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PUBLIC UTILITIES COMMISSION

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF HAWAII

In the Matter of the Application of	)	
	)	
HAWAIIAN ELECTRIC COMPANY, INC.	)	DOCKET NO. 05-0069
	)	
For Approval and/or Modification of Demand-Side and Load Management Programs and Recovery of Program Costs and DSM Utility Incentives	)	

DIVISION OF CONSUMER ADVOCACY'S RESPONSES TO THE PARTIES' INFORMATION REQUESTS TO THE DIVISION OF CONSUMER ADVOCACY ON ITS FINAL STATEMENT OF POSITION

Pursuant to the agreed upon Procedural Schedule,[1] Division of Consumer Advocacy hereby submits its **RESPONSES TO INFORMATION REQUESTS SUBMITTED BY:**

- **HAWAIIAN ELECTRIC COMPANY, INC.**
- **HAWAII RENEWABLE ENERGY ALLIANCE**
- **ROCKY MOUNTAIN INSTITUTE**
- **LIFE OF THE LAND**
- **THE GAS COMPANY, LLC**
- **HAWAII SOLAR ENERGY ASSOCIATION**

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1 By letter dated June 21, 2006 Division of Consumer Advocacy requested approval to amend Procedural Schedule approved by Commission letter dated April 13, 2006.

DOCKET NO. 05-0069

HAWAIIAN ELECTRIC COMPANY, INC.

DIVISION OF CONSUMER ADVOCACY'S RESPONSES TO HAWAIIAN ELECTRIC COMPANY, INC. INFORMATION REQUESTS TO THE DIVISION OF CONSUMER ADVOCACY ON ITS FINAL STATEMENT OF POSITION

HECO/CA-FSOP-IR-101 **Ref: CA FSOP, pages 2 and 15.**

Please identify and provide excerpts of IRP plans of other utilities which identify the following:

- The degree to which "demand-side resources would complement HECO's supply-side resources",
- "DSM procurement parameters",
- How "DSM procurement parameters are consistent with [the utilities' IRP] Plan", and
- An "appropriate delineation of the needs that are to be met through demand-side programs vis-à-vis via supply-side resources". (page 15)

RESPONSE: There are a large number of IRPs addressing the various demand-side resources that complement the supply-side resources of a given utility. Each plan is specific to the utility involved, so they do not address HECO's situation. Accordingly, the Consumer Advocate has not conducted a survey of other IRP plans to identify which address these subjects. The information requested does not appear relevant to this proceeding.

The Consumer Advocate has recommended that the Commission act to ensure that, in response to a given resource need, HECO should *explain how and to what degree demand-side resources would complement its supply-side resources.* The Consumer Advocate has also recommended that the Commission

ensure an *appropriate delineation of the needs that are to be met through demand-side programs vis-à-vis via supply-side resources.* The Consumer Advocate submits that, in seeking to address a given need for new resources, a utility can either (1) be arbitrary in determining how much of that need is to be met through demand-side resources (i.e., rather than supply-side resources), or (2) can apply some rationale. Presumably, HECO would adhere to the latter approach. Moreover, that rationale necessarily would apply to HECO's needs and particular circumstances, and thus would be different from that used by other utilities in other circumstances. The essence of Consumer Advocate's recommendation in this regard is simply that the Commission should understand HECO's rationale in order to assess its reasonableness.

The Consumer Advocate also has recommended that the Commission should act to ensure that HECO clearly identifies its *"DSM procurement parameters,"* and provides an explanation of *how "DSM procurement parameters are consistent with [the utilities' IRP] Plan."* Here, too, two approaches are possible. A utility can either: (1) acquire DSM resources without any particular idea as to what kind, how much, or the objectives that it would satisfy through such procurements, or (2) purchase DSM resources according to a plan that provides clear purchase specifications, or "DSM

procurement parameters," in accordance with its resource procurement plan. The Consumer Advocate strongly recommends that the Commission ensure that the latter approach is implemented, and again observes that the DSM procurement parameters of other utilities necessarily would be different from HECO's.

In short, HECO should be expected to explain exactly how it arrives at the amounts and types of DSM resources that it proposes to pursue to meet its needs – and for which it will seek cost-recovery from ratepayers. As emphasized in the Consumer Advocate's FSOP, such explanation has not yet been provided.

HECO/CA-FSOP-IR-102 **Ref: CA FSOP, page 5.**

The Consumer Advocate states that "The Company should adopt the resource planning objectives advanced by the Consumer Advocate if they are appropriate..."

a. Are the Consumer Advocate's proposed resource planning objectives derived from the objectives of utilities or utility regulatory bodies in other jurisdictions?

RESPONSE: The planning objectives presented by the Consumer Advocate are "illustrative." They reflect the Consumer Advocate's understanding of HECO's system, as communicated through the IRP-3 proceedings, the instant proceeding, and otherwise. The Consumer Advocate has recommended that its resource planning objectives should be adopted **if they are appropriate,** because they exhibit a level of detail that is lacking in the objectives identified in HECO's IRP-3. At this juncture, the Consumer Advocate would leave to HECO the task of identifying and advancing a set of detailed resource planning objectives that are, in fact, appropriate to its system.

b. If the answer is yes, please identify the utilities or regulatory bodies and provide documentation of their resource planning objectives.

RESPONSE: Please see the Response to Part a, above.

c. If the answer is no, please fully explain the basis for the Consumer Advocate's proposed resource planning objectives.

RESPONSE: Please see the Response to Part a, above.

to reduce energy consumption by some amount across a given period.

The Consumer Advocate is concerned that HECO's true capacity and energy needs across the IRP planning period have not been communicated – i.e., within the context of the resource planning objectives that HECO could or should be pursuing.

b. If the answer is yes, please provide a detailed explanation of why not.

RESPONSE: Please see the Response to Part a, above.

processes (i.e., integrated resource plans) and (2) programs, program budgets and rate surcharges are adjusted to reflect actual performance and emergent circumstances. To date, such proceedings have not occurred. Appendix C discusses these issues in more detail.

HECO/CA-FSOP-IR-107 **Ref: CA FSOP, page 9. "The Consumer Advocate contends that the utilities should receive no rate incentive to implement DSM programs. . . . competitive providers stand ready to offer DSM programs without this substantial cost adder."**

a. Please provide a listing of competitive DSM providers who "stand ready" to offer DSM programs and who are willing to offer DSM programs in Hawaii without any cost adder beyond simple program cost recovery.

RESPONSE: This statement is based upon our experience with DSM programs broadly across the utility industry. Where utility companies have aggressively pursued DSM programs, companies have stepped up and entered the market to provide the products and services necessary to implement these programs. The Consumer Advocate is aware of some specific DSM implementation by third-party providers in Hawaii. One such example is the energy efficiency installation at the Aliamanu Military Reservation.

b. How will these competitive providers be compensated for implementing DSM programs? Who will pay for this compensation?

RESPONSE: There are various payment mechanisms that can be utilized. Some involve passing these costs along to utility customers, much as HECO does now. Other mechanisms involve having the customer pay for the DSM measures from the savings they produce by installing DSM measures (the shared savings approach) where no utility charges are utilized.

HECO/CA-FSOP-IR-108 **Ref: CA FSOP, page 12.**

Please provide a copy of the National Association of Regulatory Utility Commissioners' ("NARUC") report entitled "Profits and Progress Through Least-Cost Planning", November 1989 that provides the definition of least-cost planning.

RESPONSE: The document is available through NARUC. Since the document is voluminous one copy will be provided to the Parties via separate transmittal letter.

HECO/CA-FSOP-IR-109 **Ref: CA FSOP, page 13.**

The first step in the integrated resource planning process suggested by the Consumer Advocate as referenced in the ACEEE Article is "Identifying the objectives of the plan [these should tie back to the basic planning objectives] that balance reliable service, cost minimization and other planning objectives ...".

a. Please explain the difference, if any, between the terms "objectives of the plan" and "basic planning objectives".

RESPONSE: The Consumer Advocate anticipates that the "objectives of the plan" would be the same as the basic, IRP planning objectives (illustrative planning objectives are discussed, for example, in Section VII.A of the Consumer Advocate's FSOP).

b. At what step in the overall integrated resource planning process should the "objectives of the plan" and the "basic planning objectives" be identified, target values set, and target values finalized?

RESPONSE: IRP planning objectives should be identified by a utility during early stages of an IRP cycle (i.e., as early as possible and immediately after an assessment of the state of its system, which comprises an assessment of key performance indicators). Procurement targets would be set (such as the "DSM procurement parameters" discussed in the CA's FSOP at 53) thereafter.

A utility's proposed IRP planning objectives (and proposed procurement targets) would subsequently be reviewed (and possibly commented on) by an Advisory Group, then later reviewed by the Commission during the formal review phase of an IRP cycle.

c. What is the Consumer Advocate's position on what is required in the IRP Framework for "objectives of the plan" and "basic planning objectives"?

RESPONSE: Part III of the IRP Framework discusses the "Planning Context." Part III.A.1 discusses the first of four "Major Steps" in that process. It states that "Planning is the process in which the utility's needs are identified; the utility's objectives are formulated...." Section III.D.1.a establishes that "The utility shall include in its integrated resource plan a full and detailed description of (1) the needs identified ... (4) the objectives to be attained by the plan...." It is the Consumer Advocate's position that its characterization of planning objectives (see, for example, in Section VII.A of the Consumer Advocate's FSOP) is fully consistent with the requirements of the IRP Framework.

d. Can changes be made to the "objectives of the plan" and "basic planning objectives" during the IRP planning process to take into consideration any changes in conditions and/or public feedback?

RESPONSE: Yes, however, depending on where in the 3-year cycle the change in conditions or comments are offered, it may be more appropriate to consider the impacts of the changes in the development of the next major IRP plan to be filed every three years, pursuant to the Commission's IRP Framework.

HECO/CA-FSOP-IR-110 **Ref: CA FSOP, pages 13-14.**

The ACEEE Article referenced by the Consumer Advocate identifies 11 steps in the integrated resource planning process.

a. Do the steps identified have to occur sequentially or can some steps occur concurrently? If yes, please identify the concurrent steps.

RESPONSE: In a narrow sense, the Steps identified represent a sequence of Steps in resource planning processes (with some Steps, such as Steps 2, 3, and 4, perhaps done concurrently). However, the Consumer Advocate has tried to emphasize that the resource planning would best be viewed as a continuous process. As such, planners would routinely build on their earlier efforts and would continuously obtain new data and information, reevaluate planning objectives, revise prior analyses, reassess scenarios to be explored, etc. In this context, for example, data gathering (Step 2) for one IRP might occur even as Steps of an earlier IRP are being completed.

b. Please explain why the steps do not identify setting basic planning objectives or specific targets for those planning objectives in the process.

RESPONSE: Step 1 specifically calls for the identification of the objectives of the plan.

HECO/CA-FSOP-IR-111 **Ref: CA FSOP, page 14.**

Please provide examples of utilities that procure incremental DSM resources through competitive bidding processes. Identify the processes that each went through to pre-determine the amount of demand-side resources to procure.

RESPONSE: A situation very similar to HECO's reserve capacity shortfall is what ISO-New England faced in SW Connecticut in the summer of 2004. ISO-NE did not have sufficient operating reserve (10 minute and 30 minute) to maintain reliability. In December 2003, ISO-NE issued an RFP for up to 300 MW of quick start generating capacity or demand response resources. As a result of this RFP, ISO-NE executed contracts for more than 250 MW for four years with an option for a fifth year. This clearly indicates that aggressive efforts to resolve a capacity shortfall can produce successful results.

programs that have been implemented as the current practice does not require such a filing. However, the Consumer Advocate is recommending in the instant proceeding, a change in the current practice which will provide interested parties with the opportunity to formally file comments on the Company's annual evaluations of the DSM programs in the future.

c. Please provide examples of the specific benchmarks that the Consumer Advocate utilized to assess HECO's DSM program effectiveness to support its assertion that the current approach to DSM program administration is not as effective as it needs to be.

RESPONSE: The Consumer Advocate did not apply any "specific benchmarks" in determining that DSM program administration in Hawaii will not be effective unless the Commission increases its DSM program oversight role. This conclusion is based on the position that a routine, comprehensive post-implementation assessment (i.e., in formal proceedings before the Commission) of DSM programs is necessary, if Hawaii's DSM effort is to yield optimal results. This position, which is discussed in greater detail in Appendix C, is fully consistent with recommendations advanced in NARUC's "Regulating DSM Program Evaluation" report (at E-1).

HECO/CA-FSOP-IR-115 **Ref: CA FSOP, page 23.**

HECO's A&S Report, filed March 31, 2006, provided extensive information on HECO's DSM program costs, energy and demand savings, and cost-effectiveness.

a. Please discuss how the A&S Report did not provide sufficient opportunity for the review of HECO's DSM program implementation?

RESPONSE: The Consumer Advocate has not been able to perform a thorough assessment of HECO's recent A&S report in the context of the instant proceeding to determine whether additional information would be required to set a foundation for the Commission proceedings recommended in Appendix C. The Consumer Advocate's purpose in advancing Appendix C in the instant proceeding is to make recommendations to the Commission regarding the two sets of proceedings that it should routinely be used to effectively administer DSM programs that are being implemented in order to maximize the benefits that can be derived from such programs. If the Commission determines that such proceedings are to occur, the Consumer Advocate would have sufficient time to properly analyze the A&S filing and provide an assessment of HECO's A&S report.

b. Does the Consumer Advocate maintain that HECO's A&S Report should include additional information necessary to assess the effectiveness of DSM program implementation? If the answer is yes, please provide a detailed listing of the information that the Consumer Advocate maintains needs to be provided in order to better perform this DSM program effectiveness assessment.

RESPONSE: Please see the response to Part a, above.

HECO/CA-FSOP-IR-116 **Ref: CA FSOP, page 23.**

". . . the Consumer Advocate asserts that the DSM program administration in Hawaii – whether performed by electric utilities or third-party provider – will not be effective unless the Commission increases its DSM program oversight role."

a. How will increased Commission oversight increase DSM program effectiveness?

RESPONSE: Formal reviews of DSM program effectiveness (i.e., as described in NARUC's report, "Regulating DSM Program Evaluation," are important because they represent an opportunity to ensure that DSM programs are operating effectively based on the actual to-date program results. In addition, the Commission must ensure that the energy and capacity savings attributed to DSM programs are, in fact, being achieved. An independent review by the Commission, with input from other affected parties (such as the Consumer Advocate and members of the utility's IRP advisory group), is important because utilities and DSM providers may have incentives to overstate the actual benefits being realized from the programs that are implemented. This could be harmful to consumer interests.

b. Please identify aspects of HECO's DSM program administration to implement and deliver cost effective demand-side resources that will not be effective unless the Commission increases its DSM program oversight role.

RESPONSE: In general terms, post-implementation reviews would be expected to identify any DSM programs that are achieving less (or more) than the level of energy and capacity savings anticipated at the

program design stage. Absent such reviews, there is a risk that underperforming DSM programs will continue to receive investment dollars. Alternately, DSM programs that are achieving a greater level of savings than anticipated might not be recognized as such, which may lead to lost opportunities to increase the commitment to such programs when a need exists. In either case, DSM program effectiveness would be sub-optimal.

HECO/CA-FSOP-IR-118 **Ref: CA FSOP, page 25.**

The Consumer Advocate states that "The Washington State public utilities commission requires IRP filings to be submitted every two years."

d. Is the Washington State public utilities commission required to approve each utility IRP filing?

RESPONSE: It appears that the Washington State PUC does not approve each IRP filing. Washington WSR 06-03-001, a Rule Amendment issued in January 2006, provides as follows:

> "(4) Timing. Unless otherwise ordered by the commission, each electric utility must submit a plan within two years after the date on which the previous plan was filed with the commission. Not later than twelve months prior to the due date of a plan, the utility must provide a work plan for informal commission review. The work plan must outline the content of the integrated resource plan to be developed by the utility and the method for assessing potential resources;..." and
>
> "(6) The commission will consider the information reported in the integrated resource plan when it evaluates the performance of the utility in rate and other proceedings."

e. Are there specific rules/procedures, i.e., an IRP Framework, the Washington State utilities are required to follow in developing their IRPs?

RESPONSE: Yes, see Washington PUC Rules WAC 480-100-238.

f. If yes, please provide a copy of the Washington State public utilities commission's IRP Framework.

RESPONSE: Please see the Washington State PUC's website at: **http://apps.leg.wa.gov/WAC/default.aspx?cite=480-100-238.**

c. Would an appropriate method to determine the cost-effectiveness of a particular DSM program be to compare the total resource cost of a particular plan with and without including the particular DSM program in the plan, and if excluding the particular DSM program results in higher total resource cost, then the particular DSM program would be deemed cost-effective?

RESPONSE: Yes.

The Consumer Advocate can, however, offer, as an example, the observation that in 2002, Vermont's calculation of environmental benefits equaled $0.007/kWh. This figure was the product of a settlement between Vermont utilities, the Vermont Department of Public Service and some other parties in to Vermont Public Service Board Docket 5980.

c. Does the Consumer Advocate have recommendations for changes to existing methods and rules governing cost-effectiveness calculations in the Hawaii IRP context?

RESPONSE: The Consumer Advocate does not have specific recommendations on modifications to offer at this time regarding the cost-effectiveness calculations currently employed by HECO. The Company has not provided sufficient information to allow for the independent assessment. The Consumer Advocate would, however, be willing to consider any proposals that the Company advances in keeping with the utility's statutory mandates, any detailed planning objectives that the Company ultimately identifies as important to its system, and effective resource planning.

d. Is it the position of the Consumer Advocate that externalities should be quantified for quantitative inclusion in the cost-effectiveness calculation?

RESPONSE: Yes, the Consumer Advocate believes that such factors should be considered either qualitatively or quantitatively. The challenge will

be on reaching agreement as to the quantification of the factors. The mere fact that there is a challenge in quantification should not, however, result in a utility not offering a proposal as to how each factor was taken into consideration in developing their respective IRP and action plan.

HECO/CA-FSOP-IR-121 **Ref: CA FSOP, page 26. "Cost-effectiveness calculations must consider explicitly the benefits of: . . . (c) long-term, non-price benefits (such as may result from a reduced dependence on oil imports and compliance with Hawaii's RPS)."**

a. Please clarify if the Consumer Advocate is recommending that these benefits be considered quantitatively or qualitatively. If quantitatively, please describe the methodology that the Consumer Advocate envisions should be used to include these benefits into the cost-effectiveness calculations.

RESPONSE: The Consumer Advocate believes that such factors should be considered either qualitatively or quantitatively. The Consumer Advocate proposes no specific methodology for quantifying the external factors considered by HECO. Rather, the Consumer Advocate believes that each utility should develop and propose a methodology for considering the non-price costs and benefits that DSM resources would bring to its system. The Consumer Advocate's position is that the non-price costs and benefits cannot be ignored, particularly where there exists a linkage to statutory (e.g., RPS) or other objectives established by the legislature (e.g., reduced dependence on fossil fuels).

b. Please provide the basis for the Consumer Advocate's proposed methodology. Please identify the other jurisdictions that use such methodology.

RESPONSE: Please see the response to part (a) above. In addition, examples of other jurisdictions that recognize non-price benefits in evaluating DSM programs include Vermont, California, New York and Oregon.

HECO/CA-FSOP-IR-122 **Ref: CA FSOP, page 26.**

Does the Consumer Advocate believe that "proposed budgets related to investments in specific demand-side programs" (emphasis added) should be provided the opportunity to earn a reasonable rate of return comparable to investments in supply-side resources?

RESPONSE: A return on equity is allowed on utility investments that are capitalized and paid for with external sources of funds, such as the issuance of common equity. Since the Company's investments in DSM are not capitalized but are expensed and funded currently via surcharges on customer bills, no return on equity is appropriate.

HECO/CA-FSOP-IR-123 **Ref: CA FSOP, page 27.**

In its A&S Report, filed March 31, 2006, at page 17 HECO stated "The 2001-2003 NTG study is expected to be completed later this year, and HECO is working with the Consumer Advocate on modifications to the survey instrument." Does the Consumer Advocate have any further comments and/or proposed modifications to the NTG (net to gross) survey instrument to facilitate finalizing the instrument such that the NTG study can be completed this year?

RESPONSE: At this time, the Consumer Advocate does not have any comments on the proposed NTG survey instrument, although the Consumer Advocate reserves its right to provide comments to the Commission on this matter in the future.

HECO/CA-FSOP-IR-124 **Ref: CA FSOP, page 28, Footnote. ". . . lost margins and shareholder incentives associated with each of the Company's proposed DSM programs represents a very substantial portion of the overall DSM program expense."**

a. Please define lost margins.

RESPONSE: Lost margins as referenced in this footnote equate to lost base revenues.

b. In the absence of DSM energy efficiency programs that result in reduced kWh sales, would the utilities have otherwise recovered these fixed costs through its rates?

RESPONSE: Theoretically, a utility recovers all costs, both fixed and variable, in the rates it charges for the service rendered. For an electric utility, it is recognized that the loss of a kWh sale from the level assumed in determining the existing rates results in the lost contribution to recover the fixed costs also assumed in determining the existing rates. Ratemaking is dynamic, however, and the level of revenue, expenses, and rate base upon which a utility's rates are determined change constantly. Therefore, it is the relationship between the revenues and expenses and the returns on rate base that are actually being realized that determines the need for a rate adjustment filing. It is not correct to presume that the mere loss of a kWh sale will actually result in the lost contribution to the utility's fixed costs such that without a lost margin recovery mechanism, the utility will not be allowed to recover its fixed costs.

Furthermore, such an analysis fails to consider the increasing sales volumes from load growth that may more than offset the lost contribution from the kWh sales that derive from the installation of a given DSM measure. It also is quite possible that over time the utility would have to make additional investments to serve the load if the load reduction caused by the DSM programs did not occur as expected, or if the sales were to increase to a point that the DSM programs could not defer the need for additional generation.

Therefore, the DSM programs implemented by the Company are expected to have a positive, not negative, impact, especially given that the utility's transmission system is not connected to other utilities and there are competing interests for the use of limited land available for siting generating units. Shareholder incentives would not have otherwise been recovered.

HECO/CA-FSOP-IR-126 **Ref: CA FSOP, page 33. "The Consumer Advocate acknowledges that this position represents a change from the settlement reached in Docket No. 00-0209...".**
Would the Consumer Advocate agree that it may be appropriate to re-examine the stipulation approved by the Commission in Decision and Order Nos. 19019 and 19020 in today's context to find a better solution for electric utility ratepayers?

RESPONSE: No. It is not appropriate to re-examine the entire stipulation. The Consumer Advocate has re-evaluated its agreement on the mechanism for cost recovery, believing that a surcharge is the preferred mechanism. The Consumer Advocate's position on the matter does not alter its stance that the Company should recover all prudently incurred costs associated with its DSM programs. Whether the Company recovers these costs through a surcharge or through base rates, it will still recover the appropriate costs. Therefore, the Company should be indifferent to the cost recovery mechanism from a financial perspective.

Since the Consumer Advocate is not altering its position in any fundamental way that affects the Company, the Consumer Advocate expects the Company to do the same, and honor its commitment to not seek recovery of lost margins and shareholder incentives for DSM programs.

Furthermore, as previously noted, in approving the stipulation, the Commission reminded the Company that it could not use its agreement to terminate the recovery of lost margins and

shareholder incentives as the basis for not actively pursuing the implementation of DSM programs.

HECO/CA-FSOP-IR-127 **Ref: CA FSOP, pages 33-34. "This change in position stems from the Consumer Advocate 's recognition that DSM resources are a critical component in Hawaii's energy future, given the increasing demand for electricity coupled with the limited available sites for new generation. Thus, close scrutiny of such programs, financially and otherwise, will be required at least for the time being to help Hawaii's electric utilities accelerate implementation of their DSM programs to meet both "urgent" resource needs and legislative initiatives."**

a. When did the Consumer Advocate recognize that DSM resources are a critical component in Hawaii's energy future, and that there is an "urgent" resource need?

RESPONSE: The referenced statement is being taken out of context. The statement was not meant to imply that the Consumer Advocate has not recognized the benefits that DSM programs have offered in meeting the needs of the electric utility's customers since the 1990s. Rather, the statement was offered to acknowledge the contribution that DSM resources can provide in light of HECO's urgent need for generating resources.

b. How does the Consumer Advocate's recommendation for "close scrutiny" help Hawaii's electric utilities accelerate implementation of their DSM programs?

RESPONSE: Close scrutiny will help ensure that the Company demonstrates that its portfolio of DSM programs represents an optimal mix of resources to meet customers' needs at the lowest reasonable costs. This is especially so in light of the Company's decision to seek Commission approval to commit monies for the installation of a new combustion turbine to be sited in the Campbell Industrial

Park (i.e., the subject of Docket No. 05-0145 which is pending before the Commission).

HECO/CA-FSOP-IR-128 **Ref: CA FSOP, page 37. "The Consumer Advocate does not believe that the Company should be allowed a 15% return on its DSM costs, which are expensed, not capitalized."**

a. Does the Consumer Advocate consider the 15% return on DSM costs similar to a markup?

RESPONSE: Yes.

b. Is a markup incentive mechanism included in the IRP Framework Section III.F.3.a. as a possible form of utility incentive?

RESPONSE: Yes, Section III.F.3.a(2) indicates that a possible form of incentive may be "[g]ranting the utility a percentage of certain specific expenditures it makes in demand-side management programs (markup). It should also be noted that Section III.F.3.a of the Commission's IRP Framework states that "[u]nder appropriate circumstances, the Commission may provide the utility with incentives to encourage participation in and promotion of full-scale demand-side management programs." Thus, there is no requirement to allow a utility to include a mark up incentive mechanism for the implementation of DSM programs.

c. Does the IRP Framework indicate that the markup could only be applied to capital costs?

RESPONSE: The IRP Framework does not state that the markup can only be applied to capital costs. Nonetheless, the Consumer Advocate's position is that a 15% "markup" is excessive, given that the underlying costs would be expensed by HECO. The 15% markup

exceeds the 10.7% return on common equity that was agreed to by the Parties in HECO's pending rate proceeding (i.e., Docket No. 04-0113), resulting in an overall weighted cost of capital or rate of return of 8.66%. Moreover, the 15% markup exceeds the 11.5% return on common equity which HECO requested in its application filed in Docket No. 04-0113.

Finally, it is the Consumer Advocate's position that the circumstances are such that it would not be appropriate for any such markup to be approved by the Commission – it would be contrary to the terms of the October 2001 Stipulation Agreement.

HECO/CA-FSOP-IR-129 **Ref: CA FSOP, page 40. "The Consumer Advocate observes that if the responsibility for DSM program administration is transferred to a third-party provider, these costs [lost margin and shareholder incentives] would not accrue to ratepayers."**

a. Are the utility's fixed costs embedded in base rates in a rate case?

RESPONSE: Generally, yes.

b. Does the Consumer Advocate believe that a third-party provider would require some type of return or profit to administer DSM programs?

RESPONSE: It depends upon the market structure chosen. If a government agency or non-profit entity is chosen to administer DSM programs, then customers could wind up paying only the program costs (which could be recovered via a surcharge on utility bills). Even if a for-profit entity is chosen, it may well seek to charge much less than the 15% markup that is being proposed by the Company in the instant proceeding.

c. Will the Consumer Advocate oppose compensation by ratepayers of more than program costs to a third-party provider of DSM programs?

RESPONSE: The answer will depend on who the third-party provider is. As noted above, if the third-party provider is a government agency, there likely will be no compensation required other than a recovery of the costs incurred to implement and monitor the DSM programs. If the third-party provider is not a government agency, the Consumer Advocate will evaluate the merits of any specific

proposal for compensation for the third-party provider once the specific facts supporting the request are known.

HECO/CA-FSOP-IR-130 **Ref: CA FSOP, page 45.**

The Consumer Advocate indicates that while the seven objectives listed in Chapter 4 of HECO's IRP-3 report are not unreasonable in and of themselves, HECO failed to provide "specific quantitative and qualitative targets that are to be achieved to meet each of the stated objectives...".

a. If HECO were to set quantitative and qualitative goals for these objectives, would the Consumer Advocate agree that these objectives are appropriate resource planning objectives?

RESPONSE: In order to provide a response, the Consumer Advocate would need to know what the quantitative and qualitative goals are for each of the specific objectives, and how they relate to the proposed resource planning objectives for the Company's system. Next the Consumer Advocate would need to know how the IRP plan proposed by the Company meets each of the stated goals, in terms of quantitative and qualitative results, and in consideration of the costs that are expected to be incurred to achieve the expected results. In other words, the Consumer Advocate would need to be able to independently assess the "trade-offs" considered in developing IRP-3 and the five-year Action Plan.

b. If the answer is no, please explain in detail why not.

RESPONSE: See the response to part (a) above.

to optimize the performance (i.e., in terms of reliability, cost, environmental impact, etc.) of its system, (3) define the planning targets and DSM procurement paramaters (or "thresholds") that will enable it to operationalize its planning objectives, and then (4) identify the incremental resources that will best meet the established planning targets (and thus, meet the underlying planning objectives).

b. What modification to this alternative approach would make it reasonable to the Consumer Advocate?

RESPONSE: See the response to part a, above.

HECO/CA-FSOP-IR-132 **Ref: CA FSOP, page 45. "HECO failed to present adequate information regarding the present state of its system (i.e., where the Company stands today, not at the time of the last IRP, in relation to the target levels that HECO would seek to achieve)."**

a. On March 6, 2006, HECO filed its 2006 Adequacy of Supply ("AOS") Report. Does the Consumer Advocate consider the 2006 AOS as providing adequate information regarding the state of HECO's system? If not, why not.

RESPONSE: Please refer to Appendix A of our FSOP, where the Consumer Advocate describes in detail the additional information that would be useful to enable an independent assessment of the HECO's projected loads in relation to the capabilities of existing resources. There likely are many more factors that are important in assessing the state of HECO's system. Many of these likely are implicit in the "measures" by which the Company proposes to evaluate alternate resource plans in its IRP-3. Understanding current and foreseeable system costs, emissions levels, etc., would appear important.

b. At which point(s) in the DSM program approval process would the HECO need to provide information regarding the present state of its system?

RESPONSE: This information is needed at the start of the process to develop an integrated resource plan (see Step 2 on page 13 of the Consumer Advocate's FSOP), and should be readily updated and made available through the process as the interested stakeholders and utility identifies the DSM programs that are appropriate for implementation. Basic information regarding the state of the utility's

system should always be available to effectively monitor performance (e.g., whether reliability levels are being achieved) and to ensure that the utility is able to meet its obligation to serve.

HECO/CA-FSOP-IR-133 **Ref: CA FSOP, page 45. "In addition to the lack of specificity in planning objectives described above, the Finalist Plans presented in Chapter 10 of HECO's IRP-3 appear to look at various planning objectives in isolation of each other. For instance, Plan 1 is represented as a "Least Cost Plan," while Plan 2 and Plan 4 explore compliance with Hawaii's Renewable Portfolio Standards statute. None of these plans start with specifications of the quantitative and qualitative targets that are to be achieved through the 'Plan' then frame a plan that would reasonably balance the impacts of each."**

a. Does the Consumer Advocate believe that it is inappropriate for HECO to analyze a least cost plan that does not meet the RPS levels specified in Hawaii's RPS law? Please explain your answer.

RESPONSE: No, it is the Consumer Advocate's position that HECO should comply with all statutory requirements. As such, it is the Consumer Advocate's view that it would not be useful for HECO to advance any plan as a "Finalist Plan" if it does not meet the requirements of the RPS statute. The cited discussion was offered to convey the challenge with performing an independent assessment of the proposed resource plan relative to the planning objectives that the Consumer Advocate anticipates would be important (e.g., as may relate to reliability, cost and RPS compliance objectives). See also the response to HECO/CA-FSOP-IR-131.

b. If the answer to part (a) is yes, then please explain how HECO would address the provision in Hawaii's RPS law that achievement of the RPS be done using cost-effective renewable resources?

RESPONSE: It is the Consumer Advocate's position that the Company should advance a proposed resource plan that meets the requirements of

the RPS statute **and** satisfies least cost requirements (in light of any necessary constraints) **and** meets other important planning objectives identified by the Company. The Consumer Advocate sees little point to the Company identifying a "Finalist Plan" that exhibits the lowest life-cycle costs (for example), but would not be lawful because it does not reasonably accommodate the RPS statute. Likewise, it would be problematic for the Company to identify a "Finalist Plan" that would satisfy the RPS percentages in full, but would run afoul of the statutory provisions for "cost effectiveness." Certainly, it would be appropriate for the Company to explore the boundaries of cost-effectiveness and RPS percentage compliance in formulating a proposed resource plan. This analysis may help the company to explain why, for example, its proposed resource plan does not meet the full RPS percentage (i.e., if meeting the RPS percentage targets would violate cost-effectiveness constraints). However, the pro forma scenarios that are the core of such analysis should not be characterized as "Finalist Plans."

Furthermore, the Consumer Advocate emphasizes that the Company should consider non-price costs and benefits in assessing the value of various resources. It would be unfortunate if, for example, a renewable resource that would bring substantial

presenting its recommended resource plan to the Advisory Group and to the Commission, the Company should explain the tradeoffs that it considered (relative to identified targets) in arriving at its recommended resource plan.

Clearly, judgment will be required as the Company's proposed resource plan is developed in light of identified targets. The Consumer Advocate anticipates that the Company will be prepared to respond to questions from the Advisory Group and participants in Commission review proceedings to explain its decisions.

The concern expressed throughout the Advisory Group meeting and in the Consumer Advocate's PSOP and FSOP is that the Company failed to (1) provide a quantification of the objectives (e.g., planning "targets") early and throughout the IRP development process, and (2) explain the trade-offs that were considered in developing its proposed "Finalist" Plan. Without such information, the parties were precluded from forming independent assessments of the Company's proposal. Also see the response to HECO/CA-SOP-IR-131.

d. If the answer to part (c) is yes, then what if the "quantitative and qualitative targets" are such that a Finalist Plan is not able to meet all of the targets (e.g. minimize the expected percentage increase in revenue requirement below a specified percentage and preserve system reliability)? How would the IRP process develop a plan to meet the "quantitative and qualitative targets?"

RESPONSE: Please see the response to Part c, above.

HECO/CA-FSOP-IR-134 **Ref: CA FSOP, page 46.**

The Consumer Advocate states that "The Company's planning documents are devoid of information that would allow the Commission, or any independent reviewer, to determine "how much is enough," how much is too much," or where more of a given resource may be needed."

Please provide a detailed explanation of the information that is not provided in the Company's planning documents and how it would be used to determine the amount of a specific resource that is needed.

RESPONSE: The Company has proposed DSM programs that are expected to achieve a certain level of capacity and energy savings. These programs do not meet all of the Company's stated needs, as evidenced by a reserve capacity shortfall that exceeds the DSM savings. Nor has the Company presented sufficient information for other parties to independently determine how and why the Company settled on the proposed investment levels for the DSM programs identified.

The Consumer Advocate believes that the Company should develop a plan that answers, for example, the following questions and provide sufficient information that allows for an independent assessment of the conclusions reached by HECO.

- What specific resource planning objectives are to be achieved through the DSM programs being proposed?
- What were the DSM procurement parameters that governed the types and quantities of DSM programs selected?

- Does the fact that HECO has a near-term reserve capacity shortfall mean that more DSM should be implemented?
- What combination of DSM programs and budgets will best fill the remaining capacity need?
- Should greater emphasis be placed on demand response programs, rather than energy efficiency programs?
- How much of this shortfall should be met by new supply sources?

HECO/CA-FSOP-IR-136 **Ref: CA FSOP, pages 49-53.**

The Consumer Advocate recommends six planning objectives be generally applied to HECO's IRP planning processes.

a. Does the Consumer Advocate recommend that specific quantitative target values be derived for each of the suggested objectives?

RESPONSE: Quantitative targets (and DSM procurement parameters) should be set for each resource planning objective in a given IRP, to the extent possible. Note, however, that pages 49-53 are intended to offer an illustration of the types of resource planning objectives that the Consumer Advocate would view as significant improvements to HECO's resource planning processes. The Consumer Advocate does not have access to the range of data on the current state of the utility's system to enable it to be fully effective in prescribing such objectives or the associated targets. Such task should be performed by HECO.

Page 53 of the Consumer Advocate's FSOP indicates that based on a set of more detailed planning objectives, and armed with detailed information regarding key reliability and operational parameters on its system, the utility should define specific targets that would establish the parameters of DSM procurement decisions. These targets would provide a tangible form to the identified planning objectives. Again, the Consumer Advocate recommends that these targets be quantified to the extent feasible, but recognizes that qualitative targets may be necessary in some instances.

b. If yes, please explain in detail the methodology (e.g., formula) that would be used to develop the targets for each of the suggested objectives. In particular, explain how quantitative target values would be developed for objectives that are inter-related. For example, explain how a revenue requirement target can be set if meeting the statutory RPS levels is also set as a target, without having done the analysis to determine the cost required to meet the statutory RPS levels.

RESPONSE: The Consumer Advocate has not considered any specific "methodology" by which the targets would be developed. The establishment of targets to be achieved through resource procurement processes is a fundamental responsibility of the utility's planners. The Consumer Advocate has attempted to provide an illustration of the types of targets (or "DSM procurement parameters) that may be useful where DSM resources are to be procured (see pages 53-54 of the CA's FSOP). The point of the discussion is that without the targets, one cannot perform an independent assessment of the reasonableness of the conclusions reached by the utility and the ultimate plan that is submitted for Commission approval.

HECO/CA-FSOP-IR-137 **Ref: CA FSOP, page 51.**

The Consumer Advocate suggests "explicitly recognizing in DSM program cost-effectiveness calculations the value (even if a rough estimate) the risk hedge implicit in resources that are not affected by changes in fossil fuel prices."

a. Please explain how the Consumer Advocate suggests that the risk hedge value be explicitly calculated.

RESPONSE: Risk assessments and techniques for hedging risk are utility functions that the Consumer Advocate believes the Company should be competent at and must routinely perform as part of its core business. There are several ways to deal with risk in utility operations and planning. As an example of how one utility performed these functions in an IRP process, please review the Vermont Electric Cooperative Integrated Resource Plan dated January 12, 2004, as filed with the Vermont Public Service Board. Since the document is voluminous one copy will be provided to the Parties via separate transmittal letter.

b. Please provide any supporting documentation (e.g. reports, IRPs from other jurisdictions) that explains the Consumer Advocate's suggested method.

RESPONSE: Please see the IRP filing reference in the response to Part a, above. Please see also Chapter 4 of PacifiCorp's 2004 IRP Update at http://www.pacificorp.com/File/File57884.pdf.

HECO/CA-FSOP-IR-138 **Ref: CA FSOP, page 58. "...then DSM programs that focus on peak load reductions (such as CIDLC and RDLC) likely should play a more prominent role in an optimized DSM portfolio."**

a. Is the Consumer Advocate suggesting that energy efficiency programs that save energy should play a less prominent role? Why or why not?

RESPONSE: No, however, given the Company's stated urgent need for reserve capacity, the Consumer Advocate is suggesting that the Company evaluate whether or not a greater emphasis on LM and less emphasis on EE at this time would produce a better solution to the reserve capacity shortfall.

According to the Company's own calculations, LM programs have a TRC test of 2.71 compared to 1.09 for EE programs in the aggregate. One question the Consumer Advocate would like answered is if more of the $22 million were spent on LM programs, would there be greater peak load reductions to address the observed reserve capacity shortfall? Why or why not.

b. Should the Consumer Advocate's recommended IRP planning objective of meeting the statutory RPS requirements (page 50) be subordinate to focusing on peak load reduction with load management programs?

RESPONSE: The Company should meet its statutory obligations, both with respect to the RPS statute and any reliability-related service obligations implicit in Hawaii law. However, how this is done may involve tradeoffs in the levels of specific types of resources that are pursued (e.g., peak load reduction measures vis-à-vis renewables)

HECO/CA-FSOP-IR-139 **Ref: CA FSOP, page 62. ". . . analysis of the industrial sector does not appear to address the two refineries that operate in HECO's service territory, . . ."**

The two refineries provide more than 50% of their electrical needs with their own co-generation. Therefore, most of the energy and demand savings resulting from ratepayer supported DSM rebates would benefit the refineries rather than the utility system. The 50% exclusion rule (see HECO T-10, Docket No. 04-0113) describes the implementation guidelines for customers with self- or co-generators that are currently in place. Does the Consumer Advocate support modifying that rule?

RESPONSE: If the Company's shortfall of reserve capacity is as dire as the Company purports and the Company has no other options that it can implement in the short term, then a relaxation of this criterion for these customers is worth considering in this case.

HECO/CA-FSOP-IR-140 **Ref: CA FSOP, pages 74-75.**

Please provide specific numerical examples of where HECO's consultant Global Energy Partners failed to include incentive payments in its cost-effectiveness calculations.

RESPONSE: Please refer to the table on page 75 of the Consumer Advocate's FSOP.

HECO/CA-FSOP-IR-141 **Ref: CA FSOP, page 75.**

Please provide all workpapers, models and spreadsheets that backup up the "corrected" TRC tests contained in Column 10 of Table 4.

RESPONSE: Please refer to the response to RMI/CA-IR-3.

HECO/CA-FSOP-IR-142 **Ref: CA FSOP, page 75. "The Consumer Advocate observes that it is inappropriate to exclude Utility Incentive Payments to program participants in the TRC Test."**

The California Standard Practice Manual: Economic Analysis of Demand-side Programs and Projects, October 2001, page 18, when describing the Benefits and Costs of the TRC Test states: "This test represents the combination of the effects of a program on both the customers participating and those not participating in a program. In a sense, it is the summation of the benefit and cost terms in the Participant and the Ratepayer Impact Measure tests, where the revenue (bill) change and the incentive terms intuitively cancel (except for the difference in net and gross savings)."

a. Based on this statement from the California Standard Practice Manual, would the Consumer Advocate agree that it is appropriate to leave the revenue (bill) change and the incentives to the customers out of the TRC test, (i.e., canceled out of the equation)?

RESPONSE: Upon examining the formulas used for the Participant's Test and the RIM test, it appears that it is possible to cancel out the revenue (bill) change and incentive terms in the calculation as described in the Total Resource Cost test. However, on the participant cost component of the equation, the cost includes the initial capital cost (before incentives) as the proper accounting for total resource cost.

b. If no, please provide a specific site from the California Standard Practice Manual that specifically states that Utility Incentive Payment should be included as a cost in the Total Resource Cost Test.

RESPONSE: Please refer to page 18 of the California Standard Practice Manual, which, in describing the TRC test, states that the costs in this test are the program costs paid by both the utility and the participants. Thus, all equipment costs, no matter who pays for them (i.e., even if a portion of the total payment to the supplier is paid using the

utility incentive) are included in this test. Please see also the response to part a., above.

c. Please identify a source document that serves as the basis for each utility jurisdiction listed.

RESPONSE: Not applicable.

b. Is the Consumer Advocate proposing that a formal hearing be conducted by the Commission to review the results reported in HECO's Annual Program Accomplishments and Surcharge (A&S) Report?

RESPONSE: The Consumer Advocate is proposing that retrospective DSM program evaluations should be performed, of the type described in NARUC's report "Regulating DSM Program Evaluation." A quick review suggests that information presented in HECO's A&S reports would facilitate this review. However, the Consumer Advocate has not performed a rigorous review of the A&S report to determine whether it would be a fully adequate foundation for such reviews.

c. If the answer to part "a." above is yes, what is the timeframe in weeks and the procedural steps, if applicable, that the Consumer Advocate is contemplating to facilitate this process.

RESPONSE: The Consumer Advocate has not given rigorous consideration to the procedural steps to be implemented. The process could include, for example, utility filings, interventions, an opportunity for information requests from interested persons, an opportunity for comments and/or analysis by interested persons, hearings before the Commission and a Commission order. Such proceedings likely would require several months to complete. The Consumer Advocate anticipates that as review procedures and methods for assessing DSM program performance become established, the proceedings likely can be completed more quickly.

Moreover, if the utility continued with the Advisory Group meetings on a regular basis there would be opportunity to discuss with the interested stakeholders the results of the annual evaluations and allow for discussion in such meetings. At that point, depending on the extent of any concerns that may exist, the formal proceedings or filings may or may not be extensive.

Note that these Commission reviews of DSM program effectiveness would result in Orders approving or modifying a utility's DSM programs. In subsequent proceedings, the utility would submit a filing that (1) describes its DSM programs, as modified in compliance with the Commission order, and (2) proposes budgets and rate surcharges to support the modified DSM programs.

HECO/CA-FSOP-IR-144 **Ref: CA FSOP, page 80. "In the alternative, the Commission could consider the retention of a third-party evaluator to review the Company's performance and offer an objective opinion of the Company's implementation success."**
In the Consumer Advocate's proposal, at what frequency would the Commission's third-party evaluator issue its opinions?

RESPONSE: Annually.

HECO/CA-FSOP-IR-145 **Ref: CA FSOP Appendix C, page 1. "The Commission would review those budget filings and approve (or reject) the budget applications based on consistency with an approved IRP Action Plan, and perhaps other considerations."**

1. Is the Consumer Advocate requesting that the Commission issue a formal approval or rejection of the DSM Budgets included in the Annual Modification and Evaluation Report filed by the Companies in or around November of each year?

RESPONSE: The Consumer Advocate recommends that the Commission issue a formal approval of or rejection of (or more likely an approval with modification(s) to) a utility's proposal on an annual basis, consistent with the filing requirement. These orders would respond to applications for budgetary approvals and corresponding adjustments to DSM surcharges in rates. The applications would follow proceedings in which the Commission reviews and issues an order on the effectiveness of DSM programs (i.e., DSM program evaluations).

The month in which orders approving budgets and surcharges would not be critical, although there likely will be benefits if such orders are issued in the same month each year for a given utility.

HECO/CA-FSOP-IR-146 **Ref: CA FSOP Appendix C, page 1.**

What is the timeframe in weeks and procedural steps, if applicable, envisioned by the Consumer Advocate for the Commission to review and approve DSM annual budget filings?

RESPONSE: The Consumer Advocate has not given rigorous consideration to the procedural steps to be implemented. The process could include, for example, utility filings, interventions, an opportunity for information requests from interested persons, an opportunity for comments and/or analysis by interested persons, hearings before the Commission and a Commission order. Such proceedings likely would require a month or two to complete. Note that these proceedings would review a utility's proposed modifications to its DSM programs (i.e., in light of Commission findings in DSM program evaluation proceedings) and associated budgetary and surcharge adjustments. As such, they often may have the appearance of compliance filings, and may not present much controversy. Furthermore, as discussed above, the annual evaluations could be routinely discussed in the IRP Advisory Group meetings. At these meetings, the utility would respond to questions posed by interested stakeholders on the results of the evaluations and proposed modifications based on such analysis. Such a process may alleviate some of the contention that would prolong a formal review process for the Commission, prior to rendering a decision on the proposed modifications. The Consumer Advocate continues to believe that IRP and the meetings with the Advisory

Group members should be an on-going activity that occurs throughout the year at regular intervals. Advisory Group meetings should not be conducted only in anticipation of major IRP filings.

DSM program implementers have financial incentives that might also create an incentive to overstate DSM program results.

HECO/CA-FSOP-IR-148 **Ref: CA FSOP Appendix C, page 6. "Moreover, in order to make these proceedings effective, the Commission should routinely open dockets, conduct hearings and accept comments in relation to the information that is advanced by the DSM program utilities."**

a. Does the Consumer Advocate purport that routinely opening dockets, conducting hearings and accepting comments improves the effectiveness of DSM programs?

RESPONSE: The Consumer Advocate recommends that the Commission evaluate the DSM programs during the implementation period. A rationale for these reviews is presented on page 2-2 of NARUC's report, "Regulating DSM Program Evaluation." The Consumer Advocate views docketed proceedings with opportunity for comments from interested parties and hearings as an effective means by which the Commission can perform its reviews and allow interested stakeholders an opportunity to express any concerns with the evaluations and proposed modifications, if any.

b. From the opening of a docket and procedural steps if applicable, how long (in months) and procedural steps if does the Consumer Advocate believe it will take to complete this process and a final decision be rendered by the Commission?

RESPONSE: Please see the Responses to HECO/CA-FSOP-IR-143.c and 146.

c. How is timely implementation of DSM measures or program modifications included in the Consumer Advocate's measure of effectiveness?

RESPONSE: DSM programs should be implemented prior to either of the two Commission reviews being recommended by the Consumer

HECO/CA-FSOP-IR-149 **Ref: CA FSOP, Appendix C, page 6. "The electric utilities must make bona fide efforts to understand whether and to what degree the programs that they are responsible for designing and implementing are achieving maximum benefits per dollar invested."**

Please provide an example of how other utilities have shown that their DSM programs are achieving maximum benefits per dollar invested.

RESPONSE: States such as Oregon, New York, Vermont, and California conduct annual evaluations of their DSM programs.

HECO/CA-FSOP-IR-150 **Ref: CA FSOP, Appendix C, page 7. The NARUC report "suggests that public utility commission oversight of DSM programs can be intensive, often requiring extensive staff and commission involvement. It identifies administrative issues to be resolved, including the following: . . . Addressing staffing requirements; ..."**

Does the Consumer Advocate recommend that the Commission consider the need for (or the lack of) resources available to it as it determines the appropriate level of DSM program oversight?

RESPONSE: Yes. The Commission should recognize that the DSM program evaluation is an important part of the overall DSM effort, and should do what it can to dedicate an appropriate level of resources to DSM program evaluations. Ultimately, the Commission will have to adopt a level of DSM program oversight that is consistent with its available resources.

HECO/CA-FSOP-IR-151 **Ref: CA FSOP, Appendix C, page 8.**

Has the Consumer Advocate ever filed comments or a Statement of Position addressing any issues or concerns with respect to HECO's two cycles of Impact Evaluation Reports that were filed in HECO's M&E Reports?

RESPONSE: No.

HECO/CA-FSOP-IR-152 **Ref: CA FSOP, Appendix C, page 8. "Timely Commission decisions on contested issues will be necessary if the DSM evaluation process is to become effective."**

Is the reverse also true, that untimely Commission decisions can result in the DSM evaluation process to become ineffective?

RESPONSE: Yes. Consider for example a hypothetical DSM program that is producing a fraction of the savings anticipated when that program was introduced, such that it is far from cost-effective. Assume also that the actual level of savings is contested by parties to a Commission proceeding (and that the evidence presented is sufficient to persuade the Commission that the program is truly problematic). Clearly the DSM program evaluation process would be less effective than it might otherwise be if a Commission order that cancels or fixes the deficient DSM program is delayed.

HECO/CA-FSOP-IR-154 **Ref: CA FSOP, Appendix D, page 1.**

a. Does the Consumer Advocate support a utility DSM incentive similar to that provided in Nevada?

RESPONSE: No.

b. Do the DSM program administrators in Nevada have DSM objectives in the level of detail that the Consumer Advocate is proposing in its FSOP? If the answer is yes, please provide a copy of the Nevada DSM objectives.

RESPONSE: The Consumer Advocate is not familiar with the DSM objectives that have been set by DSM program administrators in Nevada.

essential to the process of determining which and what quantities of various DSM programs will best be included in a resource portfolio. Defining planning objectives and DSM procurement parameters are thus critical steps to ensuring that all cost-effective demand-side resources are fully embraced. Other steps in the process are as described in the Consumer Advocate's FSOP at 42-44.

The Consumer Advocate recommends that the Company give a first priority to promptly addressing its reserve capacity shortage. How to present the proposed solution (i.e., as an amendment to its IRP-3, or otherwise) can be addressed as a secondary matter.

HREA-CA-IR-3 The CA states the following on page 8.

> "... there is room for the utilities to improve their administration of DSM programs. If vibrant demand-side programs do not result once such improvements are achieved, then the case for introduction of a third-party DSM program administrator becomes more compelling."

Please briefly summarize the Consumer Advocate's recommendations on how the utilities can improve their administration of DSM. How long a period would the Consumer Advocate reasonably allow for such improvements? What criteria would the Consumer Advocate use to evaluate improvement? HREA is concerned about potentially significant lost DSM opportunities, during what appears now to be an indefinite while the CA is evaluating whether there is substantive improvement in the utility DSM programs. Specifically, HREA is concerned that the utility might wait until its next IRP round to implement any new programs to introduce new promising DSM technologies, such as Solar Air Conditioning (SAC), Seawater Air Conditioning (SWAC) and electricity-generating, customer-sited renewables.

RESPONSE: Pages 25 to 27 of the Consumer Advocate's FSOP describe changes that can be made to improve the delivery of DSM programs. The Consumer Advocate does not offer a specific time period for these improvements. Nonetheless, the Consumer Advocate does recommend that the Commission establish a priority for such action. Whether these improvements are effectively implemented will be determined as part of the review of a utility's DSM programs. If HREA believes that SAC and SWAC are effective DSM options, they should request that the Commission order the utilities to evaluate these options and report on the results of that assessment as soon as possible.

HREA-CA-IR-5 The CA states the following on page 20:

> "HECO continues to seek recovery of lost margins and shareholder incentives. If HECO persists in this position, it seems quite possible that the balance could shift in favor of third-party administration of DSM programs. Presumably, third-party DSM program administrators would have no need for lost margin recovery. In such case, they may be able to implement a given set of DSM programs at much lower cost than could a utility. Over a period of years, the ratepayer savings that may result could be substantial."

If HECO continues to seek recovery of lost margins and shareholder incentives, the CA would support a third-party administrator. Is this correct?

RESPONSE: As stated in our FSOP, cost-effectiveness is one of the factors to consider in determining what market structure is appropriate. If lost margins and shareholder incentives are costs that will be borne by customers, those costs could mean that reliance on a third-party administrator would be more cost-effective. This factor should then be considered in determining the best way to proceed for customers.

HREA-CA-IR-7 The CA states the following on page 25:

> "Ensure (e.g., through regular IRP filings, reviews and orders) that each utility's resource portfolio planning objectives and needs for incremental resources are clearly (and routinely) identified, such that the procurement of demand-side (and supply-side resources) can be more responsive to those needs."

What does the CA recommend to ensure that "procurement of demand-side (and supply-side resources) can be more responsive to ... needs?"

RESPONSE: In both the PSOP and FSOP, the Consumer Advocate described in detail how clearly defined objectives can lead to the procurement of resources that will be more responsive to a utility's needs. For example, if a utility has a need for peaking capacity to address a near term reserve capacity shortfall, then its planning and procurement activities should focus on resource alternatives (including demand-side resources) that can address that need for peaking capacity.

HREA-CA-IR-8 The CA states the following on page 27:

> "Ensure (e.g., through routine reviews of each electric utility's Modification and Evaluation ("M&E") filings) that each utility is diligent in evaluating: (a) the performance of its demand-side programs, and (b) opportunities to improve its demand-side programs (i.e., individually and collectively)."

Would the CA support an approach that would allow greater public participation in the review of these M&E reports? If not, why not?

RESPONSE Yes, the Consumer Advocate has recommended such an approach, as discussed in Appendix C to its FSOP. The review proceedings that the Consumer Advocate recommends would allow for comments from interested parties and hearings, if necessary.

structure more efficient. The Consumer Advocate also expects the Company to honor its previous commitment not to seek recovery of lost margins and shareholder incentives, which will yield benefits to customers. As stated in its FSOP, if this is not to be the case, then the Consumer Advocate believes that having a third party responsible for planning, design, and implementation of DSM programs should be seriously considered.

HREA-CA-IR-10 The CA states the following on page 32:

> "... DSM goals should be rooted in some reliable process that systematically assesses: (a) resource needs (in light of established planning objectives), and (b) the costs and benefits of the demand-side effort that would be required to achieve such goals. The Consumer Advocate observes that such assessments can only be done in the IRP process and the Commission's IRP Framework sets the foundation for that process. Thus, the Consumer Advocate recommends that long-term DSM goals be established through each electric utility company's IRP processes."

A number of stakeholders have expressed concerns about the frequency and pace of the IRP process. What suggestions can the CA provide to ensure that DSM assessments can be done in an expeditious and timely manner? How would the CA address the need to evaluate promising new DSM technologies that may have not been evaluated in the utility's most recent IRP cycle?

RESPONSE: Whether DSM assessments can be performed in a timely manner will depend heavily upon the resources available to the Commission in managing DSM review processes. The Consumer Advocate views DSM program as an essential component of Hawaii's DSM initiative, because it represents the mechanisms by which ratepayers can enjoy a measure of confidence that their DSM investment are producing benefits. New technologies that emerge after the completion of an IRP cycle can be presented to the utilities and the utilities can evaluate them for inclusion in a subsequent year's DSM budget proposal or in the next major IRP filing, depending on the point in the three-year cycle the technology becomes available. As the Consumer Advocate has contended,

IRP is a continuous, on-going effort which required constant review and adjustments. Thus, the major change that must first occur is to have the process proceed on an on-going basis and not be a "start/stop" process that gears up every three years in anticipation of the need to file the "next" IRP plan.

Would the CA support an increase in the amount provided for energy (and capacity) savings? If yes, what would be a reasonable amount based on today's oil prices, projections of future prices, and the risk of such oil price increases that is assumed by consumers (utility customers)? If not, why not?

RESPONSE: The Consumer Advocate has not calculated the value of energy and capacity savings to HECO, in part because these values could be influenced by the detailed resource planning objectives that HECO may determine to achieve (and which are not yet well-defined, as discussed in the Consumer Advocate's FSOP). For example, HECO may determine that external factors should receive explicit treatment in its valuation of the benefits of energy and capacity savings. Importantly, the Consumer Advocate maintains that all resource options, both supply and demand, should be evaluated by the Company using valuations that incorporate up–to-date assumptions, including oil prices.

HREA-CA-IR-14. The CA states the following also on page 51:

> "... a "fixed" cost recovery mechanism may discourage utilities from pursuing good, emergent opportunities to secure an increased level of benefits through increased commitments."

Did the CA mean "demand-side energy savings," rather than "demand-side capacity savings" (i.e., in the context of reducing dependence on fossil fuels)?

RESPONSE: The referenced statement appears to be taken out of context. The Consumer Advocate was discussing the impact of a fixed, versus surcharge cost recovery mechanism. The discussion was not attempting to discuss the savings and/or benefits that could be achieved, as the question appears to imply. If the question refers to lines 10-12 on page 51, the Consumer Advocate believes the reference should be to "demand-side savings," reflecting both the capacity and energy benefits.

HREA-CA-IR-16. The CA states the following on page 63:

"...if commercial air conditioning were determined to be a significant end use consumer of electricity, then any new piece of equipment or modification to existing equipment that can result in greater efficiency should be included on the list of possible DSM measures."

In fact, commercial air conditioning is a significant end use consumer of electricity in Hawaii. HREA believes SWAC and SAC have the potential to decrease energy use for air conditioning and a corresponding reduction in demand. Again, this is another reason why HREA has encouraged the utility to incorporate these technologies into its IRP and to support the proposed HSWAC projects on Oahu and introduction of SAC in their service territory.

Furthermore, HREA does not understand why SWAC and SAC were apparently not considered in Global Energy Partners' screening of DSM measures. Would the CA support an evaluation of SWAC and SAC as potential DSM measures? If not, why not? How should HECO address promising DSM technologies that were not included in Global Energy Partners' screening process?

RESPONSE: This question of why SWAC and SAC were not considered in Global Energy Partners' screening of DSM alternatives seems more appropriately addressed to HECO and/or Global Energy Partners. The Consumer Advocate would support evaluating such alternatives.

HREA-CA-IR-17 The CA states the following on pages 66 to 67:

> The Residential Efficient Water Heating ("REWH") program targets replacement of retrofit installations of solar and high efficiency electric waters heaters. The Company offers rebates equal to 25% of the measure cost [underlining added for emphasis]." [CA FSOP - p 66 ¶ 2]
>
> "The Commercial and Industrial Energy Efficiency ("CIEE") program offers cash rebates to non-residential customers who purchase and install high efficiency electric equipment and to dealers who sell high efficiency electric equipment. Targeted measures include air conditioning, lighting, motors, window film, and booster pumps. The rebate level is 25% of measure cost [underlining added for emphasis]." [CA FSOP – p 66 ¶ 4].
>
> "The Commercial and Industrial New Construction ("CINC") program is intended to address ready opportunities to introduce energy efficiency measures as new facilities are built and as major renovations are implemented, that otherwise might be very costly to achieve (often referred to as "lost opportunities"). Targeted measures include air conditioning, lighting, motors, window film, and booster pumps. The approach is to offer rebates that reduce the payback period on a customer's investment in energy efficiency to a specific level, such as 2 years. The larger the utility rebate to customers, the less customer funds are required, and the shorter the payback to customers. In Exhibit HECO-1102, page 40, Global Energy Partners states that financial incentives are designed to cover 60% to 90% of the incremental cost [underlining added for emphasis].between standard equipment and high efficiency equipment or a 1.5 year payback period, whichever is less." [CA FSOP – p 67 ¶ 2].

See also the following comments and analysis on the potential for SWAC:[3]

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3 *Ibid.*

the CA support a higher rebate level for SWAC consistent with those provided to other DSM technologies? If not, why not?

RESPONSE: If HREA believes that SAC and SWAC are effective DSM options, it should request that the Commission order the utilities to evaluate these options and report on the results of that assessment as soon as possible.

HREA-CA-IR-18. The CA states the following on page 72:

> "The next step in the DSM program process is to test the cost-effectiveness test of each potential program. To accomplish this task, budgets are prepared for each program, estimating total program costs (i.e., including the costs of administration, promotion, and the estimated incentives deemed necessary to attract targeted customers). Budgets for each proposed program were developed by HECO. Global conducted an assessment of the cost-effectiveness of each program using four standard utility DSM benefit cost tests ..."

The CA has conducted an analysis of the appropriate costs to include in the utility DSM benefit cost tests, and has concluded that costs are higher, and consequently benefit/cost ratios are lower than HECO estimates. Has the CA conducted a similar analysis of benefits (the numerator in such benefit/cost analyses)?

RESPONSE: No.

DOCKET NO. 05-0069

HAWAIIAN ELECTRIC COMPANY, INC.

DIVISION OF CONSUMER ADVOCACY'S RESPONSES TO ROCKY MOUNTAIN INSTITUTE'S INFORMATION REQUESTS TO THE DIVISION OF CONSUMER ADVOCACY ON ITS FINAL STATEMENT OF POSITION

RMI/CA-IR-1

Re: DCA FSOP at page 19.

"First, RAP observed that the utilities that achieved high levels of investment in DSM measures in the early 1990's had three things in common: (1) clear and sustained regulatory policies existed relative to DSM activities; (2) proper incentives [FN13] were in place including internal rewards for corporate achievement in energy efficiency; and (3) stakeholders supported the DSM programs. See RAP Report at 17."

Please list the "proper" incentives for Demand Side Management (DSM) described by Regulatory Assistance Project (RAP).

RESPONSE: In presenting the "three things in common" for utilities that achieved high levels of energy efficiency investment in the early 1990's, the text of the RAP Report states at 17 that "proper incentives were in place including internal rewards for corporate achievement in efficiency." No further definition of the term "proper incentives" accompanies that statement. The document is available on RAP's website at:

http://www.raponline.org/Pubs/RatePayerFundedEE/RatePayerFundedEEFull.pdf.

RMI/CA-IR-2 **Re: CA FSOP at page 19 FN 13.**

"Proper" incentives.

Please identify where RAP suggests that the "proper" incentives for DSM are solely that a utility "has sufficient incentives to aggressively pursue DSM, in the form of a pressing need to resolve a substantial reserve capacity deficiency."

RESPONSE: The above statement is taken out of context as the Consumer Advocate did not use the term "solely" with respect to the statement "HECO currently has sufficient "incentives" to aggressively pursue DSM, in the form of a pressing need to resolve a substantial reserve capacity deficiency. Furthermore, the RAP Report does not limit the "incentives" to a pressing need to resolve a capacity deficiency. Rather, the discussion contained in footnote 13 of the Consumer Advocate's FSOP presents the Consumer Advocate's position that HECO currently has sufficient incentives to aggressively pursue DSM. The response to RMI/CA-IR-1, above, addresses the contents of the RAP Report.

Is it the Consumer Advocate's contention that the need for capacity constitutes a "proper incentive" that is described by RAP?

RESPONSE: It is the Consumer Advocate's position that HECO, as a public utility, has an obligation to serve all customers. As a result, in order to fulfill its obligation as a public utility, HECO has a pressing need to resolve its substantial reserve capacity deficiency in order to avoid or mitigate the concomitant risk of outages should such deficiency not be addressed. This situation provides HECO with

ample incentives to pursue DSM programs to mitigate the problem. As indicated in Footnote 13 to the Consumer Advocate's FSOP, DSM can provide other benefits to Hawaii's utilities that should enhance its attractiveness.

RMI/CA-IR-3 **Re: DCA FSOP at page 76-77.**

Recalculation of cost-effectiveness of HECO's DSM programs.

(a) Please provide the formulas used by the DCA for the Total Resource Cost (TRC) test; the Utility Cost Test (UCT); and the Participant Cost Test (PCT).

RESPONSE: The following are the formulae used to calculate the benefit/cost ratios referenced on page 76. The data are provided in the table on page 75.

TRC per Ex HECO-1102 = Utility Avoided Costs ÷ (Utility Admin Costs + Participant Costs).

Corrected TRC = Utility Avoided Costs ÷ (Utility Admin Costs + Utility Incentive Rebates + Participant Costs).

(b) Please describe how the DCA proposes that the Public Utility Commission (Commission) use the TRC, UCT and PCT tests to evaluate HECO's DSM Programs.

RESPONSE: The Consumer Advocate recommends that the Commission review and consider all four tests, the TRC, UC, PC, and RIM tests, in its assessment of the cost-effectiveness of utility DSM programs. The application of these tests is discussed in Part VII.F of the Consumer Advocate's FSOP. Cost-effectiveness considerations are but one component of the broader assessment of a company's DSM program proposals, as is discussed in detail in Part VII (beginning on page 41) of the Consumer Advocate's FSOP.

RMI/CA-IR-4 **Re: DCA FSOP at page 75-76.**

"Thus, it is clear from this definition [of Total Resource Cost Test as defined in the California Standard Practice Manual] that the utility incentive payments to customers who participate in DSM programs should be included in the TRC cost test."

(a) Please provide evidence that the California Public Utility Commission (CPUC) incorporates utility incentive payments to the customers in the Total Resource Cost test when evaluating the cost effectiveness of participant programs.

RESPONSE: The Southern California Edison Company ("SCE") filed "Testimony of Southern California Edison Company In Support Of Its Application for Approval of Its 2006-08 Energy Efficiency Programs and Public Goods Charge and Procurement Funding Requests" dated June 1, 2005, submitted in compliance with CPUC order D.05-09-043. According to SCE in its calculation of TRC:

> The Total Resource Cost Test measures the net costs of a demand-side management program as a resource option based on the total costs of the program, including both the participants' and the utility's costs. Most of the cost-effectiveness calculations presented in this Application are based upon the TRC. This method of calculation of the cost-effectiveness of the 2006-08 programs is consistent with the cost-effectiveness requirements contained in the Energy Efficiency Policy Manual, Version 3.15. The costs in this test are the program costs paid by both the utility and the participants plus any increase in supply costs for the periods in which load is increased.

Thus all equipment costs, installation, operation and maintenance, cost of removal (less salvage value), and administration costs, no matter who pays for them, are included in this test. Please see the Application of Southern California Edison Company in Docket U 338-E. For detailed calculations, look in file:

http://www.sce.com/NRC/AboutSCE/regulatory/eefilings/proposals/2006-08/SCECostEffectivenessFiles.zip.

(b) Please provide the docket number where the CPUC applied these costs in the TRC test, and examples of the calculation used in that docket.

RESPONSE: See response to part (a) of this information request.

RMI/CA-IR-5 **Re: DCA FSOP at page 75-76.**

"In that Manual, [the California Standard Practice Manual] the Total Resource Cost test is defined to include all program costs...However, if the Company is going to be allowed to recover these costs, [fixed recovery shortfall and/or shareholder incentives] then these costs should be included in the TRC."

(a) Please provide evidence that the CPUC incorporates shareholder incentives and/or lost margins in the TRC test.

RESPONSE: The California Standard Practice Manual does not include shareholder incentives in the TRC test. The point that the Consumer Advocate attempts to make in the cited portions of its FSOP is that, if the Company continues to insist on some fairly substantial shareholder incentives (which would require ratepayer support), it may be appropriate for the Commission to consider the incentives in assessing program cost-effectiveness.

(b) Please provide the docket number where the CPUC applied these costs in the TRC test, and examples of the calculation used in that docket.

RESPONSE: Please see the response to part (a) of this information request.

energy efficiency activities in the Commonwealth (DOER is responsible for administering energy efficiency programs, and must apply cost-effectiveness criteria defined by the Massachusetts public utility commission, which were established in MDTE 98-100). The DOER report can be found on its website at http://www.mass.gov/doer/pub_info/ee02-long.pdf.

(b) Please provide docket numbers where a Public Utility Commission or similar regulatory agent, aside from the purported use in California, applied these costs in the TRC test, and examples of the calculation used in that docket.

RESPONSE: The Consumer Advocate has not performed an exhaustive search of state jurisdictions to identify the docket numbers in which the Commission applied the costs in the TRC test. See response to part (a) of this information request for an example of one other jurisdiction.

RMI/CA-IR-7 **Re: DCA FSOP at page 80.**

"The RCEA program or similar advertising effort should not be implemented unless the Company can demonstrate the cost-effectiveness of the effort by assessing the energy savings that are expected to be achieved in relation to the monies spent for the effort."

Please explain what methodology the Consumer Advocate believes is valid for determining the energy savings associated with general customer awareness programs.

RESPONSE: It should be recognized that the Consumer Advocate is not responsible for determining the methodology to assess the energy savings associated with general customer awareness programs. Rather HECO is responsible for making this determination since HECO is the entity seeking Commission approval to expend monies for such programs and have ratepayers provide the funds for such expenditures. As a public utility, HECO should not be allowed to expend monies on activities which are expected to funded by ratepayers, if the Company is unable to demonstrate the benefits to be derived from such expenditures. Furthermore, it should be noted that the program was initially proposed as a pilot DSM program. As such, the Commission's IRP Framework states that:

> A purpose of piloting demand-side management programs is to ascertain whether a given program, not yet proven in Hawaii, is cost-effective—whether it will have the penetration and will achieve accomplishment of the utility's objectives as originally believed. . . For each program, the utility shall clearly articulate the parameters of the program, the objectives to be attained by the program, the expected level of achievement of the objectives, the measures by which the attainment of the objectives is to be assessed, the

> data to be gathered to assist in the evaluation of the pilot program, and the expenditure it proposes to make by appropriate cost components.[1]

The Consumer Advocate is concerned about HECO's request to expend ratepayer monies for such programs, in part because it is difficult to credibly demonstrate their cost-effectiveness. Thus, before committing substantial sums to this program, the Company should be able to demonstrate that RCEA monies would not be better spent on other programs. In summary, the Consumer Advocate offers no methodology at this time for determining the savings associated with general customer awareness programs. It is the utility's responsibility to determine the expected savings from its proposed DSM programs and to establish a means of measuring them.

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1 A Framework for Integrated Resource Planning, Revised May 22, 1992, Section V. pages 24 and 25.

RMI/CA-IR-8 **Re: DCA FSOP Appendix C at page 9.**

"Cost effectiveness calculations must consider explicitly the benefits of: ... (c) long term non-price benefits (such as may result from reduce dependence on oil imports and compliance with Hawaii's RPS."

Does the Consumer Advocate contend that the following non-price benefits should be included, and quantified where possible?

Reduced risk from lower exposure to fossil fuel prices, particularly oil.

Reduced risk from lower exposure to future carbon emissions costs.

Reduced environmental impacts from lower fossil fuel combustion.

RESPONSE: The Consumer Advocate contends that, to the extent such benefits have been defined and agreed upon in advance as objectives of the DSM programs, it is appropriate to consider them in evaluating said DSM programs. Such benefits may be considered qualitatively or quantitatively.

LOL-CA-IR-3 (a) What level of energy efficiency penetration is reasonable? (b) How was this determined?

RESPONSE: The Consumer Advocate has not conducted an independent assessment of the potential for energy efficiency in Hawaii. The Consumer Advocate notes that Global Partners has provided such estimates in the testimony and exhibits of Mr. Wikler.

LOL-CA-IR-4 When all the parties other than the Consumer Advocate met to discuss alternative proposals, why didn't the Consumer Advocate participate?

RESPONSE: The meetings were planned for days on which the Consumer Advocate could not attend because of staffing constraints and pending Consumer Advocate filings for other docketed matters. For example, on May 11 the Consumer Advocate was required to file discovery in a docketed matter and was working on Direct Testimony in a rate case for a privately owned wastewater utility that was to be filed with the Commission on Friday, May 12. On Tuesday, May 16, the Consumer Advocate also had to file Direct Testimony in another rate case for a privately owned wastewater utility company.

The Consumer Advocate notes that it is not always possible to attend all meetings that are not planned around the Consumer Advocate's work schedule. This is particularly true of late, where procedural schedules are established for most docketed matters.

LOL-CA-IR-5 How does the Consumer Advocate determine what consumers want? Please elaborate.

RESPONSE: Public utilities are by nature monopolies providing a service that is deemed to be essential to public health and welfare. Therefore, the purpose of public utility regulation is to act as a surrogate for the competitive market. As noted in Principles of Public Utility Rates, "the traditional public interest view of regulation is to protect consumers against high or discriminating prices or unreliable service."[1] This is consistent with the statutory responsibility set forth in HRS § 269-51 which states that "[t]he Consumer Advocate shall represent, protect and advance the interests of all consumers, including small businesses, or utility services." Therefore, consistent with its statutory responsibility, in determining what the consumers want, the Consumer Advocate first works to ensure that the consumer of the utility service has reliable service.

Next, the Consumer Advocate addresses the reasonableness of the price charged by the utility for that service. In considering price, the Consumer Advocate reviews the costs that are assumed to be incurred to provide that service. For any business, in order to determine the price that will be charged for a good or service, one must first assess the costs that will or are

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1 See Principles of Public Utility Rates, Jame C. Bonbright, Alvert L. Danielsen, and David R. Kamerschen, page 33.

being incurred, and then determine what level of profit is needed to sustain the operations in the long-term.

The Consumer Advocate also attends public hearings to listen to the concerns or support expressed by the members of the public in attendance.

LOL-CA-IR-6 The Administration put forth the idea that a model similar to Efficiency Vermont was worthy of consideration. However, the Consumer Advocate appears to reject that, relying on the Business-As-Usual Model. (a) Do you agree with this characterization? (b) If not, please fully elaborate.

RESPONSE: No, the Consumer Advocate does not advocate "business as usual." Rather, the Consumer Advocate recognizes the pros and cons of the various models for implementing DSM, and has suggested improvements in the process where the utility is responsible for designing and implementing DSM programs.

Commerce and Consumer Affairs to monitor the discussions and represent consumer interests.

of the instant proceeding (for DSM programs) and Docket No. 05-0145 (for the next generating unit).

(b) Does the Consumer Advocate have any ideas on how this may be achieved?

RESPONSE: The Consumer Advocate has made recommendations in its FSOP (see pages 44-54) that would provide a framework for assessing HECO's proposed DSM programs. Such framework would also facilitate a review of alternative demand-side strategies for addressing HECO's needs.

(c) Does the Consumer Advocate react only to HECO's proposal or have they developed proactive stances and positions?

RESPONSE: The Consumer Advocate's proactive positions are presented in its FSOP. Importantly, it is the utility's responsibility to adequately plan to meet the needs of its customers. The Consumer Advocate has made specific recommendations to the Commission, and would fully support all reasonable efforts by the Commission to ensure that the utility meets its service obligations.

(d) What level of load reduction does the Consumer Advocate believe can be reasonable achieved through (1) load management programs and through (2) energy efficiency systems?

RESPONSE: The Consumer Advocate has not developed an independent estimate of the potential from DSM. The Consumer Advocate notes that HECO has provided such an estimate in Exhibit HECO-1101. The maximum achievable potential for HECO is 205 MW by 2010, 80 MW from energy efficiency and 125 MW from demand response. The Consumer Advocate also notes that the Company has not analyzed the cost-effectiveness of implementing DSM at this level, nor has it compared these potential DSM increments to supply options, which should be done as part of a least cost integrated resource plan.

LOL-CA-IR-10 The Consumer Advocate Statement of Position states: "The cost of supply-side options, the associated dependence on oil imports, and the land-use and environmental restrictions and impacts give rise to a host of concerns regarding increased reliance on fossil fuel supply-side options. Hawaii must do all that it reasonably can to maximize the development of demand-side (and renewable) resources. The Consumer Advocate contends that integrated resource planning, with its focus on 'least cost' resource plans sets a proper context for the design and implementation of effective DSM programs."

(a) Is the Consumer Advocate stating that the current approach has made us too oil dependent, so lets continue that approach, and hope for a different answer?

RESPONSE: No.

(b) How specifically can Hawai'i maximize the development of demand-side (and renewable) resources?

RESPONSE: Hawaii can maximize the desirable level of DSM and renewable resources by requiring its utilities to develop, analyze, and implement least cost integrated resource plans that meet the needs of its customers.

best situation for customers. For example, Hawaii could establish a mandate that limits imported oil as a source of electricity to no more than 50% of the total supply by 2010. This may not be achievable, or it may be so cost-prohibitive that it will have undesirable consequences to the State's economy. In the process of establishing planning objectives through an IRP process, these tradeoffs can be carefully considered.

(d) Please give examples where this has worked.

RESPONSE: The Consumer Advocate cannot identify situations where the effectiveness of mandates versus goals have been explicitly compared to determine which is more effective.

DOCKET NO. 05-0069

HAWAIIAN ELECTRIC COMPANY, INC.

DIVISION OF CONSUMER ADVOCACY'S RESPONSES TO THE GAS COMPANY, LLC INFORMATION REQUESTS TO THE DIVISION OF CONSUMER ADVOCACY ON ITS FINAL STATEMENT OF POSITION

TGC-AII-IR-1

Ref.: Issue 1 Whether energy efficiency goals should be established and if so, what the goals should be for the State.
The various types of energy sources each have their own set of attributes, usually both positive and negative, in contributing to the state's overall energy picture.

a. Should increasing the diversity of energy sources/alternatives be included as part of any energy efficiency goals? Please explain why or why not.

RESPONSE: The Consumer Advocate believes that it is generally appropriate for electric utilities to diversify their power supply portfolios to avoid undue reliance upon one type of fuel or technology. Diversity can serve as a hedge against price volatility and supply shortages.

b. Should the process of identifying energy efficiency goals take into consideration the different scenarios, e.g., natural disasters, shipping disruptions, local refinery problems, etc., under which energy is, and will be, needed? Please explain why or why not.

RESPONSE: These scenarios appear to be more appropriately addressed as part of emergency response planning than integrated resource planning. That said, risk associated with any resource option should be considered in comparing the options.

c. For each energy goal to be identified/adopted, should the definition of "efficient" and the methodology adopted to quantify such "efficiency" differ? If "yes", how does/will each goal account for such difference, and, if "no", what is the common definition of and methodology to be used to define and quantify each goal's efficiency?

RESPONSE: The Consumer Advocate is unable to provide a response because the question does not provide sufficient information to understand the context in which the question is posed.

DOCKET NO. 05-0069

HAWAIIAN ELECTRIC COMPANY, INC.

DIVISION OF CONSUMER ADVOCACY'S RESPONSES TO HAWAII SOLAR ENERGY ASSOCIATION'S INFORMATION REQUESTS TO THE DIVISION OF CONSUMER ADVOCACY ON ITS FINAL STATEMENT OF POSITION

HSEA/CA-FSOP-IR-1 **Ref: CA FSOP, page 66.**

In regard to the existing REWH program, the CA states that the Company offers rebates equal to 25% of the measure cost. On Oahu the rebate for an REWH solar water heating system is currently $750. Is it the CA's understanding that the average REWH solar water heating system on Oahu costs approximately $3,000?

RESPONSE: HECO assumes that solar water heating equipment costs are $2,500. The Consumer Advocate has not developed an independent cost estimate.

HSEA/CA-FSOP-IR-2 **Ref: CA FSOP, page 66.**

Does the CA believe that a REWH solar rebate equal to 25% of the installed cost is an appropriate incentive level?

RESPONSE: The cost-effectiveness tests for the REWH program that are proposed by the Company are as follows:

UC test = 1.27
PC test = 1.00
TRC test (filed) = 0.75
TRC test (revised) = 0.58
RIM test = 0.57

Based upon this analysis, it appears that this program is marginally cost effective, and that the rebate level as proposed is appropriate.

HSEA/CA-FSOP-IR-4 **Ref: CA FSOP, page 81.**

The second bullet states that the individual programs as currently designed and budgeted are not cost effective (based on the analysis of B/C developed on pages 75 – 77). Despite this, the fourth bullet states that the CA does not wish to have the Commission reject the Company's DSM programs (with the exception of the advertising program). Why is the CA recommending the approval of programs its calculations show are not cost-effective?

RESPONSE: Our analysis points out that some of the programs as designed by the Company do not pass the TRC test. These programs do pass the UC test, indicating that they will likely cost less than the Company's avoided costs. HECO has stated that they will have a shortfall of reserve capacity from 2006 through 2010. New utility capacity cannot be added before 2009. DSM programs can make a significant contribution to addressing this reserve capacity shortfall, and therefore the Consumer Advocate recommends that the Company proceed with implementation, except for the RCEA program as discussed previously. The Consumer Advocate also recommends that the Company prepare for public review a detailed plan that fully addresses its reserve capacity shortfall as soon as possible.

DOCKET NO. 05-0069

HAWAIIAN ELECTRIC COMPANY, INC.

DIVISION OF CONSUMER ADVOCACY'S RESPONSES TO KAUAI ISLAND UTILITY COOPERATIVE INFORMATION REQUEST TO THE DIVISION OF CONSUMER ADVOCACY ON ITS FINAL STATEMENT OF POSITION

KIUC-SOP-IR-9 **Ref: Consumer Advocate Final SOP, page 13.**

In its Final SOP, the Consumer Advocate states that the "Commission should retain, at least for the present, the established 'market structure' in which Hawaii's electric utilities are the administrators of DSM resources."

In connection with the above, it is KIUC's understanding that the Consumer Advocate was not present during at least that portion of the May 11, 2006 settlement meeting that dealt specifically with KIUC. In connection with the above, the following summarizes KIUC's understanding of the consensus reached by the parties/participants present during those discussions on four of the five issues established for this proceeding as they pertain to KIUC, together with some background on each issue:

Docket Issue No. 2: What market structure(s) is the most appropriate for providing these or other DSM programs (e.g., utility-only, utility in competition with non-utility providers, non-utility providers)?

Consensus: As it pertains to KIUC, an electric cooperative essentially owned by its customers, there should be no change to the market structure by which KIUC currently develops and administers its DSM programs, provided that, as recommended by HREA and agreed upon by KIUC, KIUC hire a DSM consultant and/or consult with a third party or fund administrator if and when appropriate.

Background:

- Under the current structure, KIUC, at its discretion, either conducts its own DSM/energy services programs or contracts it out to a third party as appropriate. During the meeting, KIUC stated that this structure best supports the cooperative model, whereby DSM could be integrated with other energy services offerings.
- KIUC also noted that it strives to provide a level of service to its members even higher than that allowed or established by

the current DSM evaluation criteria, and as such, KIUC is currently implementing programs that go beyond simple cost effectiveness. Examples given were: (1) KIUC's current appliance rebate program, whereby KIUC pays a rebate to any member that purchases a qualifying energy efficient appliance, and (2) KIUC's current solar rebate and loan program whereby KIUC either pays rebates or provides (through third-party lending institutions) no-interest loans for the installation of solar water heating systems. In both examples, KIUC does not screen for cost effectiveness and the programs are funded by the program budget approved by KIUC's Board of Directors (who are elected directly by KIUC's customer/members to represent their interests).

- KIUC also noted that the direct install DSM programs offered by KIUC during the past 7 years have significantly penetrated the residential markets. As a result, the current remaining markets may be too small to overcome the fixed cost associated with a full-scale DSM-type program. KIUC stated that they believe that these small markets can best be served with energy efficiency programs that combine DSM programs with other energy service programs.
- KIUC also stated that the commercial programs are an integral part of its Commercial Enhanced Energy Services offering and Key Accounts program, through which solutions to commercial customer's high-energy costs are achieved through a mix of DSM-type measures with other energy service-type measures, such as power factor correction.

Docket Issue No. 3: For utility-incurred costs, what cost recovery mechanism(s) is appropriate (e.g., base rates, fuel clause, IRP Clause)?

Consensus: As it pertains to KIUC, KIUC should be able to recover its utility-incurred costs from its members and customers via cost recovery mechanisms that are deemed most appropriate for KIUC's situation and cooperative structure.

Background: As a not-for-profit, member-owned cooperative for which the traditional rate base method of ratemaking is not applicable, KIUC anticipates working with the Commission and the Consumer Advocate at some point in the future to determine the most appropriate cost recovery mechanism that should apply not only to energy efficiency costs, but to all of its costs of operation in general. This is a matter that should be decided at the time of KIUC's first rate case or deregulation proceeding, and is outside of the context of the subject proceeding.

RESPONSE: Although the Consumer Advocate did not attend the meeting which served as the basis for the discussion contained in the question, the Consumer Advocate does not have any comments to offer that are contrary to the observations contained in the question. The referenced statements from the Consumer Advocate's FSOP were more directed at Hawaii's investor-owned utilities. The Consumer Advocate does not object to allowing KIUC some flexibility in the manner in which it designs and implements DSM programs, given the cooperative ownership in the utility by KIUC's customers.

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing **RESPONSES TO THE PARTIES' INFORMATION REQUESTS TO THE DIVISION OF CONSUMER ADVOCACY ON ITS FINAL STATEMENT OF POSITION** was duly served upon the following parties, by personal service, hand delivery, and/or U.S. mail, postage prepaid, and properly addressed pursuant to HAR § 6-61-21(d).

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DATED: Honolulu, Hawaii, July 14, 2006.

Desiree Yoshioka