation in Hawaii)
_____)

DOCKET NO. 03-0371

PUBLIC UTILITIES
COMMISSION

2004 MAY 24 P 2:04

FILED

**INFORMATION REQUESTS
FROM THE GAS COMPANY, LLC
AND
CERTIFICATE OF SERVICE**

George T. Aoki, Esq.
The Gas Company, LLC
P. O. Box 3000
Honolulu, HI 96802-3000

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

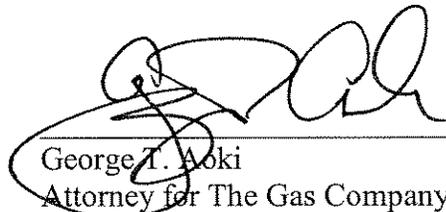
In the Matter of)
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PUBLIC UTILITIES COMMISSION)
) DOCKET NO. 03-0371
Instituting a Proceeding to Investigate)
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INFORMATION REQUESTS FROM THE GAS COMPANY, LLC

Pursuant to Prehearing Order No. 20922, The Gas Company, LLC, submits the Information Requests ("IR") listed below for response. A reference to the party to whom the IR is addressed was added immediately after the "/" in the numbering format to avoid any confusion. The General Instructions, attached, apply to all of the IR's.

1. TGC/CA-SOP-IR-1 to 17
2. TGC/COM-SOP-IR-1 to 4
3. TGC/DBEDT-SOP-IR-1 to 7
4. TGC/HECO-SOP-IR-1 to 24
5. TGC/HESS-SOP-IR-1 to 5
6. TGC/HREA-SOP-IR-1 to 5
7. TGC/JCI-SOP-IR-1 to 5
8. TGC/KIUC-SOP-IR-1 to 12

DATED at: Honolulu, Hawaii, May 24, 2004.



George T. Aoki
Attorney for The Gas Company, LLC

DOCKET NO. 03-0371
INFORMATION REQUESTS
GENERAL INSTRUCTIONS

The following are applicable to the attached Information Requests and responses thereto:

1. The term “document” as used herein shall mean any handwritten, typewritten, printed, transcribed, impressed, recorded (whether in writing or electronic) however produced or reproduced.
2. For each response, the Party should identify the person who is responsible for preparing the response as well as the witness who will be responsible for sponsoring the response during the evidentiary hearing phase of this Docket;
3. Unless otherwise specifically requested, for applicable schedules or workpapers, the Party should provide hard copies of each schedule or workpaper together with one copy of each such schedule or workpaper on electronic media in a mutually agreeable format (e.g., Excel and Quattro Pro, to name two examples); and
4. When an information request makes reference to specific documentation used by the Party to support its response, the response should consider all documents including, but not limited to, assumptions, instructions, or any other relevant authoritative source which the Party used.

DOCKET NO. 03-0371
SUBMISSION OF INFORMATION REQUESTS
BY THE GAS COMPANY
TO DIVISION OF CONSUMER ADVOCACY

- TGC/CA-SOP-IR-1
- a. Please identify the consultant(s) and consulting firm(s) the Consumer Advocate expects to seek assistance from in this proceeding.
 - b. Please provide copies of any testimony, comments, position statements, articles, memoranda or other written documents, slides, etc., prepared in part or wholly by such consultant(s) or consulting firms since enactment of PURPA in November 1978 which address the topics of (1) market power or market concentration in gas or electric wholesale or retail markets, (2) affiliate rules, standards and/or codes of conduct, (3) distributed generation or cogeneration, (4) divestiture or other structural or functional separation of the generation function by vertically integrated electric utilities, (5) unbundling of electric utility rates or services, (6) cost allocation, rate design, incentive or performance-based rates for electric or gas utilities at the state or federal level, (7) any facet of integrated resource planning, (8) back-up/standby rates or rate design and scheduled maintenance rates, (9) bypass or “uneconomic bypass,” or customer retention-type rates, and (10) competitive bidding for generation.

TGC/CA-SOP-IR-2 Ref: DCA Preliminary Statement of Position, p. 6 “The viability and feasibility of available or planned DG technologies is site specific and should be analyzed in each of the Electric Utility Company’s IRP to identify the least cost options for customers.”

Does the CA believe that the “least cost options for customers” should be based on the DG system’s installed cost or life cycle cost?

TGC/CA-SOP-IR-3 Ref: DCA Preliminary Statement of Position, p. 7, fn. 3 “In the ‘regulated’ Hawaii environment, DG participants can not presently sell electricity services directly to other customers or have DG output delivered, or ‘wheeled’ over the utility’s delivery system to other utility customers.”

- a. Does the Consumer Advocate believe that the electric utilities should be unbundling utility costs/rates/bills for generation, transmission, distribution, and ancillary services, or separately offering such services?

- b. Does the Consumer Advocate believe that third-party generators should offer ancillary services to the utilities? If so, does the Consumer Advocate believe that the rates for such services should be set at other than market prices? Please explain.
- c. Does the Consumer Advocate believe that the unbundling of electric utility costs for generation, transmission, distribution, and ancillary services, etc., is needed to facilitate wheeling of DG? Please explain.

TGC/CA-SOP-IR-4 Ref: DCA Preliminary Statement of Position, p. 9 “The Consumer Advocate believes there should not be a restriction on who may own and operate DG projects.”

- a. Please explain whether the Consumer Advocate believes that a vertically integrated, shareholder-owned electric utility company should be allowed to own and operate user-sited DG (not designed to sell electricity back to the grid) as a utility function, above the line, at other ratepayer expense. Please provide the rationale.
- b. If the Consumer Advocate believes that a vertically integrated, shareholder-owned, electric utility should be allowed to own user-sited DG not designed to sell electricity back to the grid, at other ratepayer expense, does the Consumer Advocate have a position on whether any portion of the costs of the installation (e.g., heat recovery units, control rooms, etc.) should be ineligible for recovery from other ratepayers? If so, please explain.
- c. Please explain the Consumer Advocate’s position on whether a vertically integrated, shareholder-owned, electric utility company should be allowed to own and operate user-sited DG designed not to sell electricity back to the grid, as a nonutility function, below the line, at shareholder expense. Please provide the rationale.
- d. Does the Consumer Advocate believe that a vertically integrated, shareholder-owned, electric utility should be allowed to own or operate user-sited DG designed not to deliver electricity to the grid and recover portions of the costs and revenues *either* above the line or below the line, in the sole discretion of the electric utility? Please explain.
- e. Please explain the Consumer Advocate’s position on whether a vertically integrated, shareholder-owned electric utility company should be allowed to own user-sited DG designed not to deliver electricity to the grid, as a utility affiliate, exclusively or not. Please provide the rationale.
- f. Please enumerate any other considerations the Consumer Advocate believes should be involved in determining the form of ownership by a vertically integrated, shareholder-owned, electric utility company of user-sited DG. Please explain if the Consumer

- Advocate believes its position would change based on whether or not the DG is designed to deliver electricity to the grid.
- g. Does the Consumer Advocate consider electric utilities installing user-sited DG that will convert existing gas water heating, chilling, etc. load to electricity to be engaging in a promotional program(s)?
 - h. In its October 1998 position statement in electric competition Docket No. 96-0493 at pp. 18, 42, the Consumer Advocate identified as a hurdle to competition for individual electric customer loads the need for third-party generation suppliers to site their facilities inside-the-fence, on the premises of the customer. Does the Consumer Advocate believe that the ability of a vertically integrated, shareholder-owned electric utility having market power to place utility-owned generation inside the fence, on a user's premises, is also a deterrent to competition for individual customer load? If not, why not?
 - i. Does the Consumer Advocate believe that new entrants seeking to compete in the market of providing inside-the-fence DG in Hawaii would be unfairly disadvantaged if an incumbent electric utility having market power is allowed to enter that market? If not, why not?
 - j. Does the Consumer Advocate have any concerns about the market power of the incumbent electric utilities entering the market to perform DG? Please elaborate.
 - k. Please explain if the Consumer Advocate believes that a vertically integrated, shareholder-owned, electric utility should proactively seek out opportunities to install user-sited DG at other ratepayer expense whether or not there is a system need on that portion of the system?

TGC/CA-SOP-IR-5 Ref: DCA Preliminary Statement of Position, Article III, Section D Operational Considerations, p. 11 "...ownership and operation of the DG by the Electric Utility Companies may be a lower risk, higher reliability option than other combinations of ownership and operation..."

- a. Please explain the term "risk" and what is encompassed by the term, e.g., rate risk to the user on whose site the DG is located, rate risk to the other electric utility customers, operational risk to the electric system, market risk, etc.
- b. Please explain what forms of risk the Consumer Advocate believes may be lowered by electric utility ownership, e.g., risk to the equipment itself, operations of the individual user, system instability, economic risk of project failure to the individual user or to other ratepayers who are bearing the costs of installation, ownership and operation, etc.

- c. Please explain what special ability the Consumer Advocate believes that an electric utility may possess to operate commercially available DG equipment that it believes third party operators do not have, assuming that third party operators adhere to best methods and practices and are granted utility approval for interconnection.
- d. Is the Consumer Advocate aware of any studies that have examined the risks, related to ownership, to customers other than the individual customer(s) installing utility-owned vs. non-utility owned, user-sited generation? If so, please provide information on how a copy may be obtained.

TGC/CA-SOP-IR-6 Ref: DCA Preliminary Statement of Position, Article III, Section D Operational Considerations, pp. 10-11; Article IV, Section A Reliability Issues That Need To Be Considered, p. 13

- a. Please explain if the Consumer Advocate believes that the Electric Utility Companies' resource planning criteria should include all distributed generators.
- b. Please explain if the Consumer Advocate believes that the planned reliability levels should be increased if distributed generation is included.

TGC/CA-SOP-IR-7 Ref: DCA Preliminary Statement of Position, Article III, Section E Factors Related to the Interconnection of Distributed Generation to the Electric Grid, pp. 11-13

In the case of utility-owned, user-sited DG, does the Consumer Advocate believe that regardless of whether the facility is designed to serve the user only or to deliver power to electric grid, the costs of interconnection studies, facilities analyses and upgrades to accommodate DG, and the like that are required before a particular request to interconnect may be acted upon should be borne by the utility's shareholders, the utility's other ratepayers, or the user of the DG facilities? Please explain.

TGC/CA-SOP-IR-8 Ref: DCA Preliminary Statement of Position, Article IV, Section A, p.13 "If the DG facility is not deemed to be a reliable capacity resource, then the electric utility will have to continue to maintain adequate generating reserves in order to be able to continuously serve its customers."

- a. Please explain by what criteria the DG facilities should be deemed reliable or not. Please indicate if these criteria should be applied to

all DG facilities, including those not designed or used to deliver power to the electric grid.

- b. Please explain if the Consumer Advocate believes that the electric utility would need to maintain generating reserves on a one for one basis for DG resources not deemed to be reliable. If not, please explain how an adequate amount of generating reserves should be determined.

TGC/CA-SOP-IR-9 Ref: DCA Preliminary Statement of Position, Article IV, Section B Ancillary Functions that DG Might Provide, pp. 14-17

- a. Does the Consumer Advocate believe that all forms of DG, except stand-alone but including those that are not designed or used to transmit power to the electric grid, provide ancillary functions?
- b. Please explain if the Consumer Advocate considers user-sited emergency backup generators that are not interconnected to the electric grid to be a form of DG.
- c. Does the Consumer Advocate believe that all utility-owned, user-sited DG should be subject to the utility's economic dispatch regime? Please explain.
- d. Does the Consumer Advocate believe that the cost of fuel used by an electric utility-owned, user-sited DG facility sized not to deliver electricity into the grid, should be passed through the ECAC of the electric utility?
- e. Please explain in what manner the Consumer Advocate believes that environmental factors should be balanced with the least reasonable cost analysis in evaluating the cost of fuel for electric utility-owned and operated, user-sited, DG.
- f. Does the Consumer Advocate believe that a vertically integrated, shareholder-owned, electric utility should proactively seek out opportunities to install user-sited DG at other ratepayer expense anywhere on that utility's grid, whether or not there is a need to create capacity or energy or reduce load on that portion of the system? Would this belief change if the utility-owned, user-sited DG is designed not to deliver electricity into the grid?
- g. Does the Consumer Advocate have a position on whether an electric utility should be free to approach a user with a proposal to install utility-owned DG designed not to deliver electricity into the grid, without regard to prior identification of system need for specified quantities of capacity or energy at specified locations, through or during an IRP proceeding? Please explain.
- h. Does the Consumer Advocate believe that an electric utility installing user-sited DG at other ratepayer expense should be allowed to offer the kWh generated by the utility-owned DG at a discount? If yes, how should the discount be computed?

- i. Should other electric ratepayers be required to subsidize the cost of any discount afforded to the users who received the electric-utility-owned, user-sited DG, via base rate increases in the electric utility's next rate case? In other ways? Subject to any conditions?

TGC/CA-SOP-IR-10 Ref: DCA Preliminary Statement of Position, Article IV, Sections B and C, pp.14-19

- a. How would the Consumer Advocate explain the importance of determining DG's benefit to the utility to a utility customer who is trying to find a way to lower his energy costs and is installing DG to accomplish that goal?
- b. Given the Consumer Advocate's definition of DG as generation at or near the load, please explain the statement "...the site also needs to be adjacent to the electric utility delivery system (distribution or transmission) to deliver the energy from the DG facility to the electric system."

TGC/CA-SOP-IR-11 Ref: DCA Preliminary Statement of Position, p. 20 "If a customer installs DG for its use first, then the customer makes its own economic decision by comparing the cost of the DG facility to the unbundled rates that would be implemented in conjunction with DG."

- a. Please explain the meaning of "for its use first."
- b. Please explain the meaning of "the unbundled rates that would be implemented in conjunction with DG." In particular, does this refer to existing retail rates, standby rates, rates for excess sales to the interconnecting utility, or some other rate?
 - i) Does the Consumer Advocate believe that unbundling of electric utility services will be required in order that producers of non-firm or as-available DG be required to purchase additional ancillary services from the electric utility to improve the quality of the power they are selling or wheeling? Please explain.
 - ii) Does the Consumer Advocate have a position or recommendations as to when and how this unbundling should be carried out? Please explain.
- c. Please explain if the Consumer Advocate believes that unbundling utility rates or services and assigning a regulated rate to each component will be necessary to assist with the valuation of these services in the process of competitive bidding for new generation, least cost IRP planning, and/or creating retail markets for IPPs.
- d. Please explain whether the Commission's October 21, 2003 order in Docket No. 96-0493, finding that "implementation of retail access would be premature" in Hawaii (p. 14) would affect the

- Consumer Advocate's position concerning unbundling electric utility rates and/or services in this proceeding.
- e. Does the Consumer Advocate believe that customers who install DG facilities for their own use, prior to the outcome of this proceeding, without a prior agreement for sale of power to the interconnecting utility should be treated in some special way under any rules or orders that are adopted in this proceeding? If so, please explain any such differences and the reasons for them.
 - f. Does the Consumer Advocate believe that customers who install DG for their own use after rules or orders are issued as may result from this proceeding but without a prior agreement for sale of power to the interconnecting utility should be treated in some special way under any rules or orders that are adopted in this proceeding? If so, please explain any such differences and the reasons for them.

TGC/CA-SOP-IR-12 Ref: DCA Preliminary Statement of Position, Article V, Section B Cost Allocation and Unbundling Utility Costs, pp. 21-22

- a. Please explain how separately stating transmission and generation rates, without tying them to the actual marginal costs to serve each class, "provide[s] proper price signals to DG projects."
- b. Please reconcile the stated goal of providing proper price signals to DG projects with the recommendation of doing so in a way that "does not disrupt bundled rates used by the Electric Utility Companies, and the Commission's gradual approach in addressing inter- and intra-rate class subsidies." Please explain if the Consumer Advocate is suggesting that these goals be attained simultaneously, that certain goals be subordinated to others, or that there be a phase-in of the new rate design or structure.
- c. Please describe the rate structure(s) that the Consumer Advocate believes will accommodate the goals enumerated in Section B, e.g., performance-based rates or other incentive rates, a different structure for base rates, a different structure for standby rates and scheduled maintenance rates, exit fees or reentry fees. Please explain.
- d. The Consumer Advocate discusses "establishing a cost of service based value that can be used to measure the economic feasibility of specific DG projects." Does the Consumer Advocate contemplate that the utility, the Commission, the potential customer, or the Consumer Advocate will perform this measure?
- e. When and where does the Consumer Advocate believe that such measuring (from item d) should take place?

TGC/CA-SOP-IR-13 Ref: DCA Preliminary Statement of Position, Article VI, Section A, pp. 23-24

- a. Does the Consumer Advocate have a position on how the “lowest reasonable cost” in the context of electric utility’s IRP plan is determined with respect to a DG facility that produces combined heat and power (i.e., both kWh and therms)? Please explain.
- b. In determining “lowest reasonable cost” for a potential CHP installation, does the Consumer Advocate believe that the comparison should be based on cost and quantity of the input fuel(s), the output energy, or some combination of the two? Please explain.
- c. If the potential CHP customer currently uses utility gas for its heating load rather than electricity, does the Consumer Advocate believe the lowest reasonable cost analysis changes? Please explain.
- d. Does the Consumer Advocate have a position on what level of revenues an electric utility that owns user-sited CHP should (1) charge the user, or (2) credit to its other utility customers for the sale of heat energy (therms)?
- e. Please explain if the Consumer Advocate has considered how the ratepayer impacts of shifting of load between the gas utility and electric utility through forms of distributed generation should be addressed. Please explain if ownership of the DG facility would have an impact on the treatment.

TGC/CA-SOP-IR-14 Ref: DCA Preliminary Statement of Position, Article VI, Section B Real v. Externalities (Environmental, Energy and Social Policies), p. 24

- a. Please explain if the Consumer Advocate believes that this Section should apply to all forms of DG, including those projects that are not intended, designed or used to deliver power to the electric grid.
- b. Does the Consumer Advocate believe that a DG project owned and operated by a third party (not the utility) should ideally (i.e., unconstrained by the current IRP Framework or the practices that electric utilities have traditionally followed under it) be evaluated in the electric utility’s IRP similarly to other resource alternatives?
- c. Ideally, should the externality and other costs and benefits of an electric utility-owned, user-sited CHP project on utility gas customers be considered and/or evaluated in the context of the electric utility’s IRP by the electric utility? By the Consumer Advocate? By the gas utility? By others?
- d. Please explain if the Consumer Advocate has a position on how the impacts of fuel switching, for example, shifting gas load to an electric utility owned diesel-fired DG, should be addressed.

- e. Please clarify that the statements in Section B apply only to the treatment of externalities and not to any other regulatory issues such as cost recovery.

TGC/CA-SOP-IR-15 Ref: DCA Preliminary Statement of Position, Article VII, Section C Implementation, p. 28

- a. Does the Consumer Advocate envision a change in rate design philosophy, i.e., from cost of service to some other basis?
- b. By what mechanism does the Consumer Advocate envision appropriate changes to the utility companies' rate structures, e.g., general rate case, etc.?

TGC/CA-SOP-IR-16 Ref: HECO Preliminary Statement of Position, Docket No. 03-0371, p. 15: "...in the case of customer-sited CHP systems and DG owned by third-parties, the Commission's role is to review whether the retail sale of electricity by such third-party owners falls within the purview of the public utility statutes. To date, the Companies have not yet taken the position that these third-party owned installations should be regulated by the Commission, due to the relatively small number of such installations."

- a. Does the Consumer Advocate have a position on whether electricity generated by a CHP provider, behind the fence, on the premises of a user, for use by the user and not to deliver electricity to the grid, "falls within the purview of the public utility statutes"? Please explain. Does your answer change if the arrangement between the user and the third-party CHP provider is on a "share-the-savings" basis?
- b. Please list every instance of which the Consumer Advocate is aware where a cogenerator producing power for consumption on the premises sought and received a determination from the Hawaii PUC that it was not holding itself out as engaged in the business of supplying its product or service to the public as a class or to any limited portion of the public and therefore was not a public utility.

TGC/CA-SOP-IR-17 Ref: Docket No. 03-0366 application, Exhibit C, p. 4, footnote 2 stating that the Consumer Advocate has proposed a more gradual elimination of class cross subsidies than the utilities.

- a. Please provide copies of any Commission precedent or other authority under which the Consumer Advocate has been operating in the elimination of class cross subsidies.
- b. Please explain the Consumer Advocate's position on the period of time over which class cross subsidies will be eliminated in light of

new options, such as DG, now available to certain commercial and large power customers.

- c. Please explain the Consumer Advocate's position on unbundling as related to the gradual elimination of class cross subsidies.

DOCKET NO. 03-0371
SUBMISSION OF INFORMATION REQUESTS
BY THE GAS COMPANY
TO COUNTY OF MAUI

TGC/COM-SOP-IR-1

Ref: CoM Preliminary Statement of Position

Please explain if County of Maui intends its statements to apply to all forms and types of distributed generation installations, including those facilities that are not designed or used to deliver power to the electric utility grid, or if it believes that its position will differentiate between the forms and types of distributed generation.

TGC/COM-SOP-IR-2

Ref: CoM Preliminary Statement of Position, Section 4
Developing a “Virtual” Utility Backup Power Plant

- a. Who does County of Maui believe should own these facilities?
- b. Does County of Maui believe that maintenance, operation and/or fueling of these facilities should be open to competition? Please explain.
- c. Please explain if County of Maui believes that these facilities would become regulated facilities, subject to Commission oversight.

TGC/COM-SOP-IR-3

Ref: CoM Preliminary Statement of Position, p.4 “...fuel switching from diesel to gaseous fuels, biodiesel, or other biofuels could be required.”

- a. Please explain what is meant by “fuel switching.”
- b. Please explain by what authority fuel switching could be required and what entity would be mandating the switching.
- c. Please explain if County of Maui believes that the owner of the facility should be free to choose fuel type, provided all permitting and operating requirements are met.

TGC/COM-SOP-IR-4

Ref: CoM Preliminary Statement of Position, p.5 “...eliminate negative impacts to the electric utility.”

- a. Please explain if County of Maui is aware of the potential cost impacts of forms of DG on gas utility customers and the gas utility.
- b. Please explain how County of Maui believes that the shifting of load between the gas utility and electric utility through distributed generation should be addressed.
- c. Please explain if the County of Maui believes that negative impacts to other utilities and utility customers also merit consideration.

DOCKET NO. 03-0371
SUBMISSION OF INFORMATION REQUESTS
BY THE GAS COMPANY
TO DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

TGC/DBEDT-SOP-IR-1

Ref: DBEDT Preliminary Statement of Position, Issue 2, p. 8
“...DBEDT believes that electric utility customers/end users, energy service companies/DG vendors, and the electric utilities should be allowed to own and operate DG projects.”

- a. In its October 1998 Statement of Position in Docket No. 96-0493, DBEDT proposed that generation should be provided by independent subsidiaries for electric utilities, “in a manner to ensure that any competitors would be on an equal footing with the competing element of the former utility” for access to customers, facilities, etc. DBEDT likewise identified a need to mitigate the generation market power of vertically integrated incumbent electric utilities via organizational separation and the application of strict codes of conduct governing affiliate transactions, etc. (ES-5, 7, 9, SOP 19, 25, 38).
 - i) Please explain or reconcile these positions.
 - ii) Please explain DBEDT’s position on whether a vertically integrated, shareholder-owned, electric utility company should be allowed to own and operate user-sited DG designed not to sell electricity back to the grid, as a utility function, above the line, at other ratepayer expense, and give the rationale.
 - iii) Please explain DBEDT’s position on whether a vertically integrated, shareholder-owned, electric utility company should be allowed to own and operate user-sited DG designed not to deliver electricity to the grid, as a non-utility function, below the line, at shareholder expense, and give the rationale.
 - iv) Please explain DBEDT’s position on whether a vertically integrated, shareholder-owned electric utility company should be allowed to own user-sited DG designed not to deliver electricity to the grid, exclusively as a utility affiliate and give the rationale.
 - v) Does DBEDT believe that new entrants to the market of providing user-sited DG in Hawaii would be discouraged if an incumbent electric utility

having market power is allowed to enter that market? If not, why not?

- vi) Does DBEDT believe that there should be any conditions on incumbent electric utilities having market power entering into the market of providing user-sited DG? Please explain. Does your answer change if the user-sited DG is not designed to deliver electricity to the grid?

TGC/DBEDT-SOP-IR-2 In its October 1998 Statement of Position in Docket No. 96-0493, DBEDT stated, "A critical first step to competition is a clear decision that all new generation requirements will be subjected to competitive bidding." (p. 6).

- a. Does DBEDT envision some form of competitive bidding program as a precursor or precondition for the utility installing, owning and operating user-sited DG that is designed not to deliver electricity into the grid? Please explain.
- b. Does the response change if the DG is designed to deliver electricity to the grid on an emergency, peaking, as available, or baseloaded basis? Please explain.

TGC/DBEDT-SOP-IR-3

- a. Will DBEDT sponsor a witness, either in house or a consultant, for purposes of responding to questions about the positions, ideas, and content of the resources contained in its preliminary statement of position?
- b. Please identify any witness(es), consultant(s) and consulting firm(s) DBEDT is considering or expecting to sponsor in testimony, final statements of position or rebuttal, workshops, or otherwise in this proceeding or while this proceeding is pending a decision.
- c. Please provide copies of any testimony, comments, position statements, articles, memoranda or other written documents, slides, etc., prepared in part or wholly by such in house witnesses or consultant(s) or consulting firms since enactment of PURPA in November 1978 which address the topics of (1) market power or market concentration in gas or electric wholesale or retail markets, (2) affiliate rules, standards and/or codes of conduct, (3) distributed generation or cogeneration/CHP, (4) divestiture or other structural or functional separation of the generation function by vertically integrated electric utilities, (5) unbundling of electric utility rates or services, (6) cost

allocation, rate design, incentive or performance-based rates for electric or gas utilities at the state or federal level, (7) any facet of integrated resource planning, (8) back-up/standby rates or rate design and scheduled maintenance rates, (9) bypass or “uneconomic bypass,” or customer retention-type rates, and (10) competitive bidding for generation.

- TGC/DBEDT-SOP-IR-4 Ref: DBEDT Preliminary Statement of Position, Issue 3, p. 9
- a. Please explain in detail the type of incentive mechanism DBEDT recommends for “targeted areas,” including but not limited to how such areas will be selected, how incentives will be determined and paid, eligibility, procurement, monitoring, and how the mechanism will maximize total benefits.
 - b. Please explain how this proposed incentive for non-utility DG squares with the statements on page 8 regarding electric utility ownership of DG. Please provide any documents analyzing or discussing this issue.

- TGC/DBEDT-SOP-IR-5 Ref: DBEDT Preliminary Statement of Position, Issue 5, pp. 11-12
- Does DBEDT recommend the RMI resource planning and rate design changes quoted on the cited pages? If so, please explain how those changes should be implemented and in what forum. If not, please explain DBEDT’s position on rate design in this proceeding.

- TGC/DBEDT-SOP-IR-6 Ref: DBEDT Preliminary Statement of Position, Customer Retention Rates, p. 20
- a. Please explain in detail why allowing utility ownership of DG makes it appropriate to eliminate customer retention rates.
 - b. Does DBEDT support elimination of such rates if utility are not permitted to own DG? Why or why not?

- TGC/DBEDT-SOP-IR-7 Ref: DBEDT Preliminary Statement of Position, Issue 6, p. 23
“We note that the HECO utilities are planning for forecasted combined heat and power for the first time in IRP-3. We believe that this should be continued.”

Please state whether DBEDT takes the position that the electric utilities' IRP process should take into account third-party-owned DG as well as utility-owned DG, and give the rationale.

DOCKET NO. 03-0371
SUBMISSION OF INFORMATION REQUESTS
BY THE GAS COMPANY
TO HAWAIIAN ELECTRIC COMPANY, INC., HAWAII ELECTRIC LIGHT
COMPANY, INC., MAUI ELECTRIC COMPANY, LTD.

- TGC/HECO-SOP-IR-1
- a. Please identify the consultant(s) and/or consulting firm(s) HECO, HELCO, and MECO expect to use to supply or assist in the formation of testimony, statements of position, exhibits, etc. in this proceeding.
 - b. Please provide copies of any testimony, comments, position statements, articles, memoranda or other written documents, slides, etc., prepared in part or wholly by such witnesses, consultant(s) or consulting firms since enactment of PURPA in November 1978 which address the topics of (1) market power or market concentration in gas or electric wholesale or retail markets, (2) affiliate rules, standards and/or codes of conduct, (3) distributed generation or cogeneration, (4) divestiture or other structural or functional separation of the generation function by vertically integrated electric utilities, (5) unbundling of electric utility rates or services, (6) cost allocation, rate design, incentive or performance-based rates for electric or gas utilities at the state or federal level, (7) any facet of integrated resource planning, (8) back-up/standby rates or rate design and scheduled maintenance rates, (9) bypass or “uneconomic bypass,” or customer retention-type rates, and (10) competitive bidding for generation.

TGC/HECO-SOP-IR-2 Ref: HECO Preliminary Statement of Position

Please provide an electronic version of HECO, MECO, and HELCO’s current tariff rules and schedules for purposes of facilitating responses to the Commission’s issue 13, regarding changes needed to utility rules and practices to facilitate the successful deployment of DG.

TGC/HECO-SOP-IR-3 Ref: HECO Preliminary Statement of Position

Please list every reason or consideration that has entered into the tentative decision of HECO/MECO/HELCO not to participate in

the Hawaii market for DG if required to do so only through a separately capitalized, separately staffed affiliate.

TGC/HECO-SOP-IR-4

Ref: HECO Preliminary Statement of Position

Please provide copies of all documents, studies, etc. analyzing HECO, MECO and/or HELCO's penetration of the market for electric generation on Oahu, Maui and Hawaii, on all islands where they do business, or broken down by county, or collectively.

TGC/HECO-SOP-IR-5

Ref: HECO Preliminary Statement of Position, p.1 "In order for a form of DG to be "feasible and viable for Hawaii", it must be (1) technically feasible, (2) commercially available, (3) economically viable (i.e., cost-effective versus other options), (4) price competitive in the short-term, (5) sustainable in the long-term (i.e., backed up by adequate infrastructure support with respect to O&M and fuel), (6) able to address site-specific constraints (e.g, with respect to permitting) and (7) able to meet the perceived needs of customers.

- a. In the context of the proceeding statement, please define the terms "technically feasible" and "commercially available".
- b. Please explain how a project would be defined as "economically viable." Can more than one option be considered "economically viable?" Please explain why or why not.
- c. Please explain what is meant by "price competitive" and define "short-term" and "long-term."

TGC/HECO-SOP-IR-6

Ref: HECO Preliminary Statement of Position, pp.1-2 "As indicated by current utility and customer applications, DG uses in Hawaii have included...(4) commercial customer-sited generation for combined heat and power ('CHP') systems...only."

Please identify any and all commercial customer-sited generation for combined heat and power systems that are owned by the Utility or included in its rate base.

TGC/HECO-SOP-IR-7

Ref: HECO Preliminary Statement of Position, Issue 2, p. 7, types of DG

- a. Is HECO aware of any commercial and/or industrial user-sited, types 4 and 5 CHP units owned by a vertically integrated, shareholder-owned, electric utility (not including any electric utility affiliate) in the U.S.? To the extent known, please state whether such CHP is sized so as to deliver electricity to the grid. To the extent known, state the jurisdictions, what percentage of user-sited CHP in the U.S. is owned by a vertically integrated, shareholder-owned, electric utility in whole or in part.
- b. Is HECO aware of any commercial and/or industrial user-sited, types 4 and 5 CHP units owned by an electric utility affiliate in the U.S.? To the extent known, please state whether such CHP is sized so as to deliver electricity to the grid. To the extent known, state the jurisdictions, what percentage of user-sited CHP in the U.S. is owned in whole or in part by an electric utility affiliate.

TGC/HECO-SOP-IR-8

Ref: HECO Preliminary Statement of Position, pp. 9, 27 concerning benefits of utility ownership of CHP as listed in Docket No. 03-0366, and technical and economic feasibility of 77 MW of CHP to be installed over the next 20 years.

- a. Please provide an electronic copy of the workpapers and exhibits to the application in Docket No. 03-0366, with formulas intact, for purposes of verifying the support for claimed benefits, technical and economic feasibility, etc. in connection with that application.
- b. Please provide copies of any customer impact studies that demonstrate the effect of that 77 MW of CHP or any portion thereof, if performed by third parties rather than the utility.
- c. Please provide copies of any studies done on the ability of the electric utilities to “make back” any portion of the potential load loss by converting gas, diesel, naphtha, solar, or other alternative load of the customers to electricity and/or diesel-fired CHP.
- d. Please identify any of the customers represented by that 77 MW of CHP who have existing gas load.

TGC/HECO-SOP-IR-9

Ref: HECO Preliminary Statement of Position, p 9 “The provision of CHP services by utilities is a natural step in the evolution of electric utility services, and electric utility customers...utilities.”

Do the Utilities envision installing, owning and operating other HVAC equipment (i.e, chillers, boilers, venting, etc...) as part of the "evolution?"

TGC/HECO-SOP-IR-10

Ref: HECO Preliminary Statement of Position. pp. 9-10, 14: HECO Companies will request approval under Rule No. 4 for approval on a contract-by-contract basis.

Will the HECO Companies agree to notify other parties to this docket until a Commission decision is reached, when they are filing for approval of user-sited DG under Rule No. 4, so affected parties can decide whether to attempt to intervene and comment on unresolved issues?

TGC/HECO-SOP-IR-11

Ref: HECO Preliminary Statement of Position, p. 10 "The utilities' participation on a regulated basis will ensure that the interests of all customers are taken into consideration....The independent implementation of DG/CHP results in a loss of revenue to the utility and all customers are then ultimately adversely impacted by the lack of contribution to fixed costs from customers that implement third party DG/CHP."

Energy consumers have alternative forms of energy efficient technologies, aside from DG/CHP, available to choose from that would result in lower revenues to the utility. These alternatives, like DG/CHP, also threaten the utility's revenue. Is the utility looking to design, install, own, operate and maintain these alternative forms of energy as a way to protect the interests of non-participants? Please explain why or why not.

TGC/HECO-SOP-IR-12

Ref: HECO Preliminary Statement of Position, p. 10: "Benefits should be available to the customers for whom DG/CHP is a viable option...."

- a. Please state whether the HECO companies intend to use their DG/CHP program to install user-sited CHP that does not deliver electricity to the grid (1) as a customer retention program, designed to keep third party CHP providers from "stealing" load currently served by the electric utilities, or (2) only at places on the electric system that could benefit from load reduction due to congestion or circuit overloads, or require voltage support for customers at the end of the line, etc.

- b. "... the Companies have made a limited number of proposals to customers to install and operate utility-owned CHP systems at the customers' sites..." How many such proposals (successful or unsuccessful) have been made? Of these, how many users were approached by the utility or Hess in the first instance, rather than having contacted the utility or Hess to inquire about the possibility of installing user-site CHP? How many users were made aware of the utility's intention to enter the business for providing user-site DG during DSM or conservation audits?
- c. Have the employees and contractors working with individual customers on letters of intent, memoranda of understanding, engineering studies, design work, training, preparation of the application and exhibits, and the like, recorded their time to utility or nonutility accounts? Please explain how time, expenses and overheads of company employees and outside contractors (including Hess employees, outside attorneys, and others) in conjunction with embarking on this new business venture have been accounted for.

TGC/HECO-SOP-IR-13

Ref: HECO Preliminary Statement of Position, p. 11 "...let the utility do what it does best...Manage fuel procurement for power facilities". TGC is concerned that the utilities are leveraging their market power as large buyers of fuel for central generation in the purchase of fuel in entering the new business of user-sited DG.

Please state whether the HECO companies intend to serve user-site CHP facilities with diesel purchased under the same contracts that supply the fuel used for central generation. If so, please provide copies of such contracts.

TGC/HECO-SOP-IR-14

Ref: HECO Preliminary Statement of Position, p. 15: "...in the case of customer-sited CHP systems and DG owned by third-parties, the Commission's role is to review whether the retail sale of electricity by such third-party owners falls within the purview of the public utility statutes. To date, the Companies have not yet taken the position that these third-party owned installations should be regulated by the Commission, due to the relatively small number of such installations."

Please list every instance of which the HECO Companies are aware where (1) an IPP selling to a utility, or (2) a cogenerator producing power for consumption on the premises, sought and

received a determination from the Hawaii PUC that it was not a public utility.

TGC/HECO-SOP-IR-15

Ref: HECO Preliminary Statement of Position, Issue 4, pp. 16-17
“If a third-party or a customer installs DG, the load to be served by the utility is reduced and the utility loses the portion of the rate normally charged to the customer to cover fixed costs. When that happens, those costs must be borne by other ratepayers when rates are adjusted at the next rate case.”

- a. Please provide copies of any cost-shifting or other DG/CHP impact studies performed by the HECO companies, in electronic format, with formulas intact. Please state all assumptions used in preparing such studies and the bases therefor.
- b. Do the HECO companies agree that the same potential load loss impacts and shifting of costs to other utility gas ratepayers can occur when the **electric utilities**, customers, or third-party DG providers, install DG/CHP at the sites of users who have existing utility gas load?

TGC/HECO-SOP-IR-16

Ref: HECO Preliminary Statement of Position, Issue 10, pp. 30-31 rate design and cost allocation issues; see also Docket No. 03-0366 application, Ex. C, p. 4, footnote 2

- a. Please state whether, in the HECO companies' view, currently effective rate design has created an artificial demand for user-sited CHP by giving distorted signals to commercial and large power customers as to the cost of grid-furnished electric power.
- b. Please provide copies of any studies, analyses, etc. that show the impact on commercial, large power, and other rates on Maui, Hawaii and Oahu (where the Docket No. 03-0366 program is proposed to be effective) of (i) moving to class cost of service and/or (ii) recovering only fuel and variable costs in the energy charge, and/or other changes in rate design that could mitigate the problem of uneconomic bypass and concomitant revenue shortfalls.
- c. If each of the HECO companies were allowed to adjust their commercial and large power rates in their next rate cases to reflect the actual cost of serving the commercial and large power classes, please estimate, by island, the percentage of customers eligible under the Docket No. 03-0366 program for whom utility-owned, user-sited CHP

- would no longer be economic to install, due to insufficient savings over the rate for service from the utility grid.
- d. If the HECO companies were each allowed to adjust their commercial and large power rates in their next rate cases to reflect the actual cost of serving those classes of customers, please estimate, by island, the amount of the 77 MW of utility-owned user-sited CHP estimated in the Docket No. 03-0366 program that would no longer be economic to install, due to insufficient savings over the rate for service from the utility grid.

TGC/HECO-SOP-IR-17

Ref: HECO Preliminary Statement of Position, p. 31 “The loss of a significant amount of load from the Company’s system due to uneconomic bypass would have an immediate and significant impact on the magnitude of the Company’s revenues....”

- a. In light of the HECO companies’ continued concerns about uneconomic bypass, do the HECO companies have any plans to request either rate cap or revenue cap PBR within the next five years? Is the companies’ proposed CHP program an alternative to PBR?
- b. The Freedman report for the Hawaii Energy Policy Forum set forth several alternatives for decoupling revenues from kWh sales (pp. 62-65). Do the HECO companies have any plans to request a form of decoupling akin to the types described in that report over the next two years?
- c. Do the HECO companies have any cost-cutting or other plans in effect to mitigate the impact of uneconomic bypass on remaining customers’ rates, outside the proposal for the utilities to own and operate user-site CHP? Please explain.

TGC/HECO-SOP-IR-18

Ref: HECO Preliminary Statement of Position, p. 32, re pricing under Rate Schedule CHP per the application in Docket No. 03-0366, pp. 22-31.

The CHP Program contemplates a fixed discount or reduction in the price per kWh of 1 cent for HECO, 1.6 cents for HELCO, and 1.5 cents for MECO for the electricity generated by the CHP unit. These discounts assume base prices under currently approved tariffs.

- a. If the base rates for all commercial and large power customers were established based on the true costs to serve these classes, how would the amount of the “fixed discount” under the CHP Program be calculated, and what

amount of discount would apply to each of Oahu, Maui, and Hawaii?

- b. If the base rates for all commercial and large power customers were established based on the true costs to serve these classes, at what level would the proposed base thermal charges of 40 cents for HECO, 45 cents for MECO, and 50 cents for HELCO be set? That is, would the HECO companies merely revamp the program to produce 10-14% savings for the customers from the new, lower, base rates, would they increase the amount of customer savings coming from the thermal component, or how would the program's pricing be altered to reflect the new, lower electricity rates for the eligible customers?
- c. If Schedule CHP and the five-year program in Docket No. 03-0366 are approved as filed, how will the fixed discounts for each of Maui, Oahu, and Hawaii be recalculated in each company's next rate case case? E.g., will discounts continue? Will the discounts be cost-based, value-of-site-based, loosely system-benefit-based, loosely environmental-benefit-based, market-based, geared to meet the competition, designed to achieve a certain target level of new CHP installations, or how?
- d. The HECO companies propose a minimum guaranteed annual electrical discount based on an 85% availability of the CHP system. (1) Is the 85% calculated based on the system as a whole being available 85% of the time, or each CHP unit being available 85% of the time? (2) If either the system or an individual unit is not available 85% of the time, do shareholders or other customers make good on the guaranteed savings floor for participants in Schedule CHP?

TGC/HECO-SOP-IR-19

Ref: HECO Preliminary Statement of Position, p. 36, "The process of demonstrating ratepayer benefits should be standardized."

Please set forth the HECO companies' proposal for standardizing the process of demonstrating ratepayer benefits from DG. Please state whether ratepayer benefits will be determined both before and after any installations are made.

TGC/HECO-SOP-IR-20

Ref: HECO Preliminary Statement of Position, p. 39, re misunderstandings of the teaming agreement.

- a. Please describe all conditions attached to becoming a “preferred supplier” to HECO.
- b. Please state whether the HECO companies now interpret the Hess teaming agreement to give Hess an exclusive right, a right of first refusal, or otherwise, to provide design, installation and/or other services, separate and apart from equipment, CHP installations of 1 MW or under.

TGC/HECO-SOP-IR-21

Ref: HECO Preliminary Statement of Position, Docket No. 03-0366 Ex. E p. 6, Schedule CHP Sheet 66E, Section 2 and Application p. 41.

If a potential candidate for user-site, utility-owned CHP signs a letter of intent providing for reimbursement of utility engineering expense if a final design does not achieve approximately the same level of savings as the conceptual proposal, or if the utility decides not to continue with development of the project, the utility will be responsible for the engineering costs. (p. 41). Is the proposal that the electric utility shareholders or the other ratepayers will bear those costs?

TGC/HECO-SOP-IR-22

Ref: Combined Heat and Power Agreement Section 3.5, Docket No. 03-0366 Ex. E, p. 16

- a. What costs will the HECO companies take into account in determining the total actual cost of fuel separately metered and sold to the customer for uses *other than* to power utility-owned CHP equipment?
- b. If the chosen fuel is propane, please state what costs the HECO companies will take into account in determining the total actual cost of fuel separately metered and sold to the customer for uses *other than* to power utility-owned CHP equipment.

TGC/HECO-SOP-IR-23

Ref: Docket No. 03-0366, Ex. C, page 9, concerning organizational changes implemented at HECO to pursue utility-owned CHP

Please provide a current organizational chart that includes at least the following departments and their reporting relationships: Energy Solutions, Energy Projects, Customer Installations, Energy Services, Technology, Integrated Resources Planning, the department(s) responsible for doing engineering studies for and approving third-party DG interconnection requests, the MECO

Power Supply Department, the department(s) responsible for qualifying customers for, approving and offering customer retention discounts, the departments responsible for conducting or overseeing energy conservation audits and administering or offering DSM funds.

TGC/HECO-SOP-IR-24

Ref: Docket No. 03-0366 CHP application, Exhibit H

- a. Exhibit H specifically excludes the labor costs of the members of the Energy Products Department. Please state which other employees' labor costs, including Energy Solutions, Customer Installations, Energy Services, Technology, IRP, Interconnections, MECO Power Supply, etc., were included in the Exhibit H analysis. If not, please provide an estimate of their costs and state any assumptions used.
- b. In doing their economic analyses, the HECO companies used a utility system CHP availability of 91%, or 8,000 hours per year. Please state the basis for this figure.

DOCKET NO. 03-0371
SUBMISSION OF INFORMATION REQUESTS
BY THE GAS COMPANY
TO HESS MICROGEN, LLC

TGC/HESS-SOP-IR-1

Ref: Hess Preliminary Statement of Position, Article I, Section 2, p. 2 “DG projects should be owned and operated by both regulated electric utility companies (“utilities”) and private companies to provide customers with the most options.”

- a. Please identify other jurisdictions of which Hess is aware in which state commissions have allowed electric utilities to own small (1 MW or less) user-sited CHP that do not deliver electricity into the grid. Does Hess do business in any such jurisdictions? If so, does it have a “teaming-type agreement” in place in such jurisdictions?
- b. Please state whether, to Hess’ knowledge, most mainland electric utilities participate in the market for providing user-sited DG that do not deliver electricity to the grid, if at all, via a separately capitalized, separately staffed affiliate.
- c. Please state whether, prior to or after the Hawaii “teaming agreement” went into effect, electric utility representatives attempted to contact a potential DG user that Hess was working with, in an effort to provide a utility or utility-owned DG alternative. Explain the effect of the teaming agreement on such incidences.

TGC/HESS-SOP-IR-2

Ref: Hess Preliminary Statement of Position, Issue 3, p. 3 “For example, the utilities should not be allowed to charge customers of the private companies standby charges or other fees and charges that it does not charge its DG customers.”

Does Hess have a position on an appropriate design for standby rates and scheduled maintenance rates in Hawaii? If so, please describe.

TGC/HESS-SOP-IR-3

Ref: Hess Preliminary Statement of Position

- a. As a result of the Teaming Agreement of 2/11/03, Hess is offering its products and services to the HECO companies for them to provide service to certain commercial and industrial customers within Hawaii, rather than offering those products and services directly to the customers.

Please provide the prices or pricing schedules, pursuant to which, under each Sections 4.1 and 5.1 of the teaming agreement, Hess is offering each system or service to HECO, for purposes of comparison of such prices with (1) the prices available from other vendors of CHP equipment, and (2) the prices negotiated between HECO and the Joint Customer. (Note that Ex. A to PUR-IR-7 in IC-03-098 lacks pricing information.)

- b. Please provide the prices or pricing schedules pursuant to which Hess would provide systems or services directly to the individual customers, assuming the HECO companies declined to pursue them as Joint Customers or HECO Customers.

TGC/HESS-SOP-IR-4

Ref: Hess Preliminary Statement of Position, Article II, Section 1, p. 4 “The use of DG in Hawaii will delay and/or replace transmission and distribution (“T&D”) facilities needed by the utilities. Thus, reducing the capital cost of the utilities, and in turn, reducing the rates for ratepayers.”; p.6 “DG will also delay and/or replace power plants and central station generation...”

- a. Does Hess agree that the potential for load-factor improvements, use of synchronous generators for voltage support, and reductions in T&D line losses are independent of the ownership of the DG by the electric utility or not?
- b. Hess cites as a benefit the potential for onsite CHP using synchronous generators to provide voltage support to areas of the electric system where voltage support is tenuous. Yet in Docket No. 03-0366, the HECO companies, teaming with Hess, propose that utility-owned generation installed at Joint Customers’ sites will be via inductive, rather than synchronous, generators. Is this potential system benefit therefore unrealized when the electric utility owns CHP in Hawaii?

TGC/HESS-SOP-IR-5

Ref: Hess Preliminary Statement of Position, Article II, Section 2, p. 5 “DG systems are more reliable today than ever before”

- a. For purposes of formulating a more cost-based standby rate methodology, please provide the forced outage rate(s) (FOR) for Hess- made CHP systems and units currently operating in Hawaii. TGC is willing to take this information either on an aggregate basis for all such units or on a unit-by-unit or system-by-system basis. When

Hess-made CHP units are operated by others, please so indicate.

- b. Please provide the forced outage rate for all Hess CHP systems and units currently in operation nationwide. TGC is willing to take this information either on an aggregate basis for all such units or on a unit-by-unit or system-by-system basis. When Hess-made CHP units are operated by others, please so indicate.
- c. Please explain any qualifiers to the above-referenced FORs, such as “assuming an operation schedule of 7800 hours per year” or other.
- d. Hess indicates that a contingent of three of its units will be more reliable than the utilities (p. 5). Please provide all support for this statement, including both the Hess outage figures and the figures for the utilities and their sources.

DOCKET NO. 03-0371
SUBMISSION OF INFORMATION REQUESTS
BY THE GAS COMPANY
TO HAWAII RENEWABLE ENERGY ALLIANCE

TGC/HREA-SOP-IR-1

Ref: HREA Preliminary Statement of Position, p.7

- a. If a rebate program were to be offered, who does HREA believe should receive the rebate, e.g., site-owner, electric customer, DG owner, etc.?
- b. Please explain what market barrier HREA believes a rebate program would overcome, given the current interest level in distributed generation installations.
- c. Does HREA believe that a regulated DG program can and/or should discriminate among similarly situated customers, given the generally compact island utility systems?

TGC/HREA-SOP-IR-2

Ref: HREA Preliminary Statement of Position, p. 8, Impact Issue 4

- a. Does HREA believe that all, none or some of the distributed generation facilities should be treated as a generation resource and factored into planning for generation reliability?
- b. Does HREA believe that all, none or some of the distributed generation facilities should be treated as a load modifier, similar to DSM programs?
- c. Does HREA believe that an electric utility's planning criteria should be modified to include distributed generation?
- d. Please explain if HREA believes that negative impacts to all energy utility ratepayers should be considered.
- e. Please explain if HREA believes that mitigating negative impacts to electric utility customers who are also gas utility customers is included in its position.

TGC/HREA-SOP-IR-3

Ref: HREA Preliminary Statement of Position, Section 6, p. 10

Does HREA believe that all forms of distributed generation installations, including those that require supplemental and/or backup service from the electric utility, will offer the deferred and avoided costs listed or would the impacts differ? Please explain.

TGC/HREA-SOP-IR-4

Ref: HREA Preliminary Statement of Position, Section 9, p.12
“We believe it is appropriate for the PUC to qualify or approve DG facilities for interconnection with the electric utility grid.”

- a. Does HREA believe that all DG facilities should require Commission approval, regardless of ownership?
- b. Does HREA believe that all DG facilities should be regulated?
- c. Please explain if HREA believes that Commission oversight should vary for the different forms of distributed generation, e.g., backup generation, those not designed or used to deliver power to the grid, those requesting utility backup service, etc.
- d. Please explain if HREA believes that standards other than technical standards (e.g., ownership) should be used to determine qualifying interconnections.
- e. Please explain if HREA intends these interconnection restrictions to apply to all types of DG installations, including those not designed or used to deliver power to the utility grid.

TGC/HREA-SOP-IR-5

Ref: HREA Preliminary Statement of Position, p. 14 Cost Allocation Issues, Section 11, pp.14-15

- a. Please explain if HREA is aware of the potential cost impacts of forms of DG on gas utility customers and the gas utility.
- b. Please explain how HREA believes that the shifting of load between the gas utility and electric utility through distributed generation should be addressed.
- c. Please explain how HREA believes that an optimal mix of DG measures should be determined and enforced.

DOCKET NO. 03-0371
SUBMISSION OF INFORMATION REQUESTS
BY THE GAS COMPANY
TO JOHNSON CONTROLS, INC.

TGC/JCI-SOP-IR-1 Ref: JCI Preliminary Statement of Position

- a. For purposes of establishing more cost-based standby rates, please provide the forced outage rate (FOR) of any fossil fuel fired CHP facilities you currently operate in Hawaii. TGC is willing to accept this information on a unit-by-unit basis, facility-by-facility, or consolidated statewide. Please include any qualifiers or explanations deemed necessary.
- b. Please provide the average FOR for fossil-fired CHP facilities you currently operate on the mainland. Please provide any qualifiers or explanations deemed necessary.

TGC/JCI-SOP-IR-2 Ref: JCI Preliminary Statement of Position, p. 6 "...as a result of their regulated activities, regulated electric utilities currently have a "leg up" on third-party distributed generation suppliers because they have immediate access to useful information concerning existing customers that are likely to install and/or use distributed generation services, as well as immediate and detailed access concerning the status of the electric system and plans for its future."

Does Johnson Controls, Inc. believe that this advantage implies that DG should be installed only in locations where the utility sees a benefit for it?

TGC/JCI-SOP-IR-3 Ref: JCI Preliminary Statement of Position, p. 7 "...if regulated electric utilities are permitted to use ratepayer funds to subsidize distributed generation projects, unregulated entities will be unable to compete, and will drop out of the market."

- a. Please state whether JCI does business in any other jurisdiction where vertically integrated, shareholder-owned electric utilities are allowed to provide user-sited DG sized not to deliver electricity to the grid on an above-the-line basis, i.e., using other ratepayer funds.
- b. Please identify other jurisdictions of which JCI is aware in which state commission have allowed electric utilities to own small (1 MW or less) user-sited CHP sized so as not to deliver electricity into the grid.

- c. Please state whether, to JCI's knowledge, most mainland electric utilities participate in the market for providing user-sited DG sized so as not to deliver electricity to the grid, if at all, via a separately capitalized, separately staffed affiliate.
- d. Does JCI do business in any jurisdiction where electric utility affiliates in the business of providing user-site DG are not governed by affiliate rules, codes of conduct, or reporting requirements? If so, does JCI generally find it easier to do business in a jurisdiction where electric utility affiliates are subjected to such standards, rules and reporting requirements?

TGC/JCI-SOP-IR-4 Ref: JCI Preliminary Statement of Position, p. 8 "...use of a separate affiliate would at least reduce the risk that the regulated electric utilities could use information gained through their regulated operations or their stature as the dominant owners of electric generation to gain an unfair competitive advantage in the distributed generation market, and would reduce the risks associated with cross subsidization of distributed generation projects by ratepayers."

Can Johnson Controls, Inc. describe an instance where the electric utility has unfairly used their status as a regulated utility to influence a customer's decision with respect to the installation of distributed generation equipment?

TGC/JCI-SOP-IR-5 Ref: JCI Preliminary Statement of Position, Article IV, Section 2.b(2) Limitations On Services That Regulated Electric Utilities Could Provide in Conjunction With Distributed Generation Projects, pp. 18-20

Please discuss how Johnson Controls, Inc. would propose to compete against the electric utility for projects involving the installation of heating, ventilation and air conditioning systems when the utility offers the equipment as part of a DG project.

DOCKET NO. 03-0371
SUBMISSION OF INFORMATION REQUESTS
BY THE GAS COMPANY
TO KAUAI ISLAND UTILITY COOPERATIVE

TGC/KIUC-SOP-IR-1

Ref: KIUC Preliminary Statement of Position

Please provide an electronic version of KIUC's current tariff rules and schedules for purposes of facilitating responses to the Commission's issue 13, regarding changes needed to utility rules and practices to facilitate the successful deployment of DG.

TGC/KIUC-SOP-IR-2

Ref: HECO Preliminary Statement of Position, p. 15: "...in the case of customer-sited CHP systems and DG owned by third-parties, the Commission's role is to review whether the retail sale of electricity by such third-party owners falls within the purview of the public utility statutes. To date, the Companies have not yet taken the position that these third-party owned installations should be regulated by the Commission, due to the relatively small number of such installations."

- a. Does KIUC have a position on whether electricity generated by a CHP provider, behind the fence, on the premises of a user, for use by the user and not to deliver electricity to the grid, "falls within the purview of the public utility statutes"? Please explain. Does KIUC's response change if the arrangement between the user and the third-party CHP provider is on a "share-the-savings" basis?
- b. Please list every instance of which KIUC is aware where cogenerator producing power for consumption on the premises sought and received a determination from the Hawaii PUC that it was not holding itself out as engaged in the business of supplying its product or service to the public as a class or to any limited portion of the public and therefore was not a public utility.

TGC/KIUC-SOP-IR-3

Ref: KIUC Preliminary Statement of Position, p.8 "...KIUC believes that any determination as to the specific forms of distributed generation that may be feasible and viable for Hawaii is outside the scope of the stated objective and the subject docket..."

Does this mean that KIUC believes that it is not necessary to determine feasibility and viability of specific forms in order to develop rules and regulations deemed necessary to govern distributed generation in Hawaii?

TGC/KIUC-SOP-IR-4

Ref: KIUC Preliminary Statement of Position, p.8 “It is only after such an extensive analysis takes place that an electric utility can determine what types of distributed generation would be most suitable for the different areas in Hawaii, the utility, its customers and its electrical system.”

Please explain if KIUC believes that only an electric utility can and should make the determination on what a user can install on his/her premises even if the distributed generation facility will be designed and used only to serve the user’s load and not to deliver power to the grid.

TGC/KIUC-SOP-IR-5

Ref: KIUC Preliminary Statement of Position, p. 9 “KIUC would also consider entering into a joint venture with other entities, and ... KIUC would also consider being a possible owner of the distributed generation facilities, but not necessarily the builder or installer of the facilities, if it would provide material benefits to KIUC and its members.”

- a. Does KIUC believe that being the owner or part owner of the facilities would make the installation/property subject to Commission oversight and regulation?
- b. Please explain what KIUC believes the difference in regulatory treatment would be between two similar user-sited facilities, one owned by the end-user and the other owned by KIUC, including the potential advantages and/or disadvantages of each.
- c. What “material benefits” does KIUC consider would justify such ownership? Please explain whether and why such benefits would depend on KIUC being an owner of the DG facility.

TGC/KIUC-SOP-IR-6

Ref: KIUC Preliminary Statement of Position, p.9 “...KIUC recognizes that owning the distributed generation facility ... would give KIUC some assurances that the distributed generation facility would be constructed and maintained in a manner beneficial to KIUC’s electric grid, and would provide KIUC with another resource for planning and investing in its local electric

transmission and distribution system, which could potentially offset or reduce system costs.”

- a. Please explain if KIUC has or would modify its generation resource planning criteria to include distributed generation feeding into the grid and, if so, the possible changes that might be considered.
- b. Please explain if KIUC has or would modify its transmission and distribution planning criteria to include distributed generation feeding into the grid and, if so, the possible changes that might be considered.
- c. To what specific assurances does KIUC refer? Please explain how such ownership would provide those assurances and whether and why ownership is necessary to obtain such assurances.

TGC/KIUC-SOP-IR-7

Ref: KIUC Preliminary Statement of Position, p. 12 “...if various distributed generation facilities are scattered throughout a given geographic area, the electric utility could possibly rely on a percentage of the total capacity of these facilities ... to defer or minimize capital improvements to its transmission and distribution systems.”

- a. Does KIUC believe that its current standard design and operating practices and electric grid facilities are sufficient to operate a system with user-sited generation?
- b. If not, has KIUC begun to identify the potential changes and costs that may be required? For example, monitors/meter/recorders for T&D power flow, relay protection schemes, RTUs for remote operation of switches, breakers, etc.

TGC/KIUC-SOP-IR-8

Ref: KIUC Preliminary Statement of Position, p.12 “Proper planning must take place to either continue or increase the electric utility’s reliability and power quality in the event a distributed generation facility was implemented in a given area.”

Please describe what type(s) of planning criteria changes might be involved in maintaining or increasing system reliability to accommodate distributed generation. Please explain if and how these changes would affect utility costs.

TGC/KIUC-SOP-IR-9

Ref: KIUC Preliminary Statement of Position, p.12 "...the steps taken to prevent any degradation of the electric utility's transmission and distribution systems resulting from the distributed generation facilities."

Please explain what steps KIUC is referring to in this statement. Has KIUC performed any analysis of the potential need for such steps? If so, please provide a copy of the analysis.

TGC/KIUC-SOP-IR-10

Ref: KIUC Preliminary Statement of Position, Article III, Section 9, pp. 14-17.

- a. Please explain if KIUC's concerns differentiate between users whose facilities will not transmit power to the utility grid, those that will transmit but not sell, and those that will sell power to the utility grid.
- b. If KIUC's concerns would differ by the type of user, please explain the differences. If the concerns would not differ, please explain KIUC's concerns with characteristics such as, but not limited to, maintenance requirements and hours of operation and how serving this customer would differ from serving other KIUC customers that exhibit load variations during the day or week.
- c. Regarding item (e) on page 16, what "degradation" does KIUC refer to? What remedial steps are referred to here? Regarding item (o) on page 18, what reserve requirements and what "requirements and standards" are referred to? How are they to be determined?

TGC/KIUC-SOP-IR-11

Ref: KIUC Preliminary Statement of Position, Article III, Section 10, pp. 17-18.

- a. As a cooperative, is KIUC required to conduct a cost of service study or similar analysis to support such agreements?
- b. Does KIUC anticipate any legal concerns regarding the use of customer data and regulated pricing that is not available to other competitors? Please explain.
- c. Would the Rural Utilities Service (RUS) or cooperative co-lender loan funds be available for such investments? If so, under what terms and conditions?

TGC/KIUC-SOP-IR-12

Ref: KIUC Preliminary Statement of Position, p.18 “Under this scenario, the customer would receive the benefit of waste heat ...”

Please explain if KIUC has considered a pricing schedule for this waste heat. If so, how would the pricing be determined?

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing Information Requests, together with this Certificate of Service, was served electronically and by first class mail, postage prepaid, to the following:

Division of Consumer Advocacy 3 copies
335 Merchant Street
Room 326
Honolulu, HI 96813
E-Mail: cheryl.s.kikuta@dcca.hawaii.gov
jon.s.itomura@dcca.hawaii.gov
ann.y.tonokawa@dcca.hawaii.gov
Facsimile Number: (808) 586-2780
Phone: (808) 586-2765

Thomas W. Williams, Jr. Esq. 1 copy
Peter Y. Kikuta, Esq.
Goodsill, Anderson, Quinn & Stifel
Alii Place, Suite 1800
1099 Alakea Street
Honolulu, Hawaii 96813
Attorneys for: Hawaiian Electric Company, Inc.,
Maui Electric Company, Limited, and
Hawaii Electric Light Company, Inc.
E-Mail: twilliams@goodsill.com
pkikuta@goodsill.com
Facsimile Number: (808) 547-5880
Phone: (808) 547-5600

William A. Bonnet 1 copy
Vice President
Hawaiian Electric Company, Inc.
Hawaii Electric Light Company, Inc.
Maui Electric Company, Limited
P. O. Box 2750
Honolulu, Hawaii 96840-0001
E-Mail: bill.bonnet@heco.com
Facsimile Number: (808) 532-5864
Phone: (808) 543-5660

Patsy H. Nanbu
Hawaiian Electric Company, Inc.
P. O. Box 2750
Honolulu, Hawaii 96840-0001
For hand delivery:
220 S. King Street, Suite 1301
Honolulu, Hawaii 96813
E-Mail: patsy.nanbu@heco.com
Facsimile Number: (808) 543-4718
Phone: (808) 543-4702

1 copy

Alan M. Oshima, Esq.
Kent D. Morihara, Esq.
Oshima Chun Fong & Chung
841 Bishop Street, Suite 400
Honolulu, Hawaii 96813
Attorneys for Kauai Island Utilities Cooperative
E-Mail: amo@ocfc.com
kdm@ocfc.com
ifs@ocfc.com
Facsimile Number: (808) 531-8466
Phone: (808) 528-4200

2 copies

Alton Miyamoto
President & CEO
Kauai Island Utility Cooperative
4463 Pahe'e Street
Lihue, Hawaii 96766
E-Mail: amiyamot@kiuc.coop
Facsimile Number: (808) 246-8257
Phone: (808) 246-4375

1 copy

Brian T. Moto, Corporation Counsel
County of Maui
Department of the Corporation Counsel
200 S. High Street
Wailuku, HI 96793
E-Mail: brian.moto@co.maui.hi.us
Facsimile Number: (808) 270-7152
Phone: (808) 270-7740

1 copy

Cindy Y. Young, Deputy Corporation Counsel 1 copy
County of Maui
Department of the Corporation Counsel
200 S. High Street
Wailuku, HI 96793
E-Mail: cindy.young@co.maui.hi.us
Facsimile Number: (808) 270-7152
Phone: (808) 270-7740

Kalvin K. Kobayashi, Energy Coordinator 1 copy
County of Maui
Department of Management
200 S. High Street
Wailuku, HI 96793
E-Mail: kal.kobayashi@co.maui.hi.us
Facsimile Number: (808) 270-7141
Phone: (808) 270-7832

Warren S. Bollmeier II, President 1 copy
Hawaii Renewable Energy Alliance
46-040 Konane Place, #3816
Kaneohe, Hawaii 96744
E-Mail: wsb@lava.net
Facsimile Number: (808) 247-7753
Phone: (808) 247-7753

John Crouch 1 copy
Box 38-4276
Waikoloa, HI 96738
E-Mail: hydrogen@hawaii.com
Facsimile Number: (808) 883-9119
Phone: (808) 883-9411

Rick Reed 1 copy
Inter Island Solar Supply
761 Ahua Street
Honolulu, HI 96819
E-Mail: rreed@sunearthinc.com
Facsimile Number: (808) 536-0536
Phone: (808) 523-0711

Henry Curtis 3 copies
Life of the Land
76 North King Street, Suite 203
Honolulu, HI 96817
E-Mail: henry@lifeoftheland.net
Facsimile Number: None
Phone: (808) 533-3454

Sandra –Ann Y. H. Wong, Esq. 1 copy
1050 Bishop Street, #514
Honolulu, Hawaii 96813
Attorney for: Hess Microgen
E-Mail: sawonglaw@hawaii.rr.com
Facsimile Number: (808) 537-2598
Phone: (808) 537-2598

Christopher S. Colman 1 copy
Deputy General Counsel
Amerada Hess Corporation
One Hess Plaza
Woodbridge, N.J. 07095
E-Mail: ccolman@hess.com
Facsimile Number: (732) 750-6944
Phone: (808) 537-2598

Michael de'Marsi 1 copy
Hess Microgen
4101 Halburton Road
Raleigh, NC 27614
E-Mail: demarsi@earthlink.net
Facsimile Number: (919) 845-7195
Phone: (808) 537-2598

Thomas C. Gorak 1 copy
Gorak & Bay, LLC
76-6326 Kaheiau Street
Kailua-Kona, HI 96740-3218
Attorney for Pacific Machinery, Inc.
and Johnson Controls, Inc.
E-Mail: gorakandbay@hawaii.rr.com
Facsimile Number: (808) 331-2027
Phone: (808) 331-2027

Gordon Bull
Branch Manager
Johnson Controls, Inc.
3526 Breakwater Court
Hayward, CA 94545
E-Mail: gordon.bull@jci.com
Facsimile Number: (510) 785-3170
Phone: (510) 786-5775

1 copy

Jim Reisch
Vice President & General
Manager-Engine Division
Pacific Machinery, Inc.
94-025 Farrington Highway
Waipahu, Hawaii 96797
E-Mail: reischj@pacmach.com
Facsimile Number: (808) 676-0264
Phone: (808) 676-0336

1 copy

Lani D. H. Nakazawa, Esq.
Office of the County Attorney
County of Kauai
4444 Rice Street, Suite 220
Lihue, HI 96766
E-Mail: lnakazawa@kauaigov.com
Facsimile Number: (808) 241-6319
Phone: (808) 241-6315

2 copies

Glenn Sato, Energy Coordinator
c/o Office of the County Attorney
County of Kauai
4444 Rice Street, Suite 220
Lihue, HI 96766
E-Mail: glenn@kauaioed.org
Facsimile Number: (808) 241-6399
Phone: (808) 241-6393

1 copy

John W. K. Chang, Esq.
Deputy Attorney General
Department of the Attorney General
State of Hawaii
425 Queen Street
Honolulu, Hawaii 96813
Attorney for: The Department of Business
Economic Development and Tourism
E-Mail: john.w.chang@hawaii.gov
Facsimile Number: (808) 586-1205
Phone: (808) 586-1195

1 copy

Maurice H. Kaya, P.E.
Chief Technology Officer
DBEDT-Strategic Industries Division
P. O. Box 2359
Honolulu, HI 96804
for hand delivery:
235 S. Beretania Street, Room 502
Honolulu, HI 96813
E-Mail: mkaya@dbedt.hawaii.gov
Facsimile Number: (808) 586-2536
Phone: (808) 587-3812

1 copy

Steven Alber
Energy Analyst
DBEDT-Strategic Industries Division
P. O. Box 2359
Honolulu, HI 96804
for hand delivery:
235 S. Beretania Street, Room 500
Honolulu, HI 96813
E-Mail: salber@dbedt.hawaii.gov
Facsimile Number: (808) 587-3839
Phone: (808) 587-3837

1 copy

Dated: Honolulu, Hawaii, May 24, 2004.

THE GAS COMPANY, LLC


By: Attorney