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

COUNTY OF MAUI'S RESPONSES TO INFORMATION REQUESTS FROM HECO, MECO, and HELCO

CERTIFICATE OF SERVICE

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HECO/Maui-RT-RIR-1 Ref: COM-RT-2, page 2, lines 13-26

a. Please provide copies of any published studies or reports you relied upon to conclude that "market power was determined to be a primary cause of the west coast energy crisis of 2000-2001."

RESPONSE:

The principal reports relied upon were:

Cost Curve Analysis of California Power Markets, September, 2000, Bill Marcus, JBS Energy. See attachment 1.

California's Electricity Situation Briefing for the staff of the U.S. House of Representatives, February 9, 2001, Energy Information Administration. See Attachment 2.

Competition and Regulation in Bulk Power Markets, October 2000, James Harding. See Attachment 3.

FERC Staff Report to the Federal Energy Regulatory Commission on Western Markets and the Causes of the Summer 2000 Price Abnormalities. See Attachment 4.

How We Got into the California Energy Crisis, By William Marcus, JBS Energy, Inc. Jan Hamrin, Center for Resource Solutions, February, 2001. See Attachment 5.

Prepared Direct Testimony of Robert McCullough On Behalf Of The City Of Tacoma, Washington And The Port Of Seattle, Washington. See Attachment 6.

b. In your opinion, were there any other primary causes of this west coast energy crisis?

RESPONSE:

The drought was the single most important triggering event. The requirement in California that utilities buy all power at the market clearing price was the single most important institutional failure that contributed to the crisis. The El Paso Natural Gas pipeline explosion, constraining gas supply into California was also a primary cause. We do not believe that a shortfall of generating capacity was a significant cause.

c. Please provide copies of any published studies or reports you rely upon to form your opinion in response to part b. above Please provide copies of any published studies or reports you rely upon to form your opinion in response to part b. above.

RESPONSE:

Provided in response to a.

d. Provide copies of any published materials in the economics discipline that support the following statement: "Market power is often measured by what is known as the Herfindahl-Hirschman Index, or HHI…"

RESPONSE:

See Attachments 7 and 8.

e. Is it correct to interpret from your rebuttal testimony that you equate market concentration with market power?

RESPONSE:

Market concentration is one very important influence on market power. It is not the exclusive influence.

f. In your opinion, is the "HHI, which turns market shares into a market concentration", the sole factor or measure to use in assessing the degree of market power in a market or are there other factors or measures to consider?

RESPONSE:

No. Ease of entry into a market would be another important measure. Due to the long lead time for electric generation facilities in Hawaii, this would make market concentration a very important determinant of market power.

HECO/Maui-RT-RIR-2 Ref: COM-RT-2, page 5, lines 10-14

a. Please provide copies of any empirical evidence that you have from existing DG or CHP markets suggesting that the supply of CHP systems in "a highly concentrated marketplace ... would deter competition, potentially obstruct innovation, and delay market development."

RESPONSE:

The testimony does not rely on any empirical evidence from existing DG or CHP markets; it draws this conclusion from experience in other markets, particularly the market power exerted by major power suppliers in California during the crisis, as discussed in the attachments provided in response to HECO/Maui-RT-RIR-1.

b. In your opinion, can government regulation in highly concentrated markets serve to mitigate market power?

RESPONSE:

Yes, government regulation can be a second-best substitute for competition in markets that are not susceptible to effective competition.

HECO/Maui-RT-RIR-3 **Ref: COM-RT-2, page 21, lines 23-27**

a. What is your basis for the "one-half" value in the following recommendation: "Initially, I would recommend that the Standby Reservation Charge be set at one-half of the transmission and distribution charges in tariff rates."

RESPONSE:

HECO (at Preliminary Statement of Position, page 16) and the CA (at Preliminary Statement of Position, page 21)have acknowledged in their Statements of Position that there are T&D benefits from DG. The assumption is that the benefits would range between "none" and "full offset" of incremental T&D costs, and one-half is the midpoint of this.

b. Please provide your calculation and supporting analysis for the "one-half" value in the following recommendation: "Initially, I would recommend that the Standby Reservation Charge be set at one-half of the transmission and distribution charges in tariff rates."

RESPONSE:

The calculation is provided in Exhibit COM-R-203 at page 2.

HECO/Maui-RT-RIR-4 Ref: COM-RT-2, page 24, lines 1-23

a. Please define what you mean by "*efficiency*".

RESPONSE:

Efficiency deals with the optimization of the use of societal resources, regardless of "who pays."

b. Please define what you mean by "*equity*".

RESPONSE:

Equity deals with the allocation of costs and benefits between competing participants in a market, regardless of the impacts on optimization of use of societal resources.

c. Are you suggesting that setting rates based on embedded costs is "an *equity* consideration, not an *efficiency* consideration"?

RESPONSE:

Yes.

d. If rates were set based on an *efficiency* consideration, would all rates be based on marginal cost?

RESPONSE:

Rates would be equal to (not "based on", which is vaguer) long-run marginal costs, including social and environmental costs.

e. Do customers who buy and use energy from the utility's system rely on the entire mix of generation on that system or only the marginal generation capacity?

RESPONSE:

In the aggregate, customers who buy and use energy from the utility's system rely on the entire mix of generation on that system. At the margin, incremental loads cause a requirement for incremental generation, and when that generation cannot be provided by existing generation, or can be provided more economically from new generation, incremental loads cause a demand for the development of new generation.

f. If the utility installed new generation that had an installed capacity cost that was lower than the capacity cost of some existing generation unit, which unit (the new or the existing) should be used in your marginal cost analysis?

RESPONSE:

In a declining cost industry, such as that described, there is an economic justification for such things as "economic development" or "load retention" rates that would recognize that the long-run marginal cost of new supply is lower than the average cost of existing supply. Due in part to the method of accounting used in the utility industry (straight-line depreciation, rate of return on net rate base), this is seldom the case in the utility industry. It could become the case if a quantum change in technology were to affect the industry.

HECO/Maui-RT-RIR-5 Ref: COM-RT-2, page 25, lines 6-8

a. What is your basis for the "one-third" value in the following recommendation: "I propose that one-third of the normal standby demand charge (both standby reservation charge and as-used daily standby demand charge) apply to best-efforts customers."

RESPONSE:

Best-efforts standby customers "cause" the utility to incur zero fixed costs to provide as-available standby service. The basis for the proposal is the well-accepted regulatory principle that ALL customers should contribute to the capacity costs of any resource they rely upon, as expressed on page 25 of the rebuttal evidence.

b. Please provide your calculation and supporting analysis for the "one-third" value in the following recommendation: "I propose that one-third of the normal standby demand charge (both standby reservation charge and as-used daily standby demand charge) apply to best-efforts customers."

RESPONSE:

There is no calculation. The "normal" standby demand charge is calculated in Exhibit COM-R-203 at Page 2. The one-third factor applied to this is judgmental, to assure that some reasonable contribution to fixed costs (plus full recovery of variable costs) is made by customers using this cost-free service.

c. When a customer pays the "as-used daily standby demand charge", what facilities owned by the utility are being used to provide the service, and is the cost of that service equal to one-third of the total costs related to those facilities?

RESPONSE:

When a best-efforts customer pays the as-used daily standby demand charge, the customer is using generating facilities that were installed to provide reliable service to firm customers but are not currently needed by firm customers. From a cost-causation perspective, the "cost" of that capacity caused by the best-efforts standby user is arguably zero; an as-used demand charge results in some benefit to the firm customers who would otherwise be forced to bear the entire cost of the reserve capacity developed and maintained for the purpose of ensuring the reliability of their service.

HECO/Maui-RT-RIR-6 **Ref: COM-RT-2, page 26, lines 18-25**
Please provide your calculations demonstrating that (for your hypothetical customer) "…another 100 to 300 hours of usage per month - would be much cheaper than the current level of usage."

RESPONSE:

No specific calculations were made. The average cost per kWh of the first 360 kWh/kW is equal to the demand cost (approximately $.04/kWh) plus the energy charge in the first two blocks. The incremental cost per kWh of the usage in excess of 400 kWh/kW is only the third load factor energy block, which is significantly cheaper than the first 360 kWh/kW. The table below illustrates this effect:

$/kW	$10.00	
First 200 kWh/kW	$.10	
Next 200 kWh/kW	$.08	
Over 400 kWh/kW	$.06	
	Total Cost	Average Cost/kWh
First 360 kWh/kW$44.40	$10 + 200 x $.10 + 160 x $.08 = $42.80	$.1188/kWh
Over 400 kWh/kW		$.08/kWh

HECO/Maui-RT-RIR-7 **Ref: COM-RT-2, page 29, lines 1-4**
Please provide copies of all studies including all data used in which you analyzed the effectiveness of time of use pricing for residential customers and "large customers".

RESPONSE:

A copy of the final report on the Puget Sound Energy TOU Pilot Program is included as Attachment 9.

A copy of the RAP NEDRI Final Report, Dimensions of Demand Response, is available upon request. This document is 173 pages.

HECO/Maui-RT-RIR-8 Ref: COM-RT-2, page 7, lines 7-21

a. Please provide the workpapers showing the derivation of each on the unit costs shown in the table in the referenced testimony.

RESPONSE:

The figure of $.1558/kWh was taken from the Company's website, at http://www.heco.com/CDA/default/0,1999,TCID%253D7%2526EmbedCID%253D0%2526CCID%253D0%2526LCID%253D6428%2526CTYP%253DARTC,00.html

The figure of $.11 is derived in footnote 5.

The figure of $.0458 is the difference between these.

The figure of $16.71 is $.0458 multiplied by a 50% load factor as shown in the second column.

b. Is it the County of Maui's position that the avoided costs of future generation, transmission, and distribution are collected or reflected in HECO's current rates?

RESPONSE:

No.

c. If yes, please provide evidence to support the County of Maui's position.

d. Is it the County of Maui witness' understanding that HECO's current rates are based on embedded costs, and do not reflect nor include avoided costs? If the answer is anything other than an unqualified "yes", please fully explain your response.

RESPONSE:

Yes.

e. If HECO's current rates are based on embedded costs and do not reflect nor include avoided costs, why would the County of Maui net out avoided costs from the lost revenues resulting from non-utility or third party DG to determine the impact of such lost revenues on rates to non-DG customers?

RESPONSE:

Because HECO avoids marginal costs when customers reduce their load on the utility, not average costs.

HECO/Maui-RT-RIR-9 Ref: COM-RT-2, page 6, line 9, to page 9, line 20

a. The table on page 9 shows the MECO Avoided Marginal Cost in $/year at 500 kW. Maui's annual growth in demand may be anywhere from 3 MW to 5 MW. Will a 500 kW DG unit be sufficient to defer the need for central-station generation by one year?

RESPONSE:

Yes, given the large number of potential DG customers. Adding multiple DG customers of this size would enable MECO to defer central station generation. MECO has identified approximately 100 potential DG applications Yes, given the large number of potential DG customers. Adding multiple DG customers of this size would enable MECO to defer central station generation. MECO has identified approximately 100 potential DG applications

b. If the response to part a. above is yes, please explain how.

RESPONSE:

Explained above.

c. If the response to part a. above is no, then what would be the total avoided capacity cost associated with such a 500 kW DG unit?

RESPONSE:

No response required.

d. If a 500 kW DG unit is not sufficient to defer the need for a central-station generating unit by one year, then will the MECO Retail Lost Margin from a 500 kW Customer, shown on page 7, be greater than the net benefit shown in the MECO Avoided Marginal Cost on page 9?

No.

e. If the response to part d. above is no, please explain why not.

RESPONSE:

The example is illustrative. Multiple DG customers would facilitate the deferral of central-station capacity.

f. If the response to part d. above is yes, then will this cause upward pressure on rates? If not, please explain why not.

RESPONSE:

Not applicable.

HECO/Maui-RT-RIR-10 Ref: COM-RT-2, page 13, lines 20-21

a. Does DSM result in the reduction in utility energy sales compared to what they would have otherwise been without DSM?

RESPONSE:

Yes.

b. If the response to part a. above is no, please explain why not.

c. If the response to part a. above is yes, then would the fixed costs incurred by the utility to serve existing customers need to be spread over a smaller amount of sales? If not, please explain why not.

RESPONSE:

No. The "fixed costs" are only "fixed" in the short run. Rational social decisionmaking is based on long-run conditions. Over the long run, the utility would invest in less capacity, incur fewer fixed costs, and these (lower) fixed costs would be spread over lower loads. Depending on the relationship between marginal costs and average costs, the impact could be a lower or higher fixed cost per unit of output. The "fixed costs" are only "fixed" in the short run. Rational social decisionmaking is based on long-run conditions. Over the long run, the utility would invest in less capacity, incur fewer fixed costs, and these (lower) fixed costs would be spread over lower loads. Depending on the relationship between marginal costs and average costs, the impact could be a lower or higher fixed cost per unit of output.

d. If the fixed costs incurred by the utility to serve existing customers is spread over a smaller amount of sales, then would this result in the need for higher rates to recover the utility's fixed costs from remaining sales? If not, please explain why not.

RESPONSE:

Not necessarily. If the reduction in fixed costs were equal to the reduction in loads, then there would be no change required in rates. If long-run marginal costs are greater than embedded costs, as is the case for MECO, the reduction in load would tend to cause rate reductions (or suppression of a portion of otherwise required rate increases) over time. Only if long-run marginal costs are lower than embedded costs would the condition postulated occur.

e. Would customer-owned distributed generation systems result in the reduction in utility energy sales compared to what they would have otherwise been without the customer-owned distributed generation systems?

RESPONSE:

Not necessarily. Customer-owned generation may be economic and enable businesses to continue to operate under conditions where paying utility tariff rates would make operations uneconomic.

HECO/Maui-RT-RIR-11 **Ref: COM-RT-1, page 5, lines 22 - 24**

a. Was WPPI-III's DG system dispatchable by the utility?

b. Was the maintenance of WPPI-III's DG system planned and coordinated in any way with the electric utility?

RESPONSE:

Regarding items a and b above, our information is limited to the Supreme Court ruling included in our response to HECO/Maui-DT-IR-41, at pages 53-55.

c. Did the Commission's decision in Docket No. 4779 broadly address the scenario of DG systems owned and operated by the electric utility, or was it focused on determining whether a specific 3rd party-owned DG installation was a utility service?

d. If the Commission's decision in Docket No. 4779 did not broadly address the scenario of DG systems owned and operated by the electric utility, explain how a finding that WPPI-III's DG system was not a utility service sets a precedent for HECO's proposed CHP Program.

RESPONSE:

Regarding items c and d above, the Commission's decision in Docket No. 4779 addressed the issue of what constitutes a public use, regardless of ownership.

HECO/Maui-RT-RIR-12 **Ref: COM-RT-1, page 6, lines 18-19**
Please identify where in "HECO's recommendation" it is implied that the Commission should allow public utilities to provide non-utility services on a regulated basis.

RESPONSE:

HECO's recommendation explicitly asked the Commission to approve its CHP program and tariff. What was implied was the Commission's authority to approve such a request. It would be inappropriate for HECO to request the Commission's approval of their proposed CHP program and tariff request if HECO believed that the Commission had no authority to allow public utilities to provide non-utility services on a regulated basis. Therefore, HECO's recommendation implied that the Commission has the authority to allow public utilities to provide non-utility services on a regulated basis.

HECO/Maui-RT-RIR-13 Ref: COM-RT-1, page 6, lines 19-22

a. Is it the County Maui's position that any type of system provided to serve an individual customer is a private system, which should not be regulated by the Commission?

RESPONSE:

No, for example, interconnection requirements are regulated by the Commission.

b. What is the County of Maui's position regarding the electric utility providing and maintaining generators at customer locations for emergency purposes? Does the County of Maui believe such generators, since they serve an individual customer, are therefore private systems not subject to regulation by the Commission?

RESPONSE:

No, see COM-T-1, page 10, line 17 and COM-T-1, page 17, lines 6-14.

HECO/Maui-RT-RIR-14 **Ref: COM-RT-1, page 7, lines 4-9**
HECO has provided information regarding Progress Energy Carolina's Premier Power Service Rider, a regulated utility program where the utility provides generators to customers primarily to serve the specific customer during emergencies, but also to allow the utility to use the generators for system needs. (See HECO response to COM-HECO-DT-IR-1) The County of Maui testifies that HECO has not provided any past precedents where public utility commissions have allowed investor-owned public utilities to provide private or non-utility services on a tariff basis. This suggests that the services included in Progress Energy's Premier Power Service Rider are indeed utility services. Please confirm the County of Maui's position regarding this.

RESPONSE:

Yes, see COM-T-1, page 17, lines 6-14.

HECO/Maui-RT-RIR-15 **Ref: COM-RT-1, page 8, line 13**

According to the Exhibit, the cogeneration facility is not subject to regulation by the Louisiana Public Service Commission for a number of reasons including the following:

a. The cogeneration facility is jointly owned by PPG and Energy, with each having fifty percent equity interest.
b. PPG will use its electric capacity on-site or will sell it in the wholesale power market.
c. Energy will sell its power to a wholesale power marketer.
d. Energy is a non-regulated company.
e. Energy is an indirect owner of the cogeneration facility.
f. No owner is primarily engaged in the generation, transmission, distribution and/or sale of electricity.
g. No retail electric service will be provided by the facility.
h. No utilities or ratepayers will become obligated for any of the costs associated with the facility.

Considering these aspects, please explain how this determination sets a "precedent" for HECO's proposed utility-owned CHP Program?

RESPONSE:

The precedent set relates to what constitutes a public use, regardless of ownership, and the precedent should apply to HECO's proposed program.

HECO/Maui-RT-RIR-16 **Ref: COM-RT-1, page 11, lines 3-7**
The County of Maui suggests that entities involved in supplying equipment to the shipping and trucking industries would be better equipped to provide distributed energy equipment. What does Maui understand with regard to comparing the design, installation, permitting, operation, and maintenance of stationary power generating equipment that is interconnected to the utility grid, with the equipment used in shipping and trucking?

RESPONSE:

COM testimony did not state that shipping and trucking industries "would" be better equipped to provide DG. COM-T-2, at page 23 states:

> Finally, utilities have expertise in central generating station equipment. The distributed energy resource market uses different technologies, and requires different expertise. Alternative suppliers may be best able to provide this. Since much of the equipment used in the distributed energy resource market is more similar to that used in shipping and trucking, there are other suppliers in Hawaii that may be better equipped to provide and service such equipment than the utility. (Emphasis added.)

HECO/Maui-RT-RIR-17 Ref: COM-RT-1, page 12, line 30

a. Please identify the utility referred to in the case study, and the approximate year of the project described.

RESPONSE:

The utility is HECO and the year was 1999.

b. What is that utility's current position regarding support of cogeneration?

c. What is that utility's current position regarding interconnection?

d. Did the utility ultimately implement a standby charge with approval of the public utility commission?

RESPONSE:

Regarding items b-d above, HECO should state its own positions.

HECO/Maui-RT-RIR-18 **Ref: COM-RT-1, page 16, lines 15-17, and lines 22-23**

The County of Maui states "if ratepayer-funded employees are used by the utility to compete against private energy companies, then the public utility could have an unfair advantage over private energy companies" and "the COM is concerned that it is unfair for a utility to compete against a private energy company because ratepayers fund the utility's employees, but ratepayers do not fund a private energy company's employees."

a. By this logic, please explain whether the County of Maui believes that it is a fair for the utility to compete against any entity, since ostensibly the utility's ratepayers are not funding that entity.

RESPONSE:

Testimony by Mr. Lazar addresses the reasons why the utility should not compete against any entity in the section entitled, "WHY COMPETITIVE ALTERNATIVES SHOULD BE PROVIDED BY COMPETITORS, NOT BY THE ELECTRIC UTILITY," at COM-T-2, page 19.

b. If ratepayers are also shareholders or customers of a private energy company, how does this affect the County of Maui's concern?

RESPONSE:

It does not have an affect.

HECO/Maui-RT-RIR-19 **Ref: COM-RT-1, page 17, lines 11-21**
MECO is supporting the deployment of DG and CHP on Maui via its proposed regulated CHP Program. If the Commission would be regulating MECO's CHP services as well as MECO's efforts to develop a new central generating facility, why wouldn't this be adequate to address the County of Maui's concerns regarding market power?

RESPONSE:

No. In order for "competition" to exist, there must be competitors. Preventing a dominant market participant from expanding into a potentially competitive market is one way to encourage the development of a competitive market. We believe that allowing HECO to enter the DG market would create a chilling effect on competition, prevent the emergence of viable (i.e., low-concentration) competition.

Additionally, the COM testimonies give several reasons why the Commission should not regulate utility ownership of privately used DG in addition to market power concerns.

HECO/Maui-RT-RIR-20 **Ref: COM-RT-1, page 18, lines 3-5**
The County of Maui states that it may be more cost effective to encourage the design of relatively larger CHP units, optimized to meet the needs of the grid.

a. Explain the County of Maui's position on whether such systems, inasmuch as they are optimized for grid purposes, would be either owned by the utility or owned by an independent power producer.

RESPONSE:

Neither, the CHP units are still primarily used for private use and the ownership would be no different than relatively smaller CHP units. The only difference is that the extra capacity would be available as a demand-side generation resources to the utility.

b. If the County of Maui believes such systems should not be owned by the utility, explain why not.

RESPONSE:

Such systems should not be owned by the utility for the same reasons why the utility should not own any other privately used DG or DER.

c. If the County of Maui believes such systems can be owned by the utility, explain why.

RESPONSE:

Not applicable.

HECO/Maui-RT-RIR-21 **Ref: COM-RT-1, page 20, lines 13-15**

a. What is the County of Maui's understanding with regard to whether HECO's new procurement process allows or does not allow an equipment vendor to supply equipment to a non-utility DG developer?

RESPONSE:

Our understanding is that the process allows an equipment vendor to supply equipment to a non-utility DG developer.

b. What is the basis for the County of Maui's fear of retribution theory? Did any equipment vendor express such a concern directly to Maui?

RESPONSE:

The fear of retribution is a concern, not a theory, and instances of utility retributions have been documented, see COM-RT-1, pages 12-14. The potential for retribution by HECO was stated as a possibility, not as a fact.

HECO/Maui-RT-RIR-22 **Ref: COM-RT-1, page 27, line 27, to page 28, lines 1-3**

The testimony states "HECO cannot guarantee that their CHP-related revenues will meet their market projections, nor can HECO guarantee that their CHP program will become successful. Therefore the Commission should consider the possibility of HECO failing in its CHP venture and protect ratepayers from such an eventuality."

a. Does the County of Maui believe that any business can ever guarantee its revenues, market projections, or program successes?

RESPONSE:

No.

b. If the utility cannot guarantee the future outcome of a program, should the Commission disallow the utility from participating in that program?

RESPONSE:

No. The points were that revenue forecasts are uncertain and that a program failure is a possibility, therefore, ratepayers should be protected from such eventualities.

HECO/Maui-RT-RIR-23 Ref: COM-RT-1, page 12, beginning line 5

a. Does the County of Maui allege that MECO has erected any "interconnection barriers" to the interconnection of DG/CHP customers on its system?

RESPONSE:

The citation was related to HECO, not MECO.

b. If the answer to part a. above is yes, please provide documentation to support your allegation.

RESPONSE:

Not applicable.

c. Does the County of Maui acknowledge that in MECO's Rule 14.H quarterly and annual reports, filed with the Commission in Docket No. 02-0051, there have been no reported disputes with customers that have interconnected, or are seeking to interconnect, to MECO's system?

RESPONSE:

The COM has not reviewed the referenced reports.

HECO/Maui-RT-RIR-24 **Ref: COM-RT-1, page 17, lines 4-9, page 24, lines 12-19, page 26, lines 22-23 to page 27, lines1-2, and page 28, lines 14-16**

Please explain the apparent inconsistencies whereby the County of Maui is advocating the design of larger CHP systems and advocating DSM-type incentives for CHP systems (presumably to increase their deployment), and then characterizing that larger CHP systems could be made obsolete and the possible failing of MECO's CHP Program that is designed to facilitate the deployment of CHP systems.

RESPONSE:

There are no inconsistencies, however, the question does appear to be illogical. Advocacy for all non-utility CHP systems is not inconsistent with our concerns about technology obsolescence and possible utility failures.

HECO/Maui-RT-RIR-25 Ref: COM-RT-2, page 5, lines 12-15

a. How does the HHI index in a potentially highly concentrated market take into consideration that one of the market participants is regulated by a public utilities commission?

RESPONSE:

It does not.

b. In deregulated electric markets, such as in California, isn't the HHI index "highly concentrated"?

RESPONSE:

California is not a "deregulated" electric market. At the time of the crisis in 2000-2001, California was a partially deregulated market. We have not calculated an HHI for the California market at the time of the crisis.

c. For the CHP market in Hawaii, doesn't the existence of the Hawaii Public Utilities Commission, with its broad powers of regulatory oversight of the electric utility, significantly mitigate the potential for any deterrence of competition and/or delay in market development if CHP systems were provided by a regulated electric utility?

RESPONSE:

Yes, and that is what this proceeding is about: invoking the power of the Hawaii PUC to exercise oversight to significantly mitigate the potential for deterrence of competition.

In order for "competition" to exist, there must be competitors. Preventing a dominant market participant from expanding into a potentially competitive market is one way to encourage the development of a competitive market. I believe that allowing HECO to enter the DG market would create a chilling effect on competition and prevent the emergence of viable (i.e., low-concentration) competition.

HECO/Maui-RT-RIR-32 **Ref: COM-RT-2, page 3, footnote 1**
Please provide a copy of "Williams and Rosen, A better Approach to Market Power Analysis, Tellus Institute, July 14, 1999".

RESPONSE:

A copy is provided as Attachment 10.

HECO/Maui-RT-RIR-33 **Ref: COM-RT-2, page 15, footnotes 7 and 8**
Please provide a copy of Montana Department of Public Service Regulation, Order No. 5051c and Arizona Corporation Commission, Order No. 57649. Alternatively, please provide the following information concerning these orders, in accordance with the prehearing order, the file or docket number, the date of the order, and the name of the case/matter.

RESPONSE:

The documents are very large, and would create immense files if scanned. Copies of the following can be obtained from the respective commissions.

Montana: Docket No. 83.9.67, August 3, 1984, In the matter of the Application by Montana Power Company for authority to establish increased rates for electric service in the State of Montana. Colstrip Unit No. 3 and related facilities.

Arizona: Docket U-1345-90-007, December 6, 1991, In the matter of the Application of Arizona Public Service Company for an extension of the present Palo Verde accounting order - decision no. 55939.

HECO/Maui-RT-RIR-34 **Ref: COM-RT-2, page 19, lines 24-27**
COM states "While there is still the risk of forced outages, this risk is very small (typically less than 5% for modern CHP systems), and the utility needs only to have about 5% of the capacity of CHP customers available during peak periods to provide standby service." Please provide the basis for the 5% risk of forced outages estimate, including copies of any documents and materials relied upon. Please identify what COM considers "modern CHP systems".

RESPONSE:

Exhibit G to the Company's CHP application indicates a combined Scheduled and Forced Outage Rate of 7%. Assuming one week per year (2% of a year) of scheduled maintenance (which would be done at a time of slack capacity on the utility), this would leave 5% forced outage to be covered with standby service requiring availability of standby capacity that could be shared by multiple DG customers.

DATED: Wailuku, Maui, Hawaii, November 22, 2004.

BRIAN T. MOTO
Corporation Counsel
Attorney for Intervenor
COUNTY OF MAUI

By Cindy Y. Young
CINDY Y. YOUNG
Deputy Corporation Counsel

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing document were duly served upon the following by electronic mail and by United States mail, postage prepaid, on November 22, 2004, addressed as follows:

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