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

In the Matter of the Application of)
)
HAWAIIAN ELECTRIC COMPANY, INC.)
)
For Approval and/or Modification of)
Demand-Side and Load Management)
Program and Recovery of Program)
Costs and DSM Utility Incentives.)
_____)

DOCKET NO. 05-0069

DIVISION OF CONSUMER ADVOCACY'S

OPENING BRIEF

AND

CERTIFICATE OF SERVICE

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OPENING BRIEF

Pursuant to the regulatory schedule approved by the Public Utilities Commission ("Commission") in Order No. 22251, as modified by a correspondence approved by the Commission on April 13, 2006, the Division of Consumer Advocacy, Department of Commerce and Consumer Affairs, State of Hawaii ("Consumer Advocate"), hereby submits the following Opening Brief in Docket No. 05-0069, the Commission's Energy Efficiency Docket.

I. BACKGROUND.

A. SUMMARY OF PROCEDURAL HISTORY AND PARTIES TO THE INSTANT PROCEEDING.

On November 12, 2004, in Docket No. 04-0113, Hawaiian Electric Company, Inc. (“HECO”) filed an application seeking (1) approval of rate increases and revised rate schedules and (2) approval and/or modification of HECO’s Demand-Side Management (“DSM”) and Load Management programs from the Commission.

On March 16, 2005, pursuant to Order No. 21698, the Commission separated HECO’s request for approval and/or modification of HECO’s DSM and Load Management programs from HECO’s request for rate increases. The basis for the separation was the “need for additional information [on HECO’s DSM and Load Management programs] and [the Commission’s] recent partnering with the [United States Environmental Protection Agency (“EPA”)] in the EPA-State [Energy Efficiency and Renewable Energy Project].” Order No. 21698, at 11. Thus, the Commission’s Energy Efficiency Docket No. 05-0069 was opened to examine HECO’s request for approval and/or modification of HECO’s DSM and load management programs. Id. at 19.

As part of Order No. 21698, the Commission granted the United States Department of Defense (“DOD”), Rocky Mountain Institute (“RMI”), Life of the Land (“LOL”), and County of Maui permission to intervene and participate in the Energy Efficiency Docket. Id. at 19-20. Pursuant to Hawaii Revised Statutes (“HRS”) § 269-51 (1993) and Hawaii Administrative Rules § 6-61-62(a), the Consumer Advocate is ex officio a party to the Commission’s Energy Efficiency Docket.

On April 4, 2005, the Hawaii Solar Energy Association (“HSEA”) and the Hawaii Renewable Energy Alliance (“HREA”) filed motions to intervene in the Energy Efficiency Docket. On April 19, 2005, pursuant to Order No. 21749, the Commission granted the HSEA and HREA intervenor status.

On June 7, 2005, pursuant to Order No. 21861, the Commission sua sponte included Hawaii Electric Light Company, Incorporated (“HELCO”), Maui Electric Company, Limited (“MECO”), Kauai Island Utility Cooperative (“KIUC”), and The Gas Company, LLC (“TGC”) as parties to the Energy Efficiency Docket. The Commission granted HELCO, MECO, KIUC, and TGC Party status because it found that each had interests related to the Energy Efficiency Docket and a failure of HELCO, MECO, KIUC, and TGC to participate in the Energy Efficiency Docket could impair their ability to protect their interests. Order No. 21861, at 5-6. The Commission noted that HELCO, MECO, KIUC, and TGC should be limited solely to addressing issues of statewide energy policy and not HECO’s proposed DSM programs. Id. at 6. Accordingly, the Commission ordered that that HELCO, MECO, KIUC, and TGC could participate in the Energy Efficiency Docket, but only with respect to issues of statewide energy policy. Id.

On June 17, 2005, the County of Kauai filed a Motion to Participate or Intervene in the Energy Efficiency Docket. On June 24, 2005, Honolulu Seawater Air Conditioning, L.L.C. (“Honolulu Seawater”), filed its Motion to Intervene in the Energy Efficiency Docket. On August 3, 2005, pursuant to Order No. 21957, the Commission dismissed as untimely the County of Kauai’s Motion to Participate or Intervene in the Energy Efficiency Docket and Honolulu Seawater’s Motion to Intervene in the Energy

Efficiency Docket. The County of Kauai filed a Motion for Reconsideration on August 12, 2005.

While upholding the decision rendered by the Commission in Order No. 21957, (Order No. 22029, at 5-6), the Commission, in Order No. 22029, sua sponte included the County of Kauai as a Participant to the Energy Efficiency Docket, finding that the County of Kauai “has an interest relating to the subject docket, and [that] its failure to participate in the docket may impair or impede [the County of Kauai’s] ability to protect [its] interests.” Order No. 22029, at 6-7. Similar to its ruling joining HELCO, MECO, KIUC, and TGC as parties to the Energy Efficiency Docket, the Commission noted that the County of Kauai’s participation in the Energy Efficiency Docket should be limited solely to addressing issues of statewide energy policy and not HECO’s proposed DSM programs. See Order No. 21861; No. 22029, at 7. Accordingly, the Commission ordered that the County of Kauai could participate in the Energy Efficiency Docket, but only with respect to issues of statewide energy policy. Order No. 22029, at 7.

On January 31, 2006, the Commission issued Order No. 22251 establishing, inter alia, a procedural schedule for the Energy Efficiency Docket. On March 15, 2006, the Commission, pursuant to Order No. 22319, modified the procedural schedule for the Energy Efficiency Docket to give the EPA an opportunity to provide comments on HECO’s proposed DSM programs. Order No. 22319, at 4-5. By a correspondence dated April 12, 2006 (“April 12, 2006 Correspondence”), the Parties and Participants¹ to the Energy Efficiency Docket requested a further modification to the procedural

¹ HECO, DOD, LOL, HSEA, HREA, HELCO, MECO, KIUC, TGC, and the Consumer Advocate are parties to this proceeding (“Parties”). The County of Maui and the County of Kauai are participants in this proceeding (“Participants”).

schedule approved by the Commission in Order No. 22319. On April 13, 2006, the Commission further modified the established procedural schedule consistent with the April 12, 2006 Correspondence.

On June 1, 2006, the Parties and Participants filed their Final Statements of Position ("SOPs") with the Commission. On July 14, 2006, the Parties and Participants completed their exchange of answers to information requests submitted following the filing of final SOPs. On July 26, 2006, the Commission distributed to the Parties and Participants the EPA's Comments on Docket No. 05-0069 for the State of Hawaii Public Utilities Commission ("EPA Report"). On August 22, 2006, the Parties and Participants filed their comments concerning the EPA Report with the Commission.

On August 24, 2006, the Commission held a prehearing conference to discuss matters pertaining to the Energy Efficiency Docket. Order No. 22803, at 1. A prehearing order memorializing the prehearing conference followed on August 25, 2006. See Order No. 22803. On August 28, 2006, the Commission convened a hearing on the Energy Efficiency Docket in State Capitol Room No. 325. The hearing on the Energy Efficiency Docket continued through September 1, 2006.

B. THE ISSUES TO BE ADDRESSED IN THE INSTANT PROCEEDING.

Order No. 22251² set forth the issues to be examined in the instant proceeding, which are as follows:

Statewide Energy Policy Issues:

- (1) Whether energy efficiency goals should be established for the State, and if so, what the goals should be;
- (2) What market structure(s) is/are appropriate for providing these or other DSM programs in the State (e.g., utility only structure, utility in competition with non-utility providers, non-utility providers only);
- (3) For utility-incurred costs, what cost recovery mechanism(s) is/are appropriate (e.g., base rates, fuel clause, IRP clause);
- (4) For utility-incurred costs, what types of costs are appropriate for recovery;
- (5) Whether DSM incentive mechanisms are appropriate to encourage the implementation of DSM programs, and, if so, what is/are the appropriate mechanism(s) for such DSM incentives;

Issues Pertaining To HECO's Proposed DSM Programs:

- (6) Whether HECO's seven (7) Proposed DSM Programs, the Residential Customer Energy Awareness ("RCEA") Program, and/or other energy efficiency programs will achieve the

² Order No. 22251 expanded and reorganized the issues set forth in Order 21698, which separated HECO's DSM programs from its rate case application and creating the instant docket. See Order No. 21698, at 11-12.

established energy efficiency goals and whether the programs will be implemented in a cost-effective manner;

- (7) If utility-incurred costs for the approved DSM programs are to be included in base rates, what cost level is appropriate, and what will the transition mechanism for cost recovery be until HECO's next general rate case;
- (8) Whether HECO's proposed DSM utility incentive is reasonable, and should be approved, approved with modifications, or rejected; and
- (9) Which of the Proposed DSM Programs, the RCEA Program, and/or other energy efficiency programs should be approved, approved with modifications, or rejected.

Order No. 22251, at 4-5.

C. INTERIM APPROVAL OF HECO'S PROPOSED DSM PROGRAMS SHOULD BE GRANTED.

By a correspondence dated December 5, 2005 ("December 5, 2005 Correspondence"), HECO requested that the Commission approve, on an interim basis, (1) modifications to HECO's existing energy efficiency DSM programs and (2) a new DSM program called Energy Solutions for the Home (collectively, "Interim DSM Proposals"). Letter from William A. Bonnet, Vice President, Government & Community Affairs, HECO, to Commission ("Bonnet Letter") (Dec. 5, 2005) (filed with Commission), at 1. In its December 5, 2005 Correspondence, HECO stated that the Interim DSM Proposals are "necessary . . . to provide HECO with additional megawatts ("MW") of peak demand savings in order to . . . address [HECO's] current reserve capacity

situation.” Bonnet Letter, at 1 (footnote omitted). According to HECO’s December 5, 2005 Correspondence, “[i]mplementation of accelerated DSM initiatives can help mitigate . . . [HECO’s reserve capacity] shortfall by lowering the peak demand that HECO’s units and independent power producer generators need to serve and by increasing the reserve margin.” Id.

On January 10, 2006, the Consumer Advocate provided its Response to HECO’s Interim DSM Proposals. On January 10, 2006, HREA, HSEA, and RMI provided their responses to HECO’s Interim DSM Proposals. On January 11, 2006, the DOD filed its Response to HECO’s Interim DSM Proposals.

On April 26, 2006, pursuant to Order No. 22420, the Commission approved, on an interim basis, HECO’s request to modify its existing energy efficiency DSM programs and launch a new interim DSM program. Order No. 22420, at 16-17. The Commission additionally stated that HECO may not recover lost gross margins and shareholder incentives for its DSM programs. Order No. 22420, at 17-19. HECO’s filed its Motion for Partial Reconsideration of Interim Decision and Order No. 22420 on May 15, 2006 (“May 15, 2006 Motion for Reconsideration”). In its May 15, 2006 Motion for Reconsideration, HECO asked the Commission to re-visit its decision concerning lost gross margins and shareholder incentives. May 15, 2006 Motion for Reconsideration at 1.

The Commission convened a hearing on HECO’s May 15, 2006 Motion for Reconsideration on August 28, 2006. The hearing occurred at the beginning of the Commission’s panel hearing in the Energy Efficiency Docket.

II. SUMMARY OF THE CONSUMER ADVOCATE'S RECOMMENDATIONS ON EACH OF THE ISSUES TO BE ADDRESSED IN THE INSTANT PROCEEDING.

The Consumer Advocate's recommendations are summarized as follows:

Statewide issues:

- **Issue 1** – Energy efficiency goals should be established for each electric utility authorized to provide service in the State.
 - The goals should be established on an island-by-island basis, and **not** set on a Statewide basis (as is the case with the Renewable Portfolio Standards goals set forth in HRS § 269-92).
 - The process set forth in the Commission's Integrated Resource Planning Framework should be used to establish the island-specific goals for each utility.

- **Issue 2** – Responsibility for the administration of (i.e., administering, designing, implementing, monitoring and evaluating) the energy efficiency and DSM programs for HECO, HELCO, and MECO should be given to a non-utility third-party administrator, such as the public benefits fund administrator authorized by Act 162, Session Laws of Hawaii 2006 ("Act 162"). KIUC, however, should be allowed to retain responsibility for the administration of energy efficiency and DSM programs offered to customers on the island of Kauai.

- **Issue 3** – During the transition from the current market structure to the proposed non-utility third-party administration of energy efficiency and DSM programs, HECO, HELCO, and MECO should be allowed to recover utility incurred energy efficiency and DSM program costs through the existing IRP surcharge mechanism. Once transitioning to a non-utility third-party administration of DSM programs is complete, there will be no HECO, HELCO, and MECO utility-incurred DSM program costs to be recovered by the utility.³ KIUC should be allowed to utilize the same mechanism as is now used for the recovery of KIUC-incurred costs to administer the energy efficiency and DSM programs.

- **Issue 4** – All reasonable utility incurred costs to administer the energy efficiency and DSM programs should be:
 - recovered through a surcharge mechanism (for non-recurring costs such as customer rebates, equipment costs, etc.).
 - Lost margins are not costs of DSM program administration. Therefore, the impacts of the lost sales resulting from the

³

As provided for in Act 162, such costs will be paid by funds collected through the "public benefits fee" assessed to the ratepayers of HECO, HELCO, and MECO. 2006 Haw. Sess. Laws Act 162, §1, at 640 (§ 269-A(b)).

implementation of energy efficiency and DSM programs between general rate applications (i.e., lost margins) should be considered only in the subsequent rate proceeding.

- **Issue 5** – Incentives are no longer necessary to encourage the aggressive pursuit of energy efficiency and DSM programs by a utility or third-party administrator.

Issues pertaining to HECO's Proposed DSM Programs:

- **Issue 6** – While the Consumer Advocate recommends implementing the proposed DSM programs with the exception of the RCEA program, it is not possible to determine whether the seven (7) proposed DSM programs represent the lowest reasonable cost option for meeting HECO's customers' energy needs. Rather than litigate the reasonableness of the proposed programs in the instant proceeding, the process employed by HECO to select the programs should be discussed for development of HECO's 4th IRP.
- **Issue 7** -- As stated above, while responsibility for the administration of such programs is being transferred to a non-utility third-party administrator, HECO's recurring DSM program costs should be recovered through HECO's base rates and the non-recurring DSM program costs should continue to be recovered through the IRP surcharge. No additional transition mechanism is necessary at this time to provide for the recovery of the costs that are to be recovered in base rates, because HECO has filed a notice of intent to seek Commission approval to revise its rates using a 2007 test year. That filing will be the subject of Docket No. 2006-0386.
- **Issue 8** – HECO's proposed DSM utility incentive is **not** reasonable and should thus be rejected by the Commission.
- **Issue 9** – All of the proposed DSM programs, with the exception of the RCEA program, should be approved by the Commission:
 - The seven (7) proposed DSM programs should be authorized for implementation because of HECO's critical need for an adequate generating reserve margin and the importance of such margin to HECO's ability to reliably serve its customers.
 - The RCEA program should not be approved because HECO failed to provide quantifiable benefits to demonstrate the cost-effectiveness of the program, as is required for all DSM programs.

III. DISCUSSION.

It should be noted that the Commission's determination on the statewide issues will have a direct impact on the HECO utilities, which provide electric service to customers on the islands of Oahu, Hawaii, Maui, Molokai and Lanai. The customers on the remaining Hawaiian island, Kauai, are served by KIUC, whose customers are members of the cooperative that owns the assets of KIUC.

As an energy utility, statewide energy efficiency and DSM guidelines would apply with equal force to TGC, however because TGC faces different market forces than other electric utilities operating in the State, TGC may have special circumstances that merit more individualized treatment by the Commission. See the SOP of TGC at 3. TGC currently has sufficient capacity to serve its customers on Oahu, and faces competition from suppliers of bottled gas (i.e., installers of propane tanks situated on a customer's premise). As a result, TGC does not have a need to pursue conservation and load management measures at this time. Therefore, the discussion contained in the Consumer Advocate's Opening Brief will focus primarily on recommendations for Hawaii's electric utilities.

A. STATEWIDE ENERGY POLICY ISSUES.

1. Issue 1 – The Commission should set DSM goals for utilities authorized to provide service in the State.

In the instant proceeding, the Parties and Participants expressed a number of opinions on the establishment of energy efficiency goals for the State. There does not, however, appear to be any dispute as to whether goals for DSM programs should be

established.⁴ The disagreement among the Parties and Participants pertains to whether the goals should be: (1) uniform and apply to each utility on a statewide basis (as is the case with the Renewable Portfolio Standards (“RPS”) set forth in HRS § 269--92, which establishes statewide goals), or (2) island-specific and based on utility-specific data. Before addressing the merits of uniform statewide or island specific goals, the Consumer Advocate first addresses the purpose for setting goals.

a. DSM goals are necessary to serve as long and short-term targets that each utility should achieve.

A threshold question raised by the prospect of goal setting is what function is to be served by setting energy efficiency goals in the State. In the abstract, setting goals establishes a target or an objective to be achieved by an organization or entity. Articulated with some degree of specificity, goals serve as an effective tool that directs the efforts of an organization towards an end deemed desirable by the appropriate planning body.

While the function of goal setting (i.e., setting targets or objectives for an organization to achieve) is simple in theory, in a practical, “real world” context, the role specific goals play in setting a course for an organization to follow is more complex. At

⁴ For example, HECO maintained that reasonable demand and energy savings goals for DSM programs are important because goals “can serve as a ‘yardstick’ against which actual savings can be measured” HECO Final SOP, at 10. HREA, HSEA, and RMI state that energy efficiency goals should be established for the State as an outcome of the Energy Efficiency Docket. See HREA Final SOP, at 3; see also HSEA Final SOP, at 8 and RMI Final Sop, at 9. KIUC states that it supports the establishment and implementation of viable and reasonable policies and practices that encourage the use of cost-effective energy efficiency measures within the State, however KIUC believes that such policies should be developed through the IRP process. See KIUC Final SOP, at 3-10.

its most basic level, goals can be reflective of both targets in the long term and incremental steps as to how one will achieve the long-term targets.

The long-term targets identify what an organization wishes to accomplish at some point well into the future. Goals also represent incremental targets indicating how the organization will achieve the long-term target. All goals must be revisited periodically to ensure that they are realistic or the goals serve no real purpose by way of achievement for the organization.

b. The DSM goals should reflect aggressive yet achievable targets.

In its comments to the Commission regarding the Energy Efficiency Docket, the EPA stated, in relevant part, as follows:

[e]nergy efficiency goals can take on several forms. When explicit goals are formally developed on a statewide basis, [such goals] are typically referred to as [an] Energy Efficiency Portfolio [Standard] (“EEPS”). An EEPS is conceptually similar to [a Resource Portfolio Standard], with mandatory targets [set] for energy savings from energy efficiency improvements, typically in [the] electricity and natural gas utility sectors. The purpose of an EEPS is to comprehensively pursue a large portion of the cost-effective energy efficiency opportunities within a state. State legislatures, utility commissions or other regulatory bodies specify explicit, quantitative goals that regulated utilities and other entities engaged in energy efficiency program delivery must meet, typically on an annual or cumulative basis. . . . The goals are typically set at a level designed to capture an **aggressive yet achievable percentage of the maximum achievable potential for energy savings over a specified timeframe.**

EPA Report, at 5 (emphasis added).

Of the Parties and Participants that presented a recommendation on the matter, some supported the establishment of uniform, statewide goals for DSM⁵ that would be applicable to each utility, similar to the RPS established by the State Legislature.⁶ Others, such as the electric utilities and the Consumer Advocate favored the establishment of island-specific goals.⁷

The Commission must thus wrestle with the question of whether: (1) uniform energy efficiency goals applied to all geographic regions on a statewide basis; or (2) island specific goals, reflects “aggressive yet achievable percentage of the maximum achievable potential for energy savings over a specified timeframe.”

c. Statewide DSM goals do not represent aggressive, yet achievable targets for each utility.

The Consumer Advocate contends that establishing uniform statewide goals as recommended by HREA and RMI represent a “one-size-fits-all” approach that makes little practical sense. Uniform, statewide goals similar to the RPS ignore the unique geographic, economic, political, social, and cultural factors affecting each service

⁵ In keeping with its Final Statement of Position at 16 and the Commission’s IRP Framework, the Consumer Advocate recommends that any goals established by the Commission encompass both energy efficiency measures and load management measures. The Consumer Advocate refers to these two sets of measures as demand-side management (“DSM”) programs, throughout this Opening Brief.

⁶ HREA and RMI suggested that the Commission adopt a statewide energy efficiency portfolio standard (“EEPS”) as one of the outcomes of this Docket. See HREA Final SOP, at 3 (mentioning the development of a DSM portfolio standard for the State); see also RMI Final SOP, at 10-11 (urging the Commission to create an EEPS for HECO and its subsidiaries).

⁷ In their SOPs filed with the Commission, the Consumer Advocate, HECO, HELCO, MECO, KIUC, TGC, the County of Maui, and the County of Kauai explicitly stated or implicitly suggested that the Commission resist setting an EEPS as an outcome of this docket.

territory in Hawaii and the utility's ability to achieve such goals. Thus, such goals are not consistent with the EPA's stated purpose of establishing energy efficiency goals (i.e., the goals should represent aggressive, achievable targets reflecting the maximum achievable potential for energy savings). As a result, the Consumer Advocate recommends against the establishment of uniform, statewide goals that would be applicable to each utility. Uniform, statewide goals likely will not serve as an appropriate target by which success in achievement can be measured.

As an aside, it is arguable that the State has already established uniform, statewide energy efficiency goals in the form of the RPS set forth in HRS § 269-92. The reason is that "renewable electrical energy" in HRS § 269-92 is defined to mean, among other things, "[e]lectrical energy savings brought about by the use of renewable displacement or off-set technologies, including solar water heating, seawater air-conditioning district cooling systems; solar air-conditioning, . . . Electrical energy savings brought about by the use of energy efficiency technologies, including . . . ratepayer-funded energy efficiency programs" One may argue, on one hand, that the RPS is measured by the "percentage of electrical energy sales that is represented by renewable electrical energy." The mere fact that the definition of renewable energy includes energy efficiency savings, which do **not** translate into electrical energy sales, however, could imply that the RPS also considers the electrical energy savings resulting from the installation or implementation of energy efficiency measures. Furthermore, although savings by a strict reading of the law do not result in sales that are generated or produced from renewable energy, the law allows such savings to be considered in determining the RPS requirements. Thus, it makes little sense to establish yet another

uniform, statewide goal for energy efficiency measures when such goals arguably already exist in the existing RPS statutory provisions. Any refinement to the RPS that identifies the level of energy efficiency to be achieved by each utility should therefore be done on an island-by-island basis, taking into account the specific circumstances of each utility.

- d. **DSM goals should be based on island-specific data to ensure that the goals represent aggressive, yet achievable targets.**

The Consumer Advocate recommends that the Commission establish energy efficiency goals on an island-by-island basis for the following reasons:

- Hawaii's energy industry is unique in that each electric utility provides service on a given island as a stand-alone utility. The utilities are not interconnected as are most utilities providing service on the mainland United States. Consequently, there is a need to be confident that each utility can reliably meet customer demands; this requires that the DSM goals for each utility be realistic.
- Establishing goals on an island-by-island basis takes into consideration the unique circumstances of the utility serving each of the Hawaiian islands (e.g., the type of customer base, customer load patterns, size of service territory, size and types of generation available to serve customers' needs, availability of specific types of resources, etc.). See Consumer Advocate Final SOP at 32.

The result is that the established goals will be aggressive yet achievable, and the utility or third-party administrator responsible for energy efficiency and DSM program administration (i.e., administering, designing, implementing and monitoring) can then be held accountable for achieving such goals. See Consumer Advocate Final SOP at 32.

At this time, however, the Consumer Advocate is not able to state what the energy efficiency goals should be for each of the Hawaiian islands because the goals have yet to be determined. The reason is because the DSM goals need to be established in the IRP process and tied to each utility's specific needs and planning objectives, as will be discussed in Section III.A.1.b.(3) below.

Furthermore, the Consumer Advocate notes that the process by which the DSM goals are determined would not change in a different market structure. The goals would continue to be established in the IRP process and be tied to each utility's specific needs and planning objectives. The essential difference would be that the third-party administrator would be expected to play an active role in each utility's IRP proceeding.

- (1) Hawaii's power industry is unique in that each utility is a stand-alone utility and is not interconnected to other utilities as are the utilities serving customers on the mainland United States.**

In its comments to the Commission regarding the Energy Efficiency Docket, the EPA noted, in relevant part, that Hawaii is unique in that electric power generation is divided among each major island of the Hawaiian Island chain. See HECO FACT SHEETS – POWER FACTS (2002), <http://www.heco.com/images/pdf/PowerFacts.pdf> (showing a map of HECO, HELCO, and MECO's service territories). Put another way,

each Hawaiian island is served by one electric power utility whose geographical scope of operation is the Hawaiian island. See Id.

In comparison, because they are interconnected, mainland utilities often can acquire additional electrical capacity in the near-term from other electric utilities, when such supplies are needed. Thus, mainland utilities may not have to plan with the same degree of precision as is required for Hawaii's utilities. HECO FACT SHEETS – POWER SUPPLY (2001), <http://www.heco.com/images/pdf/PowerSupply.pdf>.

A natural consequence of Hawaii's industry structure is that each electrical generating system must be more reliable and self-reliant than other power utilities located on the Mainland. Each utility must have enough generating capacity to produce power during periods of peak demand, and must have reserve generating capacity to account for generating units taken down for regular maintenance or situations of unplanned generation loss. Id. Taken together, Hawaii's electric power industry is qualitatively different from other electric utilities located on the Mainland. Hawaii's unique situation requires greater precision in forecasting customer energy demand and the ways in which such demand will be met (i.e., with supply- and demand-side resources).

Given the above, it is important to establish goals that can reasonably be achieved by each utility in order to ensure that the utility has sufficient generation to meet the energy needs of its customers. If the goals are too optimistic, such that they are established too high, the utility may rely on the expected energy savings associated with such goals and not have sufficient generation to serve the customers' needs should the goals not be achieved as anticipated. The potential result is that there may be

insufficient generation to reliably serve all customer needs, which is not in the utility's or its customers' best interests. In addition, if there are to be rewards and penalties associated with such goals, the party responsible for achieving the goals may be inappropriately penalized when the goals are set at an unrealistically high level.

On the other hand, if the goals are established too low, the party responsible for achieving the goals may not be encouraged to pursue the maximum potential energy efficiency savings, forcing the utility to acquire more generation than would be needed if the additional energy efficiency savings were realized. This would result in higher rates since the rates include a return on plant investment (i.e., a return on rate base), as well as a return of the cost of the plant investment (i.e., recovery of the depreciation expense). Furthermore, if a reward and penalty system were implemented for achieving, or not achieving a goal, the party responsible for achieving the goals may be inappropriately rewarded since the goals were set at an unrealistically low level.

(2) Establishing goals on an island-by-island basis will result in aggressive, yet achievable targets by which achievement can be measured.

A superior approach focuses upon establishing energy efficiency goals on an island-by-island basis because service territory-oriented goals account for the circumstances faced by, and the opportunities available to HECO, HELCO, MECO, and KIUC in their respective service territories. See KIUC Final SOP, at 4-10 (discussing the circumstances facing KIUC). For example, the island-specific goals will recognize the differing customer bases, which may impact the type of energy efficiency measures that can be implemented and potentially the level of penetration that can be achieved.

Furthermore, a utility that is in need of additional generating capacity may have a greater need for energy efficiency impacts in the near term than a utility that has recently acquired a significant generating resource. As a result, energy efficiency goals that are established on an island-by-island basis will be consistent with the EPA's stated purpose of establishing energy efficiency goals that represent aggressive and achievable targets based on the maximum achievable potential.

The island-specific energy efficiency goals should thus represent both near and long-term objectives that are to be achieved by each utility through the implementation of energy efficiency measures. In this regard, the goals are visionary because they reflect where the utility would like to be, and realistic because they reflect where the utility should be at some point in the future. Furthermore, given the difficulty in predicting with any degree of certainty, future results the farther out into the future the event is expected to occur, the island-specific goals that are established must be subject to modification based on current facts that may differ from the expected circumstances upon which the goals were established. In this regard, the established goals must not be static, but must evolve over time to be representative of achievable goals that truly serve as a measure of achievement.

In summary, energy efficiency goals specific to each utility for each island creates targets or objectives to be achieved over time. These goals: (1) communicate each utility's commitment to important legislative initiatives, and (2) provide stakeholders with a clear view of the level of energy and capacity savings to be

achieved by each utility across the long-term.⁸ The goals must, however, be subject to periodic revision taking into account changed circumstances which may no longer make the goals reasonable, and thus ineffective for measuring success.

(3) The Commission's Integrated Resource Planning process provides the appropriate mechanism by which to establish the island-specific DSM goals.

In Docket No. 6617, pursuant to Decision and Order No. 10458, the Commission initiated the Integrated Resource Planning process as an alternative to the traditional method of energy resource planning in the State. To implement the process, the Commission adopted "A Framework For Integrated Resource Planning" ("IRP Framework") "to serve as a mandatory guide for utilities to follow." Decision and Order No. 11523, at 26. The Commission modified portions of the IRP Framework in Decision and Order No. 11630, to address requests for clarification made by the utilities and the Consumer Advocate.

As currently formulated, the Commission's IRP Framework provides an excellent mechanism to set aggressive, yet achievable DSM goals for each utility on an island-by-island basis. The reasons are as follows:

- The Integrated Resource Planning process, as a systematic planning exercise, focuses on key utility-specific planning data, which enables goals to be crafted to address each utility's unique circumstances.
- The Integrated Resource Plan ("IRP") that is developed as a result of the planning process and submitted for Commission review and approval is

⁸ See Consumer Advocate Final SOP at 32.

specific to each utility and may be modified by the Commission if the Commission determines that such modifications are appropriate.⁹

- The IRP must consider both supply- and demand-side resources in meeting the near and long term energy needs of a utility's customers (i.e., the sales forecast).¹⁰
- The IRP must cover a 20-year planning horizon, focusing on the immediate five years of the plan, referred to as the five-year Implementation Plan, which governs the capital expenditures that the utility makes (i.e., the supply side resources) and the energy efficiency programs that are implemented (i.e., the demand side resources).¹¹
- The IRP is subject to periodic modifications.
 - The utility must submit annual evaluations assessing the continuing validity of the forecasts and assumptions upon which the IRP and its program implementation schedule were fashioned; information related to each program for the immediately preceding year, an assessment of all substantial differences between the original estimates and the actual experience, and a revised five-year implementation schedule.¹²

⁹ See IRP Framework, at 5 (stating that upon review, the Commission may approve, reject or modify a utility's integrated resource plan).

¹⁰ See IRP Framework, paragraphs II.A.1. through II.C.4.; see also IRP Framework, at 9-12 (IRP Framework paragraphs III. D.1. through III.D.5.).

¹¹ See IRP Framework paragraph III.A and III.D.5.

¹² See IRP Framework paragraph III.D.3.

- Every three years, the utility must conduct a major review of its IRP covering a new 20-year planning horizon and five-year Implementation Plan and re-analyzing the utility's resource programs.¹³
- The integrated resource planning process is a public process allowing interested stakeholders an opportunity to provide input into the plan that is ultimately developed.¹⁴

Based on the above, establishing island-specific DSM goals is a natural consequence of each utility's IRP proceeding, and is beneficial to all stakeholders.¹⁵ Several Parties and Participants concurred that the IRP Framework provides the Commission with an effective tool for setting energy efficiency goals for the utilities authorized to provide service in the State. See Consumer Advocate Final SOP, at 31-33; HECO Final SOP, at 12; KIUC Final SOP, at 3-10; The SOP of TGC at 4-5; County of Maui Final SOP, at 3-4; County of Kauai Final SOP, at 3.

The Consumer Advocate contends that using the IRP Framework allows the Commission a means of directing the pursuit of cost-effective energy efficiency opportunities available in the State.¹⁶ Furthermore, the IRP process will allow for the coordination of efforts by a non-utility third-party administrator responsible for the design, implementation, and monitoring of energy efficiency programs and the utility's

¹³ See IRP Framework paragraph III.B.2.

¹⁴ See IRP Framework paragraph III.E.

¹⁵ See Consumer Advocate Final SOP at 32.

¹⁶ See IRP Framework paragraph II.C.2.

need for sufficient generating capacity to reliably serve the utility's customers. Accordingly, the Consumer Advocate recommends that the Commission use the IRP Framework to set aggressive, yet realistic goals for energy efficiency efforts that must be met by each utility authorized to provide service in the State.

An example of how the Integrated Resource Planning process might be used to establish DSM goals is as follows. As part of its filing and in identifying its resource options, a utility might identify the maximum potential of energy savings that may be achieved through the implementation of various types of DSM programs. The utility would apply cost-effectiveness analyses and perform other analyses by which it would identify recommended DSM opportunities and discuss the proposed programs that are consistent with its resource planning objectives. The utility would then proceed to propose DSM goals that derive from the maximum achievable potential and/or programs and levels of DSM program investment that the utility has presented as being consistent with its needs and planning objectives, depending on the Commission's approved approach to establishing DSM goals. The Commission would review the proposal, with input from the parties, during the normal course of its IRP review, then approve (or modify) the DSM goals accordingly. The Consumer Advocate notes that these goals would address the period of a five-year Action Plan and the longer 20-year planning period (perhaps based on assumptions about the types and levels of future DSM program implementation). Furthermore, the goals would be subject to revision over the course of time, based on the facts and circumstances that represent differences from the assumptions upon which the goals were established.

2. Issue 2 – The Commission should assign responsibility for administering, designing, implementing, monitoring and evaluating DSM programs in the State to a non-utility third-party administrator, consistent with Act 162.

In its Preliminary SOP, the Consumer Advocate stated, in relevant part, as follows:

The delivery of effective DSM programs [in the State] requires that the following four essential functions be performed.

- The overall administration of . . . DSM programs . . . ;
- The design of DSM programs that are appropriate to a target group of customers;
- The implementation of DSM programs; and
- The monitoring and evaluation of the implemented DSM programs.

The primary issue that must be resolved in establishing the “market structure” that is most appropriate for providing DSM programs in Hawaii is who – the electric [utilities], third-party providers, or some combination of the two groups – will be responsible for the overall administration of DSM programs [in the State]

Consumer Advocate Preliminary SOP, at 13-14 (footnotes omitted). Accordingly, the relevant question to be resolved by the Commission in the Energy Efficiency Docket is which market entity or entities should shoulder the responsibility of administering DSM programs in Hawaii.

Throughout its Final SOP, HECO maintained that HECO and its subsidiaries should continue to administer most of the energy efficiency programs being implemented by HECO, HELCO, and MECO in their respective service territories. See HECO Final SOP, at 15-19. HECO pointed to its cost-effective administration of energy efficiency efforts, see HECO Final SOP, at 15-16, and the recognition HECO received

from several government agencies, see HECO Final SOP, at 17, as proof that HECO's administration of energy efficiency programs in the State has met with some success.

KIUC also believed that it should continue to administer energy efficiency efforts on the island of Kauai.¹⁷ See KIUC Final SOP, at 10-14 (explaining why utility administration of energy efficiency programs on Kauai is appropriate).

TGC did not take a position on which market structure should govern the administration of DSM programs in the State, however, TGC noted that TGC should administer gas industry DSM programs whenever such programs are required by the Commission.¹⁸ See The Statement of Position of TGC at 5-10 (explaining why utility administration of energy efficiency programs for the gas industry is appropriate).

In its Final SOP, HREA and LOL suggested that the Commission adopt a third-party DSM market structure as an outcome of the Energy Efficiency Docket. See HREA Final SOP, at 4; see also LOL Final SOP, at 4-7. HREA cited to, among other things, the inherent conflict between a utility's need to increase electricity sales and the effect of DSM decreasing energy consumption as a reason to shift the existing market structure towards a third-party DSM administrator. HREA Final SOP, at 4.

After considering the merits of the differing Parties' and Participants' positions on the matter, and the HECO utilities' continued insistence on being allowed to recover lost margins and incentives for the administration of energy efficiency programs, the

¹⁷ The County of Kauai supported KIUC's position, however the County of Kauai also acknowledged that some customers might benefit from the presence of a third-party DSM administrator in the State. See County of Kauai's Final SOP, at 4.

¹⁸ TGC noted that it "has not implemented any [DSM] programs because . . . resource planning analyses have shown that the costs of these [DSM] programs exceed the benefits. . . . As a result, [TGC] has yet to implement any DSM programs" in the State. The SOP of TGC at 6.

Consumer Advocate has reconsidered its initial recommendation and now supports the non-utility third-party DSM market structure approach.¹⁹ The Consumer Advocate contends that a non-utility third-party administrator:

- is consistent with the market structure contemplated by the Legislature and the Governor when Act 162 was signed into law on June 2, 2006;²⁰
- removes the perceived inherent conflict between: (1) a utility's desire to generate revenues and income by increasing sales and rate base, and (2) energy efficiency measures that serve to decrease sales and defer the need for additional plant investment; and
- could reduce the costs of implementing energy efficiency measures by eliminating the need to recover lost margins on an annual basis and, more importantly, provide an incentive for such implementation.

a. Act 162 promotes the adoption of a non-utility third-party energy efficiency administrator for the State and allows the Commission to establish a public benefits fund.

The relevant portions of Act 162 are provided as Exhibit A to the Consumer Advocate's Opening Brief. Act 162, amending HRS Chapter 269, was passed during

¹⁹ See *Consumer Advocate Final SOP* at n.20.

²⁰ Signing a legislative proposal into law suggests that the Governor approves of the legislation's content. If the governor did not approve of the legislation's content, the Governor could allow a proposal to become law without the governor's signature, see Haw. Const. art. III, § 16 (stating that if a bill presented to the Governor for signature is not signed and returned to the legislature, the bill shall become law as if the Governor had signed the bill). Furthermore, the Governor could veto the legislative proposal. *Id.*

For purposes of the Energy Efficiency Docket, the Consumer Advocate notes that the Governor signed Act 162 into law on June 2, 2006. Gov. Msg. No. 692, in 2006 Senate Journal, at _____. The Governor's signature suggests that the Governor approves of Act 162's content.

the 2006 legislative session. The enactment of Act 162 signals that the Legislature and the Governor believe that third-party administration of energy efficiency and DSM programs in Hawaii constitutes the preferred market structure for DSM program administration in the State. Act 162 provides the Commission with the statutory authority to create a public benefits fund and appoint a fund administrator that would operate and manage energy efficiency and DSM programs in Hawaii. See 2006 Haw. Sess. L. Act 162, § 1, at 640 (stating that the Commission shall appoint a public benefits fund administrator to operate and manage energy efficiency and DSM programs established pursuant to HRS § 269-A).²¹

b. HECO's proposal to have the third-party administrator responsible for implementing DSM programs in hard to reach markets is unreasonable.

HECO and RMI argue that a hybrid DSM market structure provides the best way to manage energy efficiency and DSM efforts in the State because the hybrid market structure combines the best attributes of utility and third-party DSM program administration given the circumstances.²² HECO cites to its extensive DSM market knowledge and ongoing relationships with contractors, providers, and clients as reasons why utility participation in DSM program administration should not be abandoned at this point. See Panel Hr'g Tr. vol. III, 512:10-516:21, Aug. 30, 2006 (discussing the number

²¹ See HRS §§ 269-A and 269-B, 2006 Haw. Sess. L. Act 162, § 1 at 640.

²² While differing on the specifics of which programs should be administered by a utility, RMI also recommended that the Commission should adopt a hybrid DSM market structure as an outcome of the Energy Efficiency Docket. RMI Final SOP, at 15-17.

of employees directly connected to DSM program administration for HECO and explaining that employees who work with customers regarding DSM programs have to be extremely knowledgeable about Hawaii conditions); see also Panel Hr'g Tr. vol. III, 518:17-519:12 (emphasizing the importance of relationships with contractors, providers, and clients in delivering energy efficiency DSM programs). RMI points to HECO's load management programs as an example of why utility involvement in DSM program administration makes sense. See RMI Final SOP, at 16 (stating that load management programs that incorporate direct control of customer loads are probably most effectively planned, designed, and implemented by utility management).

In its Final SOP, HECO acknowledged that, in certain situations, HECO did not possess a clear advantage over other providers in delivering energy efficiency DSM programs to HECO's customers. HECO Final SOP, at 19. Under certain limited circumstances, HECO admitted that a third-party DSM administrator might "provide [an] opportunity for more cost-effective DSM program delivery to certain under-served customer segments," because certain customer segments are difficult to reach with existing DSM program options. Id.; see also HECO Final SOP, at 22 (describing some hard-to-reach customer segments). Thus, HECO supported the development of a hybrid utility/third-party DSM market structure for the State, because some customers would likely benefit from the presence of a third-party DSM administrator in Hawaii.²³

²³ In its Final SOP, HSEA favored the implementation of a market structure similar to HECO's proposal. See HSEA Final SOP, at 9 (stating that HSEA favors the continuation of utility management of DSM programs with the proviso that certain hard-to-serve customer segments may benefit from the presence of a third-party DSM administrator).

See HECO Final SOP, at 22-23 (describing customers who might benefit from third-party DSM program administration in the State).

The Consumer Advocate contends that HECO's proposal is unreasonable for the following reasons. First, HECO's proposal retains the "easy to reach" market for the utility, and delegates responsibility for implementing energy efficiency measure in the harder to reach market to a third-party administrator. If there are "rewards" and "penalties" for performance, HECO's proposal will effectively make it easier for the utility to receive a reward for performance since the utility would retain responsibility for the "easier to reach" market. On the other hand, it is likely that the third-party administrator may be subject to penalties for under performance because the third-party administrator would be responsible for implementing the measures in the hard to reach market.

Second, HECO's proposal is not consistent with the regulatory obligations of a utility. Some may argue that energy efficiency measures are not necessary for public welfare purposes in the same context as public utility service. The Consumer Advocate disagrees and notes that the utility has an obligation to serve. Energy efficiency measures help to ensure that the utility has sufficient generating capacity to serve all customers. This is especially applicable in situations where the utility is in need of such capacity and is not able to readily obtain the needed capacity. Furthermore, a utility's obligation to serve is also viewed as being the "carrier of last resort" for hard to reach service territories. Thus, it is important for the utility to retain responsibility for implementing energy efficiency measures in hard to reach areas.

c. Assigning responsibility for the administration of energy efficiency measures to a non-utility third-party administrator will do much to remove the perceived conflict inherent in the existing market structure.

It is well established that a public utility generates revenues by increasing kilowatt-hour sales. In addition, increased sales over time ultimately translate into additional plant investment to serve customers' increased demand. A utility ensures its ability to earn income by maintaining a level of plant investment (i.e., rate base). All of the above are negatively impacted when energy efficiency measures are successfully implemented. As a result, some argue that a utility may have an inherent incentive to avoid or discourage the implementation of energy efficiency measures, thereby minimizing the potential impact of energy efficiency measures.

The Consumer Advocate agrees. As plant is depreciated over time, rate base is reduced, thereby lowering the level of income (i.e., return on rate base) that a utility has an opportunity to earn. Thus, a utility must invest in new plant to offset the impact of depreciating existing plant, or the investment upon which the utility is allowed an opportunity to earn a return. Effective energy efficiency measures that reduce the level of sales, however, defer the need for new plant.

Another factor that must be considered, however, is whether the utility is in need of additional plant, but is unable to install the plant. In such a situation, the utility has an incentive to maximize the implementation of energy efficiency measures to ensure that there is sufficient generation to reliably meet the utility's customers' energy needs. This is especially applicable in Hawaii where each utility is not interconnected to another utility, there is limited land available for siting new generation, and competing interests for the land that is available.

For KIUC, however, there is not the same need to have a non-utility third-party administrator to encourage the aggressive pursuit of energy efficiency measures. The reason is that unlike HECO, HELCO and MECO, KIUC is a cooperative that is primarily owned by its customers. As owners of the utility, the earnings levels belong to the members of the cooperative. Furthermore, a Board of Directors, elected by the cooperative membership, guide the actions of the utility. Thus there are common interests between the customers, owners, and Board of Directors. The interests that exist where customers are served by an investor-owned utility are very different because shareholders typically stand to profit through the sales of electricity, while customers often benefit from the energy savings achieved by cost-effective DSM programs. Thus, the Consumer Advocate contends that cooperatives like KIUC do not require a third-party administrator to ensure the aggressive pursuit of energy efficiency measures thereby protecting KIUC's customers' interests. KIUC's customers are generally its members. As members, KIUC's customers can act to ensure that the Company's policies and practices (e.g., as may pertain to DSM) would suit their needs.

Finally, the Consumer Advocate notes that it is not common for public utility commissions to regulate the activities, including DSM activities, of cooperative utilities.

d. Utilizing a non-utility third-party administrator may result in lower costs for the administration of energy efficiency programs.

Given that the Legislature and the Governor have already expressed their belief that third-party DSM program administration is needed in Hawaii,²⁴ the Consumer Advocate contends that the Commission must effectuate the provisions of Act 162 as an outcome of the Energy Efficiency Docket. The Consumer Advocate notes that having a non-utility third-party administrator be responsible for the administration of energy efficiency measures may lower the overall costs of energy efficiency programs. The reason is that there will no longer be a need to provide annual recovery of lost margins associated with the implementation of energy efficiency measures between rate proceedings.²⁵ In addition, there may no longer be a need to provide the utility with additional monies as an incentive to aggressively pursue the implementation of energy efficiency measures.

²⁴ See note 20, supra.

²⁵ It should be noted that some level of lost margins will be recovered in the rate setting process, but the annual accrual of lost margins and cost recovery of such accrual will no longer be permitted.

- e. **While the DSM market is in transition, the Consumer Advocate recommends that the Commission allow HECO, HELCO and MECO to retain responsibility for the administration of energy efficiency and DSM programs.²⁶**

The Consumer Advocate recognizes that the transition from the existing market structure to the Consumer Advocate's proposed third-party DSM market structure will not occur overnight. During the transition, HECO, HELCO and MECO should continue to administer, design, implement, and monitor energy efficiency and DSM programs within the State because utilities are still responsible for implementing measures that allow utilities to reliably meet their customers' needs.

- 3. **Issue 3 – Utility incurred DSM program costs should be recovered through a surcharge mechanism during the transition period. Once the transition is complete, there will be no utility incurred DSM program costs to be recovered.**

Until responsibility for the administration of energy efficiency programs is transitioned to a non-utility third-party administrator, the Commission should allow utilities to recover the reasonable costs incurred for the administration of energy efficiency measures, provided they are prudently incurred. The recovery should be through the existing IRP surcharge during the transition period. Once the transition is complete, the surcharge will terminate and the utility will no longer recover DSM program costs.

²⁶

If the Commission maintains the status quo or adopts a hybrid DSM market structure as an outcome of the Energy Efficiency Docket, the Consumer Advocate recommends that the Commission follow the recommendations set forth in this subsection.

RMI has suggested that a reconciliation be performed to ensure that the incremental costs incurred to administer energy efficiency programs be recovered through the IRP surcharge.²⁷ Such proposal, however, is unreasonable because the rate setting process is not intended to provide dollar-for-dollar recovery of costs incurred to provide service. Rather, the rate setting process focuses on recovering normalized levels of costs. This dichotomy makes it impossible to reconcile the costs upon which the base rates are established, to the costs incurred for the administration of the energy efficiency measures for purposes of determining whether the costs are incremental and eligible for recovery through the IRP surcharge. Although HECO indicated that the costs can be identified and reconciled to the costs included in the rate case, in reality such reconciliation cannot be performed when one considers all operating costs. For example, labor costs for a large utility like the HECO utilities often are based on equivalent employees that reflect the number of employees that would be hired, taking into consideration part-time or seasonal hires. Furthermore, the rate setting process generally relies on an average number of employees, as opposed to a year-end count. Thus, it is not possible to determine whether labor costs of an employee hired to fill a vacant or new position are truly incremental to the labor costs reflected in the test year revenue requirement. This is especially true if the employee transferred from a position whose labor costs were included in the test year revenue requirement. The Consumer

²⁷ See Panel Hr'g Tr., vol. IV, 799:10-802:10, Aug. 31, 2006; see also RMI Final SOP at 17-20.

Advocate's recommendation will allow the utility to recover the reasonably incurred costs associated with the administration of energy efficiency measures.²⁸

4. Issue 4 – All reasonable costs of administering, designing, implementing, monitoring and evaluating DSM programs should be recovered by the utility through a surcharge, with the exception of lost margins.

In the Energy Efficiency Docket, the Parties and Participants expressed a number of differing opinions concerning the subjects of cost recovery, lost margin recovery, and shareholder incentives. HECO and RMI appear to disagree on the need to recover foregone sales (i.e., lost margins) resulting from the implementation of DSM programs in a utility's service territory, compare HECO Final SOP, at 61-63 (discussing the IRP Framework and the recovery of lost margins) with RMI Final SOP, at 24-33 (discussing revenue de-coupling), however both parties seem to agree that shareholder incentives should be given to a utility under certain circumstances, see HECO Final SOP, at 62-63 (stating that the IRP Framework provides for shareholder incentives) and RMI Final SOP, at 35 (stating RMI's belief that shareholder incentives are appropriate and necessary). Not surprisingly, HECO and RMI differ on how shareholder incentives should be calculated. Compare HECO Final SOP, at 72-73 (describing the existing

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As noted by the Consumer Advocate in previous SOPs filed with the Commission, only incremental IRP costs not recovered in base rates should be recovered through the IRP surcharge mechanism. See Consumer Advocate SOP at 7-9, Docket No. 94-0316 (explaining the difficulty in discerning which labor costs are recovered through base rates and which labor costs are incremental to those costs already recovered in base rates); see also Consumer Advocate Amended SOP, at 6-7, Docket No. 95-0362 (explaining that costs claimed to be IRP costs benefit other areas of HECO as well).

shareholder incentive calculation) with RMI Final SOP, at 49-50 (criticizing HECO's shareholder incentive proposal).

KIUC asserted that it is basically indifferent to the mechanism of cost recovery and the need for any type of incentives to promote the implementation of DSM measures in KIUC's service territory because KIUC is a not-for-profit cooperative owned by KIUC's members/customers. See KIUC Final SOP, at 14-16.

The DOD stated that lost margins and shareholder incentives should not be recovered by HECO under any circumstances. See DOD Final SOP, at 2-5.

As stated in Section III.A.2.d. above, the Consumer Advocate recommends that until responsibility for the administration of energy efficiency programs is transferred to a non-utility third-party administrator, reasonably incurred energy efficiency program costs should be recovered through a surcharge mechanism. In addition, the Consumer Advocate recommends that consistent with the agreement reached between the HECO utilities and the Consumer Advocate, and approved by the Commission, no cost recovery for lost margins associated with the implementation of energy efficiency programs between rate proceedings is to be allowed.²⁹

5. Issue 5 – Incentives are no longer necessary to encourage the pursuit of energy efficiency and DSM programs.

Several Parties and Participants continue to believe that incentives should be provided to encourage the aggressive pursuit of energy efficiency and DSM programs. HECO implicitly agreed that the recovery of fixed costs would suffer if HECO

²⁹ HECO, HELCO, and MECO agreed to discontinue the recovery of lost margins and shareholder incentives pursuant Order Nos. 19019,²⁹ 19020,²⁹ 20391,²⁹ and 20392.^{29/29}

implemented energy efficiency measures in HECO's service territory. See HECO Final SOP, at 55 (stating that HECO's proposed mechanism consisted of a component that addressed the recovery of fixed cost shortfall due to sales lost as a result of implementing energy efficiency measures). HECO stated that incentives are appropriate and beneficial because incentives place energy efficiency options on a more level playing field with other supply-side choices and incentives are more effective and require the use of less regulatory resources than "command-and-control" regulation. HECO Final SOP, at 55-56. In this regard, HECO appears to imply that incentives for DSM programs are necessary to compensate investors for the use of investor funds to implement DSM programs, similar to the rate of return on rate base provided investors for the use of investor funds to acquire plant.

RMI pointed out that under traditional rate of return regulation, implementation of DSM programs could reduce a utility's sales below the levels projected in a rate case, thereby leading to an under-recovery of a utility's fixed costs. RMI Final SOP, at 35. To remedy the under-recovery of fixed costs, RMI supported the establishment of incentives to encourage utilities to embrace DSM programs within their service territories. RMI Final SOP, at 35. In support of its recommendation to provide an incentive to utilities, RMI, in its closing statement at the evidentiary hearing, urged the Consumer Advocate to let go of the past and look to the future. Panel Hr'g Tr. vol. V, 1065:24-1066:2, Sept. 1, 2006.

The Consumer Advocate disagrees with RMI and contends that it is RMI that must let go of the past and look to the future when considering the continued need to provide utilities with incentives to encourage the aggressive pursuit of energy efficiency

and DSM programs.³⁰ The Consumer Advocate also disagrees with HECO in that incentives for DSM programs are not necessary to place energy efficiency programs on a more level playing field with other supply-side choices.

The Consumer Advocate's position that incentives as proposed by both RMI and HECO are no longer necessary is discussed at length in the Consumer Advocate's SOP filed in Docket No. 00-0209. There simply is no compelling need to provide utilities with incentives to encourage the utilities to pursue the implementation of energy efficiency programs at this time.

First, the incentives that were authorized by the Commission in the early 1990s incentives were provided to encourage the utilities to embrace the concept of implementing energy efficiency measures, which was a novel approach at the time, as a means of meeting the utilities' customers' energy demand. With the experience gained over the years, utilities now recognize the benefits that are derived from the implementation of energy efficiency measures. This is especially true in Hawaii where the utilities are not interconnected and thus cannot draw upon each other to provide generation when needed due to unexpected circumstances. Furthermore, with the limited land available to site additional generation, and the competing demands/interests for that land, the value/benefit derived from the aggressive implementation of energy efficiency and DSM measures is realized. HECO has represented on numerous occasions that, without the energy savings provided from the

³⁰ It should be noted, however, that the appropriate mechanism, if one is to be allowed between rate cases, for under-recovery of fixed costs due to the implementation of DSM programs is lost margins, not incentives as RMI suggests. See discussion in Section III.A.4. above regarding the reasons why compensation for lost margins between rate proceedings is no longer necessary.

DSM measures that have been authorized by the Commission, HECO would have a challenge in meeting customer energy demands, given the current level of available generation.

Second, as discussed in Section III.A.1.a.(4) above, the Commission's IRP Framework requires the utilities to consider energy efficiency and DSM measures as a means of meeting customer demands. As stated above, HECO, in particular, has admitted that the Company needs the impacts of energy efficiency measures to reliably meet customers' energy needs until such time that HECO can acquire additional firm generation.

Third, the current statute requires utilities to achieve a defined percentage of sales through the installation of renewable energy, which includes energy efficiency measures, as discussed in Section III.A.1.a.(2) above. Here again, HECO has represented that, without the inclusion of the savings from the implementation of energy efficiency measures, the utility would be hard pressed to meet the percentages set forth in HRS § 269-92.

Fourth, HECO's claim that incentives are necessary to place DSM measures on a level playing field as supply-side options is without merit. DSM programs do not have the same risks as traditional supply-side resources. Although both are subject to uncertainties regarding sales and load growth, these uncertainties existed prior to the implementation of the Integrated Resource Planning process in Hawaii. More importantly, the utility has control over the costs incurred to administer the programs, and is allowed timely recovery of the reasonably incurred DSM program costs through the existing IRP surcharge mechanism. This is unlike the costs associated with

supply-side options where cost recovery is provided over the life of the asset through the annual depreciation expense included in the revenue requirement calculation and resulting rates. Furthermore, the current approach presents limited risks to the financial community because the IRP surcharge allows for timely recovery, and the potential for disallowance of unreasonable cost levels is not substantially different (and likely much reduced in magnitude) from the potential risk associated with disallowance of unreasonable plant costs. As a result, HECO's shareholders are not entitled to a return on the funds expended for energy efficiency measures that is similar to the return allowed on funds used for plant investment.

Fifth, the impacts of energy efficiency programs will not cause the utility's investment and earnings potential to stagnate. Energy efficiency programs primarily defer the need for certain types of investment such as plant, transmission facilities, etc. There is a continuing need to replace aged facilities, which will allow the utility to increase its depreciated rate base, and maintain or increase the utility's earnings potential.

Sixth, in its discussion pertaining to which DSM market structure is appropriate for the State, the Consumer Advocate stated that third-party administration of energy efficiency and DSM programs in Hawaii eliminates the need to provide lost margin recovery and shareholder incentives to affected utilities because electric utilities would no longer administer, design, implement, or monitor DSM programs in the State. See Part III.A.2.c. – III.A..2.d., supra.

Last and most important, the Commission stated that the continued provision of an incentive to encourage utilities to pursue energy efficiency measures will be

revisited.³¹ Thus, there was clearly was no intent to allow for the provision of an incentive in perpetuity.

Given all of the above, the Consumer Advocate contends that incentives are no longer necessary to encourage the aggressive pursuit of energy efficiency measures. The situation from the early 1990s when such incentives were believed to be necessary has clearly changed.³² Thus, the Commission should not authorize incentive compensation during the transition from utility to non-utility third-party administration of energy efficiency measures.

This position should not be construed to mean that the Consumer Advocate is opposed to having some type of reward/penalty structure that links that level of DSM program cost recovery to the achievement of established DSM goals and verified savings. Rather, the Consumer Advocate's recommendation is focused on compensation that is in addition to the recovery of program costs, similar to the return on rate base allowed utility companies subject to rate of return regulation, that HECO proposes.

In this regard, the Consumer Advocate notes that the level of additional compensation HECO seeks in the instant proceeding exceeds the overall rate of return and return on common equity that was stipulated to in Docket No. 04-0113.³³ During

³¹ See Framework, Section III.F.3.c.

³² Also see the detailed discussion of the matter in the Consumer Advocate's SOP filed in Docket No. 00-0209.

³³ The return on rate base represents compensation to investors for the use of their monies to acquire the plant (i.e., the return on investment) during the period that the investors receive compensation of their investment (i.e., through the depreciation of the acquired assets).

the settlement discussions, HECO, the Consumer Advocate and DOD agreed to a 10.7% return on common equity and an overall return on rate base of 8.66%.³⁴ This compares to the 15% return that HECO proposes to receive on the DSM program costs under the current proposal.³⁵

If one considers the compensation paid on a one year certificate of deposit versus a 15-year certificate of deposit, the interest rate for the longer term certificate is higher because the investor must "tie up" his/her funds for a longer period of time. Yet, HECO proposes to receive a 15% return on monies that are timely recovered, while its investors only receive an overall return of 8.66% for monies that are "tied up" over the extended life of the plant (i.e., HECO's rate base). HECO has failed to demonstrate why it is entitled to higher return for monies spent on DSM program costs.

³⁴ HECO initially requested a return on common equity of 11.5% return on common equity and an overall return on rate base of 9.11% in Direct Testimony. In Rebuttal Testimony, the Company reduced the request to an 11.0% return on common equity and an overall return on rate base of 8.83%.

³⁵ HECO, by and through its witness, Alan Hee, explained HECO's proposed shareholder incentive on page 869, line 17, of the Panel Hearing Transcript (Vol. IV, Aug. 31, 2006). At the Panel Hearing, Hee explained that HECO proposed to receive 5% of the net benefits of HECO's proposed DSM programs as an incentive for administering DSM programs in HECO's service territory. Moderator Hempling confirmed that the 5% net benefits proposal represented a reduction from the old 10% net benefits incentive. Panel Hr'g Tr. vol. IV, 869:22-870:2, Aug. 31, 2006. In response to questions posed by HREA regarding HECO's response to CA/HECO-IR-9 (revised on Aug. 24, 2006), Mr. Hee indicated that HECO's anticipated net benefits recovery (5% of net benefits calculated) would equate to approximately 15% of HECO's \$20 million DSM program costs. Panel Hr'g Tr. vol. IV, 899:8-900:7. According to CA/HECO-IR-9 (revised), the 5% net benefits proposal would yield approximately \$3.3 million in earnings for HECO in the first calendar year of its existence. Mr. Hee further confirmed that the benefits would be capped at \$4 million per year.

B. HECO'S PROPOSED DSM PROGRAMS.

1. Description of HECO's proposed programs.

In HECO's Final SOP, HECO described its proposed DSM programs, in relevant part, as follows:

1. [HECO's Commercial and Industrial Energy Efficiency ("CIEE")] Program – . . . [HECO's] CIEE Program offers prescriptive incentives for achieving varying degrees of efficiency for T-8 fluorescent and high intensity discharge lighting, occupancy sensors and reflectors. Split system package and chiller air conditioning units that exceed the minimum model energy code standards by 10% are offered incentives. Other measures such as premium efficient motors, LED exit signs, window tinting, and industrial lighting are also eligible technologies.

Customer education is a key element of this program. HECO offers numerous technology training workshops to customers each year, highlighting the technologies, energy savings and the financial incentives associated with . . . HECO DSM programs. These workshops educate and train customers in specific technologies and expose them to new applications of those technologies.

....

Technical support is a key feature [of] the program. Program representatives are available to work closely with customers requiring assistance with appropriate applications of energy efficiency measures and calculations of savings potential. Program representatives visit [customer] sites, make recommendations and assist [customers with] the application process.

....

2. [HECO's Commercial and Industrial New Construction ("CINC")] Program – . . . [HECO's] CINC Program is a combination of prescriptive and customized incentives and design assistance. The CINC Program captures elements of both the CIEE and [Commercial and Industrial Customized Rebate ("CICR")] Programs.

Customer education that specifically targets the architect and engineering . . . design community is key to the success of the CINC Program. Relationships with entities such as the federal, state, and local governments are also supported in the CINC Program.

Design assistance funding is offered to assist in early design consultation and review to present energy efficient options to building owners or developers. The relationships with architects, planners, engineers, and developers are essential to identify projects and keep apprised of their status during the design process.

3. [HECO's Commercial and Industrial Customized Rebate ("CICR")] Program – The key feature of the CICR Program is [the Program's] flexibility to incent most energy efficiency technologies. . . . CICR Program applications typically require pre-monitoring of a facility prior to the installation of [an] energy efficiency measure, and post-monitoring [of the energy efficiency measure] after the device has been installed and is operational. In the past, demand incentives were paid on measures that reduced demand during HECO's priority peak[] [-] 5:00 [p.m.] to 9:00 [p.m.] HECO is now proposing to pay the demand incentive for any customer demand reduction. This change reflects the added value of capacity reductions during afternoon peaks and allows the customer and HECO to pre-determine most demand incentive payments. Energy savings are paid on the calculated savings based [upon] engineering estimates[,] . . . post-monitored data[,] or both.

4. [HECO's Residential Efficient Water Heating ("REWH")] Program – . . . [HECO's] REWH Program encourages customers to reduce their electricity consumption for water heating by promoting the sale, installation, and use of energy-efficient water heaters in the existing residential market. The program specifically offers financial incentives for the installation of solar, heat pump, and high efficiency electric water heaters. The incentives are currently offered in conjunction with available State . . . and Federal tax credits. HECO is proposing to increase the customer incentive level for solar water heating systems [to \$1,000]

5. [HECO's Residential New Construction ("RNC")] Program – . . . [HECO's] RNC Program encourages homebuilders, including HECO customers who are building their own homes, to reduce electricity consumption in newly constructed homes. To market the program[,] HECO makes presentations to builders and architects and works closely with the Building Industry Association. Since most new construction projects have long lead times[,] HECO will open an application for the customer/developer as soon as [HECO] becomes aware of the project. The program promotes the installation and use of solar water heaters, heat pumps, high efficiency electric water heaters, and high efficiency electric water heaters coupled with load control devices HECO is proposing to increase the customer incentive level for solar water heating systems [to \$1,000] In addition, the program promotes the installation and use of a variety of energy efficiency measures such as

Energy Star double pane windows, increased insulation, skylights, and Energy Star appliances.³⁶

....

6. [HECO's Residential Low Income ("RLI")] Program - . . . [HECO's] RLI Program enables qualified low-income customers, as defined by the [State's] . . . guidelines for low income residents, to receive [compact fluorescent lights ("CFLs")] and high-efficiency water heating measures at no cost to them. . . .

The program would be implemented by . . . existing third-party agencies that typically deal with low-income customers. These so-called Community Action Program ("CAP") agencies would be under contract to HECO. This approach represents a commitment by HECO, where feasible, to outsource to the local contractor community some of the implementation responsibilities for [HECO's] energy efficiency programs. In this case, CAP agencies would be developing the marketing and promotional materials, recruiting and qualifying customers, certifying the installations, and scheduling the on[-]site work associated with the equipment-servicing component of the program. HECO will work with the selected CAP agencies in terms of providing training on the energy efficiency measures as well as with marketing and outreach strategies.

7. [HECO's Energy Solutions for the Home ("ESH")] Program - . . . [HECO's] ESH Program will encourage customers to reduce their electricity consumption by adopting a variety of energy efficient end-uses in the home[,] including Energy Star lighting, cooling, and other appliances. Financial incentives will be offered in order to reduce the cost burden faced by the customer when making investments in these types of

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In its Final SOP, HECO added, in relevant part, as follows:

[HECO's] Built Green Program has been designed to encourage new home developers to design their new products with energy saving measures built-in. HECO would offer four levels of energy saving measures that . . . developers can select from: Bronze, Silver, Gold[,] and Gold Plus. Each level builds upon the level before it[,] making it easier for the developer to select a higher level of savings to implement.

In the Bronze level, the developer needs to select a central air conditioning system with a SEER of 13 or better, Energy Star ceiling fans, and [compact fluorescent lighting]. The Silver level includes the same requirements as the Bronze level and adds Energy Star clothes washer[s], refrigerator[s], wall and ceiling insulation[,] and skylights. The Gold level includes the same requirements of the Silver level and adds Energy Star windows. In the Gold Plus level, the home must be built to the Gold level, but natural ventilation is required, replacing the air conditioning system.

HECO Final SOP, at 50.

equipment. The program will be structured in a prescriptive format where customers can choose one or more energy efficiency measures from a list of approved measures

HECO Final SOP, at 46-51 (footnote added).

In Docket No. 04-0113, HECO witness Gregory A. Wikler explained that HECO's Residential Customer Energy Awareness ("RCEA") Program is a program designed to be an aggressive communications and public outreach campaign directed at residential customers. See Test. of Gregory A. Wikler, HECO T-11, at 57:11-59:17 (Docket No. 04-0113). The RCEA Program seeks to increase customer awareness with respect to the many low cost, or no cost, DSM measures available to customers at the present time.³⁷ Wikler Test., HECO T-11, at 57:11-59:17. HECO seeks to use the RCEA Program as a means to change customer behavior, thereby creating significant energy

³⁷ In his testimony, Wikler stated, in relevant part, as follows:

HECO plans to promote Energy Star Appliances. Through various communication methods, HECO will make its customers aware of the potential savings that can be realized from purchasing these energy efficient Energy Star appliances when replacing their refrigerators, clothes washers and dryers, dishwashers and other household equipment.

HECO will also inform its customers of passive cooling measures such as the proper use of trees and shrubs to shade west and south facing walls, the use of drapes or other window shading devices to keep the sun out of the home, the advantages of attic fans and insulation to reduce heat build up, the advantages of light colored roofs and walls, plus other low cost or no cost measures. If the customer has air conditioning, HECO will provide information on programmable thermostats, the need for regular maintenance and other operating suggestions that will help the customers reduce their energy use and their energy bill.

Other no cost, or low cost, measures will also be addressed. These include simple changes, such as washing full loads of clothes and full loads of dishes, repairing leaking faucets, adding an insulation blanket to an older water heater, cleaning the coils on refrigerators and freezers, and, when possible, not placing a refrigerator or freezer on an outside wall, especially a west or south facing wall in a garage. These measures and other common behavioral changes can result in significant energy savings.

Wikler Test., HECO T-11, at 58:23-59:17.

savings and peak load reductions for HECO's system. Wikler Test., HECO T-11, at 57:12-15; see also Wikler Test., HECO T-11, at 58:1-8. According to Wikler, a majority of the program's expenses will be for advertising and events designed to promote customer awareness as to energy supply options and energy conservation opportunities in the State. Wikler Test., HECO T-11, at 60:5-13. Wikler noted that "HECO is not claiming energy and peak demand savings as a result of [the RCEA Program]." Wikler Test., HECO T-11, at 58:3-4.

HECO's Residential Direct Load Control ("RDLC") Program provides incentives to customers who allow HECO to control air conditioners and/or water heaters during summer peak hours. Consumer Advocate Preliminary SOP, at 69-70. Specifically, HECO cycles air conditioners off-line every 15 minutes and shuts off water heaters during the entire peak period. Id. at 70. HECO controls air conditioners and water heaters using radio signals sent to switches installed on the end-use equipment. Id. HECO's RDLC Program represents a standard load control program that has been successfully implemented by many other utilities. Id.

HECO's Commercial and Industrial Direct Load Control ("CIDLC") Program provides commercial and industrial customers with a year-round rate reduction if the commercial or industrial customer allows HECO to interrupt some of the customer's electrical load during the year. Id. HECO notifies selected customers one hour in advance of load curtailment and customers incur penalties if load is not curtailed. Id. HECO verifies whether load is actually curtailed through a special type of metering. Id. HECO account managers promote the CIDLC Program. Id.

- a. **There are deficiencies in the methods by which HECO's proposed DSM program package was developed that should be remedied prospectively.**

In its Final SOP, the Consumer Advocate described the essential steps by which the administration, design, implementation, and monitoring and evaluation of utility DSM programs should occur. Consumer Advocate Final SOP, at 42-44. The Consumer Advocate identifies deficiencies in these processes, which should be remedied as soon as is reasonably possible, and certainly before any incentive payments are provided to HECO as a reward for DSM program implementation. In short, the Consumer Advocate maintains that the Commission should expect the Company to achieve high levels of performance for any DSM programs that it implements on ratepayers' behalf. The nine essential program design steps identified by the Consumer Advocate in its Final SOP, include the following:

1. Identify and establish the basic resource planning objectives and consequent energy- and capacity-savings goals that the DSM programs are to achieve.
2. Through primary and secondary research, segment the utility's customer base into different types of customers, and identify how electricity is currently being utilized by those customers.
3. Identify new technologies and equipment that can be deployed to improve the efficiency with which electricity is utilized by the various customer segments and end uses.

4. Estimate the maximum potential reductions in total system peak load and total system energy requirements that can be achieved through the deployment of these technologies and equipment.
5. Design specific programs and delivery mechanisms to encourage target customer groups to implement the various DSM measures.
6. Assess the cost-effectiveness of each DSM program by estimating all program benefits and costs, utilizing industry standard benefit/cost tests.
7. Establish the optimum portfolio of programs to be implemented (i.e., the desired expenditures on individual programs) to best achieve the objectives and goals established in step 1 above. Ideally, the desired level of DSM expenditures on each program would be established in an integrated resource planning process where supply- and demand-side alternatives are compared directly against one another. It is possible to optimize among only DSM alternatives (e.g., assuming a certain pre-determined "set aside" for DSM), but this is less desirable because it may fail to achieve an overall least-cost plan.
8. Design procedures to: (a) monitor and evaluate the progress in implementing each program and (b) measure actual energy- and capacity-savings over the life of the measures installed.
9. Develop appropriate reporting mechanisms so that the Commission, the Consumer Advocate, and other interested parties can be kept apprised of the program results and progress.

Id. Each of these steps is discussed in detail in the Consumer Advocate's Final SOP, and the Company's proposal to implement DSM programs is evaluated in relation to how well the programs comport with the activities required in each step. From this analysis, two significant "generic" problems emerged, as discussed below.

(1) HECO's filing is not sufficiently clear in communicating the planning objectives that its DSM programs are seeking to achieve.

In HECO's Final SOP, HECO states, in relevant part, that all seven energy efficiency programs and the RCEA Program should be approved by the Commission because HECO's programs:

- 1) [a]re an essential component of HECO's preferred [IRP] plan . . . ;
- 2) [a]re necessary in order to provide HECO with additional megawatts of peak demand savings [that] . . . help [HECO in addressing] . . . its current reserve capacity situation;
- 3) [p]rovide opportunities for customers to better manage their energy consumption and their monthly bills;
- 4) [r]educe fossil fuel use;
- 5) [i]ncrementally develop the technology delivery infrastructure, thereby promoting transformation of some sectors of technology services;
- 6) [i]nject capital into the economy, improving development within [the State] . . . ; and
- 7) [a]re cost-effective as a portfolio of DSM resources, meaning that the system benefits derived from these energy efficiency programs are greater than the costs of the programs.

HECO Final SOP, at 80-81.

While the Consumer Advocate appreciates the constraints faced by HECO in developing the mix of energy efficiency programs that is proposed to meet HECO's energy savings needs in the near future, without more information, the Consumer Advocate was unable to conclude that HECO's combination of programs would optimize the level of energy and capacity savings available to HECO over the relevant planning horizon.

As discussed in the Consumer Advocate's Final SOP, HECO was not sufficiently clear in communicating the relationship between the seven "objectives" that HECO developed at the onset of its IRP planning process and the specific DSM programs that it proposes to implement. See Consumer Advocate Final SOP, at 47-54. The information cited above did little to illuminate the decision process by which the Company determined which DSM programs and what budget levels would best meet its needs and those of HECO's customers. The Consumer Advocate has emphasized that, absent a clear statement of the qualitative and quantitative targets that define HECO's true resource needs, those participating in Integrated Resource Planning process and DSM program reviews are unable to assess the reasonableness of the Company's proposals and offer alternative recommendations that may possibly represent better means of meeting the goal of IRP, as stated in the Commission's IRP Framework. Id. at 46. In its Final SOP, the Consumer Advocate illustrated some of the problems that can result from insufficient attention to these factors. See Id. at 55.

During the course of the evidentiary hearing in this Docket, the Consumer Advocate and its consultant met with HECO personnel with the objective of obtaining an understanding of the rationale behind the specific DSM program package that was

being advanced. Through those discussions, the Consumer Advocate learned that three primary considerations drove the Company's selections of DSM programs to pursue. The three considerations were as follows:

- Maximize capacity (MW) savings in order to mitigate the possible effects of the Company's reserve capacity shortfall;
- Make DSM programs available across a broad range of customer classes and sub-groups; and
- Implement DSM programs (i.e., increase program budget levels) to the point where practical experience with these programs and eligible customers dictates that maximum levels of market penetration (e.g., based on DSM program acceptance rates by customers) would be achieved.

The Consumer Advocate has not been persuaded that an optimal DSM program portfolio has been achieved by HECO. Nonetheless, the Consumer Advocate is satisfied that HECO's proposals are adequate under the circumstances, and that further delay in implementing these programs would be contrary to ratepayer interests.³⁸ The Consumer Advocate anticipates, based on communications from the Company during the course of the proceedings, that HECO will in this Docket provide additional

³⁸

The Consumer Advocate recommends that, in considering DSM program designs and the overall design of the DSM portfolio, priority be given to (1) designing and implementing an approach that can mitigate HECO's reserve capacity shortfall to the extent feasible, and (2) otherwise maintaining a diverse, balanced set of DSM programs. It is within this context, and with a particular focus on the need for additional capacity and capacity-savings resources to address the reserve capacity shortfall, that the Consumer Advocate recommends that HECO's proposed DSM programs be approved for implementation in the coming months. We note that HECO did commit to further analysis and potential revisions to its load management programs, which would offer essential contributions toward the Company's reliability problems.

information to explain its strategies for implementing demand-side programs. Moreover, the Consumer Advocate anticipates that such explanations (i.e., drawing the link between IRP planning objectives and DSM program proposals) will become a routine part of HECO's IRP processes.

(2) HECO's calculations of DSM program cost-effectiveness are flawed and should be remedied as soon as possible.

Step (6), above, requires that a utility assess the cost-effectiveness of the DSM programs that it proposes to implement by estimating all program benefits and costs, then utilizing industry standard benefit/cost tests. The Company attempted to apply a series of standard benefit cost tests to its proposed DSM programs. However, after a review of those calculations, the Consumer Advocate believed that there were errors in those tests. As noted in the Consumer Advocate's Final SOP on pages 74 to 77, it appeared that the Company had excluded utility incentive payments to customers from the Total Resource Cost ("TRC") test. Based upon that assessment, the Consumer Advocate was concerned that some of the proposed programs might not be cost-effective. This assessment was driven by the description of the TRC test contained in Mr. Wikler's report, and the labeling of formulae and cells in the electronic spreadsheet files that serve as workpapers to Mr. Wikler's exhibits. At the evidentiary hearing, the Consumer Advocate, the Company, and its consultant, Mr. Wikler, discussed these concerns off the record. After these discussions, it would appear that the calculations did, in fact, include the utility incentive payments to program participants in the TRC tests, but did not remove them from the Participant Cost ("PC")

test, as they should have. Thus, it appears that the filed TRC test benefit/cost ratios are appropriate, while filed PC test benefit/cost ratios are lower than they should be. While this exchange of information helped assuage the Consumer Advocate's concerns that the proposed programs are cost-effective, the Consumer Advocate continues to believe that the Company should file with the Commission accurate cost-effectiveness results for all four of the tests. The Consumer Advocate recommends that this situation be remedied as soon as possible.³⁹

The Consumer Advocate observes that these benefit/cost tests are an important part of the DSM program design package. Importantly, they facilitate identification of those DSM programs that are most likely to yield benefits to the Company and its ratepayers. Moreover, accurate benefit/cost data is needed to optimize the overall DSM portfolio, and to determine optimal levels of investment in the various programs. These tests also may have a significant bearing on the identified savings levels achieved, and thus on the incentive payouts to the Company (i.e., in the event that such incentives are approved by the Commission). For these reasons, the Consumer Advocate recommends that the Commission act to ensure that any deficiencies in the calculation of benefit/cost tests are addressed immediately.

In this proceeding, the Company updated the avoided costs that were utilized for calculating the programs' benefits. The following table compares the avoided costs used in this proceeding to those provided and utilized in the evaluation of the interim DSM programs reviewed earlier in this docket.

³⁹ During the course of the evidentiary hearing in this Docket, company witnesses committed to the Consumer Advocate to quickly resolve certain identified deficiencies in its benefit/cost tests. The Consumer Advocate has yet to receive this information.

DOCKET 05-0069 HECO DSM PROGRAMS
COMPARISON OF AVOIDED COSTS

year	Interim DSM Filing 11-9-05		Docket 05-0069 (8-9-06)		revised 8-24-06	
	fixed costs \$/kw-yr ^[1]	avoided energy costs \$/mwh ^[1]	fixed costs \$/kw-yr ^[2]	avoided energy costs \$/mwh ^[2]	fixed costs \$/kw-yr ^[3]	avoided energy costs \$/mwh ^[4]
2006	\$126	\$50.32	\$180	\$109.62	\$193	\$117.40
2007	\$131	\$52.23	\$181	\$107.16	\$194	\$114.77
2008	\$136	\$54.22	\$181	\$102.19	\$194	\$109.45
2009	\$141	\$56.28	\$181	\$106.89	\$194	\$114.48
2010	\$146	\$58.42	\$0	\$98.90	\$0	\$105.92
2011	\$152	\$60.64	\$0	\$100.41	\$0	\$107.54
2012	\$158	\$62.94	\$0	\$104.04	\$0	\$111.43
2013	\$164	\$65.33	\$0	\$103.69	\$0	\$111.05
2014	\$170	\$67.82	\$0	\$108.86	\$0	\$116.59
2015	\$176	\$70.39	\$1,530	(\$139.66)	\$1,639	(\$149.57)
2016	\$183	\$73.07	\$1,704	(\$132.67)	\$1,825	(\$142.09)
2017	\$190	\$75.85	\$1,538	(\$118.95)	\$1,647	(\$127.40)
2018	\$197	\$78.73	\$1,413	(\$115.36)	\$1,513	(\$123.54)
2019	\$205	\$81.72	\$1,304	(\$109.01)	\$1,397	(\$116.75)
2020	\$212	\$84.82	\$1,207	(\$104.56)	\$1,293	(\$111.99)
2021	\$220	\$88.05	\$1,150	(\$100.02)	\$1,231	(\$107.42)
2022	\$229	\$91.39	\$1,112	(\$109.30)	\$1,191	(\$117.06)
2023	\$238	\$94.87	\$1,077	(\$111.41)	\$1,153	(\$119.32)
2024	\$247	\$98.47	(\$411)	\$137.79	(\$441)	\$147.58
2025	\$256	\$102.21	(\$744)	\$144.47	(\$797)	\$154.72

[1] see electronic spreadsheet files provided by the Company

[2] see electronic spreadsheet files provided by the Company

[3] see response to Revised 08-24-06 CA/HECO-IR-9 page 49 of 55

[4] see response to Revised 08-24-06 CA/HECO-IR-9 page 48 of 55

As can be seen from the above table, both avoided fixed costs (or capacity costs) and avoided energy costs fluctuate dramatically from year-to-year, ranging from large negative to large positive numbers. The underlying cause of these fluctuations is the assumptions made about the next capacity addition that would be avoided by the DSM programs. In this proceeding, the Company assumes that without additional investments in DSM, its next generating unit would be a 180 MW fluidized bed coal plant in the year 2015. With future DSM investments, this 180 MW coal plant is assumed to be deferred until the year 2024. The Consumer Advocate has several

concerns with the approach used by the Company to calculate avoided costs for use in evaluating 2006 DSM program investments. First, it is not entirely clear how a 180 MW coal plant in 2015 became the next capacity addition, when the Company has a pending application to commit funds for the installation of a 180 MW combustion turbine. The Company did state that the choice of a 180 MW coal plant as the next capacity addition was chosen based upon an objective to add fuel diversity to HECO's energy portfolio. However, the coal plant was not the result of any cost-effectiveness analyses or optimization studies, as the Consumer Advocate contends should be the appropriate basis for selecting the next type of generating resource.

Second, the dramatic swings in avoided costs that these assumptions yield could have an undesirable impact on the cost-effectiveness tests for different programs. For example, using the latest avoided costs (those of August 24, 2006) and considering the years 2014 and 2015, avoided capacity costs are projected to jump to \$1,639 per KW-year from \$0 per KW-year, while avoided energy costs fall to a negative \$150 per MWH from a positive value of \$117 per MWH, for a swing of \$267 per MWH or a 228% change. It is unclear if such large changes in avoided costs would impact programs (such as CIEE) that focus on energy savings more than programs (such as CILC) that focus on capacity savings. The Consumer Advocate contends that the root cause of these dramatic fluctuations is the assumption that individual DSM programs implemented in 2006, which each save less than 5 MW, should be evaluated in relation to avoided costs calculated based upon the assumed deferral of a 180 MW coal plant.

An alternate approach that considers the ongoing value of capacity and energy savings (e.g., on a year-by-year basis) may offer more stable avoided cost results, and

thus set a better foundation for resource planning for demand-side activities. The Consumer Advocate recommends that these concerns can be addressed by using projected marginal capacity and energy costs in each year to initially screen individual DSM programs, and then an optimization process to establish the appropriate mix of DSM programs. The Consumer Advocate suggests that the Company utilize a process similar to the protocol described below for determining these marginal costs.

- Update all assumptions including load forecasts, fuel prices, and cost and performance of different types of new generation.
- Assuming no future investments in DSM, develop an optimized resource plan over the next twenty years, and simulate the performance of the HECO system using that resource plan.
- With the system described above, estimate the marginal cost of capacity and energy for each year. Marginal capacity costs would be equal to the annual cost of owning a simple cycle combustion turbine, the lowest cost form of conventional capacity. Marginal energy costs would be the weighted average of the hourly system lambdas, and should be broken down between peak and off peak time periods.
- Using the above marginal capacity and energy costs, perform cost-effectiveness tests for each proposed individual DSM program. This will provide an indication of each program's cost-effectiveness.
- For those programs that (individually) pass the TRC test, combine the individual programs into a portfolio of DSM that optimizes the amount spent on the portfolio and the capacity and energy saved by the portfolio.

- To determine an optimized portfolio of DSM, re-optimize the resource plan assuming future investments in DSM as determined by the optimal DSM portfolio.
- Compare the net present value (“NPV”) of the two optimized resource plans with and without future DSM investments. If the plan with future DSM investments has a lower NPV, then it is the least cost plan.

The Consumer Advocate does not recommend withholding approval of the current slate of DSM programs while such an analysis is performed. Rather, in future filings, the Company should make the improvements described above in its planning and evaluation of DSM programs.

b. HECO’s proposed programs appear to be a reasonable means of addressing HECO’s current, urgent system needs and thus should be approved by the Commission.

As indicated above, the Consumer Advocate is satisfied that HECO’s proposed programs – with the exception of the RCEA Program – should be implemented (with limited modifications, as discussed in the following subsection) at proposed budget levels to meet HECO’s system needs, primarily because they appear to offer a reasonable means of addressing HECO’s urgent reserve capacity needs. Under the circumstances, the Company should not be sent in search of perfection when good approaches to mitigating a significant problem are at hand.

The one exception is the RCEA program. As is discussed by the Consumer Advocate in its Final SOP, the RCEA Program should not be approved by the Commission because HECO has not demonstrated a sufficient connection between its

marketing efforts and a specific level of energy and capacity savings that will be provided by the implementation of the RCEA Program. See Consumer Advocate Final SOP at 69, 70. Discussion during the evidentiary hearings did little to illuminate the benefits that might be expected through the proposed investment in the RCEA program. Even HECO Witness Wikler admits that “HECO is not claiming energy and peak demand savings as a result of [the RCEA Program].” Wikler Test., HECO T-11, at 58:3-4.

c. The Consumer Advocate’s review of DSM program designs resulted in limited recommendations for improvements.

The Consumer Advocate’s Final SOP emphasizes (at 65) that the focus of the DSM program design process is to assemble groups of DSM measures that are judged likely to be most effective, and to develop the specific delivery mechanisms to encourage or cause customers to actually install the desired measures. The utility needs to design a program to market the product that it wishes to sell. As with the development of any marketing program, decisions about promotions, prices, and delivery channels are important to program design processes.

Global Energy Partners (“Global”) was retained by HECO to design the specific programs that HECO seeks to have the Commission approve in this proceeding. The record in this proceeding shows that the electric utility industry has a 20+ year track record of designing and implementing DSM programs similar to those designed by Global. Consumer Advocate Final SOP at 65. In developing the DSM programs proposed by HECO in this proceeding, Global was able to build off of existing programs

and introduced some new programs. The results of Global's program design efforts are provided in Exhibit HECO-1102. Below, the Consumer Advocate discusses program design considerations related to both HECO's existing (i.e., continuing) and new DSM programs.

(1) The DSM program proposals that are extensions of HECO's existing DSM programs are generally reasonable.

The Residential Efficient Water Heating ("REWH") program targets replacement of retrofit installations of solar and high efficiency electric water heaters. The Company offers customer rebates equal to 25% of the cost of qualifying equipment. Promotion would continue to occur through HECO's trade allies and equipment dealers, and would include contacting existing customers, telemarketing, door-to-door campaigning, posters, and flyers. The Consumer Advocate reviewed the design of this program and finds it reasonable; therefore, the Consumer Advocate recommends that the REWH program be approved by the Commission for implementation by HECO.

The Residential New Construction ("RNC") program would continue to promote solar water heating, high efficiency water heating, ceiling and wall insulation, high performance windows, high efficiency cooling, and EnergyStar appliances in newly constructed residential dwellings. This program provides cash incentives to customers who install such equipment. Promotion would continue through trade ally networks, contacting existing customers, telemarketing, door-to-door campaigning, and distributing posters and flyers. The Consumer Advocate reviewed the design of this

program and finds it reasonable; therefore, recommends that the RNC be approved by the Commission for implementation by HECO.

The Commercial and Industrial Energy Efficiency ("CIEE") program would continue to offer 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 would continue to include air conditioning, lighting, motors, window films, and booster pumps. The rebate level would continue at 25% of measure cost. Promotion would continue through trade ally networks and equipment dealers. HECO indicates that seminars will be held to familiarize vendors and dealers with this program. The Consumer Advocate reviewed the design of this program and finds it reasonable; therefore, recommends that the Commission approve the CIEE program be approved for implementation by HECO.

The Commercial and Industrial New Construction ("CINC") program is intended to address ongoing, ready opportunities to introduce energy efficiency measures to new facilities as they are built and as major renovations are implemented. This program is intended to continue to take advantage of opportunities that otherwise (i.e., outside of new construction and renovations) might be too costly thereby resulting in what often is referred to as "lost opportunities." Targeted measures include air conditioning, lighting, motors, window films, and booster pumps. The approach is to offer rebates that are intended to reduce the payback period on customer investments in qualifying equipment. The larger the utility rebate to customers, the less customer funds are required, and the shorter the payback to customers.

In Exhibit HECO-1102, Global Energy Partners states that financial incentives are designed to cover 60% to 90% of the incremental cost between standard equipment and high efficiency equipment or a 1.5 year payback period, whichever requires the smallest rebate from the utility. HECO-1102, at 40. The Consumer Advocate reviewed the design of this program and finds it reasonable; therefore, recommends that the Commission approve the CINC program for implementation by HECO.

The Commercial and Industrial Customized Rebate ("CICR") program would continue to focus on site-specific savings rather than the measure-specific incentives offered under the CIEE program. Site-specific measures include the redesign of air conditioning systems and the installation of controls on various energy systems. CICR installations typically require evaluating the facility before and after measure installation to project how much energy is expected to be saved.

HECO proposes several changes to the existing CICR program. The first is to eliminate the requirement of a customer payback of two years or greater. In making this change, the Company's stated intent is to increase customer acceptance of energy efficiency measures and increase the program's overall level of demand savings. However, the Company does not state whether there will be a new minimum payback to qualify for a rebate. This implies that rebates could be provided for measures that have a payback period that is as short as one year. The Consumer Advocate believes that some minimum payback level should be established. In the absence of any analytically supported minimum, if the Company wishes to establish a lower threshold payback, the Consumer Advocate recommends utilizing a 1.5 year payback period in order to be consistent with the CINC program.

The second change to the CICR program that is proposed by HECO is to offer incentive payments for customer demand reductions. The existing program pays for demand reductions during HECO's priority peak. The Company does not provide any analysis to evaluate the impact of this change. The Consumer Advocate is concerned that, if this proposed change is implemented, the Company could invest more in energy efficiency measure incentives while achieving little by way of incremental demand reduction. Until the Company demonstrates that this problem will not occur, the Consumer Advocate recommends that the Commission not approve this change to the CICR program design.

During the course of these proceedings, HREA sought to advance the sea water air conditioning ("SWAC") technology, for possible inclusion in HECO's CICR program. In particular, HREA sought to ensure that the developers of SWAC systems would be eligible for a \$500 rebate from HECO for each ton of SWAC equipment that such developers actually install.

During the course of these proceedings, the Consumer Advocate issued a number of information request to HREA in order to assess whether SWAC is likely to serve as a viable renewable DSM energy resource in Hawaii, whether it would be economically-viable, and whether it would successfully pass the cost-effectiveness tests that typically are applied to DSM programs. Responses to some but not all of the Consumer Advocate's information requests were provided, leaving the Consumer Advocate with insufficient information to determine whether HREA's proposal represents a viable DSM option that merits an commitment of DSM program dollars

through this proceeding.⁴⁰ On October 10, 2006, HREA provided additional responses to some requests that were deemed to be confidential. As of the writing of this brief, the Consumer Advocate and its consultants are still evaluating this material. The Commission should not require HECO to commit to substantial customer rebates unless it is confident that the money would be prudently spent and that savings would actually be delivered with acceptable impact on electric rates.

Nonetheless, the Consumer Advocate continues to maintain that HREA should be applauded for its innovative thinking in advancing this proposal. If it can be successfully implemented in a cost-effective manner, SWAC could be a significant, environmentally-friendly contributor to Hawaii's energy needs. The Consumer Advocate also observes, given the apparent lead times involved, that a SWAC project is unlikely to begin commercial operation in the next year or two. Thus, at a practical level, such a project would not have a bearing on HECO's DSM budget for some time to come. The issue before the Commission, then, is how to create appropriate incentives for such projects.

The Consumer Advocate sees incentives for emerging demand-side programs as important. Such programs ultimately may play an important role in Hawaii's energy future. Nonetheless, the issue of commitments to a level of incentives to be paid at some point in the future raises difficult questions. For instance, ideally such incentives would be consistent with the level of benefits to be provided as capacity and energy savings are realized. They would also reflect a utility's reliability position; i.e., a utility

⁴⁰ The Consumer Advocate notes that a proposal for a \$500 per ton rebate for a 25,000 ton central SWAC system would cost consumers \$12.5 million, more than 60% of HECO's total proposed budget for program expenses in this proceeding.

that is short of capacity may have to pay an extra increment to secure demand- and supply-side programs to shore up that position. In addition, the value of "external" benefits provided through capacity and energy savings also may play a role. Unfortunately, it is difficult to predict all of these things in advance. Thus, it is difficult for the Commission to identify with certainty today a rebate level that might reasonably compensate a provider of capacity- and energy-savings at a future date when a given emergent demand-side technology is implemented.

The Consumer Advocate sees two options as available. Either: (1) the Commission can state that the history of customer incentives/rebates available to qualifying demand-side programs can serve as a guide to DSM developers as they project potential customer incentives in their economic analyses, or (2) the Commission can require the utility to identify today a schedule of customer incentives/rebates that the Commission expects will require the utility to provide in relation to future DSM programs and their budgets.

At this time, the Consumer Advocate prefers the former because it minimizes advance commitments in an uncertain environment. Therefore, the Consumer Advocates recommends that the Commission not address SWAC projects in approving rebate levels for the CICR program. Rather, action on the SWAC proposal should be deferred and considered in the development of HECO's fourth IRP, which is to be filed on or about the fourth quarter of 2008 and would include a five-year action plan for 2009 through 2014. In the interim, the Commission should remind HECO that it should give careful consideration to all technologies that offer promising paths to cost-effective

capacity and energy savings, and to design effective programs to implement any such new technologies as they become commercially viable.

(2) The DSM program proposals that represent new DSM programs are generally reasonable, with the exception of the RCEA program.

The Energy Solutions for the Home (“ESH”) program is a new program that is designed to provide a comprehensive range of energy efficiency options that address several end uses, including room air conditioners, central air conditioners, ceiling fans, compact fluorescent lights, and EnergyStar appliances. The program is intended to operate in parallel with the EnergyStar program. Cash rebates are provided to customers with existing or new single-family homes. Promotion is through trade ally networks, contacting existing customers, telemarketing, door-to-door campaigning, posters, and flyers. The Consumer Advocate reviewed the design of this program and finds it reasonable; therefore, recommends that the Commission approve the EnergyStar program for implementation by HECO.

The Residential Low Income (“RLI”) program enables qualified low income customers to receive high efficiency equipment for little or no cost. Targeted end uses are cooling, water heating, and lighting. Local Customer Assistance Program agencies could serve as the marketing and delivery mechanisms. The Consumer Advocate reviewed the design of this program and finds it reasonable; therefore, recommends that the Commission approve the RLI program for implementation by HECO.

The Residential Customer Energy Awareness (“RCEA”) program is intended to determine if an aggressive marketing and communication plan by HECO can result in

significant energy savings and peak load reductions. This program consists of: (a) market research and customer surveys to determine the current level of energy awareness among residential customers, (b) a communications plan to educate customers on how they can reduce energy bills, and (c) a final survey to assess customer awareness after the communication plan has been implemented.

The Consumer Advocate continues to question the merits of the RCEA program, and recommends that it **not** be authorized for implementation. The Company is proposing to spend \$2.1 million on an advertising campaign with surveys conducted before and after. The Company attributes **no** savings of energy or peak load as a result of this program. Given the Company's expected reserve capacity shortfall of 200 MW,⁴¹ the Consumer Advocate strongly contends that spending this amount of money on programs that will achieve reductions in peak load make more sense.

The Residential Direct Load Control ("RDLC") program provides incentives to customers who allow HECO to control their air conditioners and/or water heaters during summer peak hours. Specifically, air conditioners may be cycled off-line every 15 minutes, and water heaters may be shut off during the entire peak period of a given day. These devices are controlled by radio signals sent to switches installed on these types of end use equipment. The Consumer Advocate observes that this is a common load control program that has been successfully implemented by many other utilities. The Consumer Advocate reviewed the design of this program and finds it reasonable;

⁴¹ See Table 1, Consumer Advocate Final SOP, at 55.

therefore, the Consumer Advocate recommends that the Commission authorize the RDLC program for implementation by HECO.

The Commercial and Industrial Direct Load Control ("CIDLC") program provides commercial and industrial customers with a year-round rate reduction if they allow the Company to interrupt some of their load during the year. Customers are notified one hour in advance of the need to curtail load. Penalties are incurred for non-curtailment. Verification that load is actually curtailed is achieved through special metering. Promotion will be through HECO's account managers. The Consumer Advocate observes that this is another fairly standard load control program that has been successfully implemented by many other utilities. The Consumer Advocate reviewed the design of this program and finds it reasonable; therefore, recommends that the Commission authorize the CIDLC program for implementation by HECO.

In summary, the Consumer Advocate observes that each of HECO's proposed DSM programs is similar in design to programs that have been and are being implemented at other utilities throughout the country. The Consumer Advocate has suggested some limited modifications to certain of HECO's proposed DSM programs, as discussed above. However, the Consumer Advocate otherwise finds the design of these programs – but for the RCEA program – to be reasonable and consistent with industry standards. Therefore, the Consumer Advocate recommends that all but the RCEA program be approved by the Commission for implementation (i.e., with the Consumer Advocate's recommended modifications) by HECO. The Consumer Advocate recommends not proceeding with the RCEA program unless and until benefits in excess of costs can be clearly established.

2. Monitoring and evaluating DSM measures should continue through the initiation of Commission dockets.

In the Energy Efficiency Docket, the Parties and Participants agreed upon the importance of monitoring and evaluating energy efficiency and DSM efforts in the State. In order to improve the monitoring and evaluation process, the Consumer Advocate proposes that the Commission establish dockets to consider program evaluations and ensure regulatory oversight over energy efficiency and DSM efforts. While the use of docketing might increase the Commission's workload over the short-term, the need to provide a public forum where parties and participants can analyze, discuss, and, if necessary, challenge evaluation reports cannot be overstated. Through the docketing process, the Commission can gather important information that can assist the Commission in its exercise of the Commission's regulatory authority. The benefits of a docketed proceeding with respect to energy efficiency or DSM program evaluations are apparent.

In its Final SOP (see Appendix C at 2-4), the Consumer Advocate provides the details of a process that could be implemented by the Commission for monitoring and evaluating a utility's DSM programs. That process would be equally important, and could be equally effective, if a third-party is assigned to administer DSM programs in Hawaii.

IV. CONCLUSION.

For the foregoing reasons, the Consumer Advocate recommends that the Commission should issue two (2) Decision and Orders to resolve the issues raised in the Energy Efficiency Docket. The first Decision and Order should approve HECO's

seven energy efficiency programs, exclusive of the RCEA Program, on an expedited basis so that HECO immediately can implement its proposed DSM programs at identified budget levels. Such action can help to mitigate urgent need for reserve capacity.

The second Decision and Order should resolve the statewide policy issues raised in this docket. DSM goals should be established for all electric utilities serving Hawaii, on a utility-by-utility basis through their IRP development and monitoring process. As stated herein and in keeping with recent actions by the Legislature and Governor, the Commission should implement non-utility third-party administration of the HECO Companies' DSM programs. Such action should be accompanied by establishing a public benefits fund (and appointing a fund administrator), pursuant to Act 162. In keeping with the requirements of Act 162, cost recovery would continue to occur through a surcharge, which would be called the "Public Benefits Fee." Third-party administration of the HECO Companies' DSM programs thus will render a Commission decision pertaining to DSM Program cost recovery, lost margin recovery, and shareholder incentives unnecessary. The Consumer Advocate recommends that the current approach to cost recovery (i.e., surcharge) be retained through the transition to third-party administration. Furthermore, the Consumer Advocate recommends that during the transition, the HECO Companies no longer be allowed to receive: (a) incentives to encourage and ensure the implementation of DSM programs, and (b) compensation for lost margins resulting from such implementation in years between rate proceedings.

Finally, as discussed in here, a systematic Commission program for monitoring and evaluating DSM programs is essential to the success of this important effort. The Consumer Advocate has made specific recommendations regarding regular Commission proceedings to implement this program.

The Consumer Advocate recommends that the Commission accept the Consumer Advocate's recommendations provided herein.

Dated: Honolulu, Hawaii, October 25, 2006.

Respectfully submitted,

By *Lane H. Tsuchiyama*
LANE H. TSUCHIYAMA, ESQ.

Attorney for the
DIVISION OF CONSUMER ADVOCACY

Chapter 269, Hawaii Revised Statutes, is amended by adding four new sections to be appropriately designated and to read as follows:

§269-A Public benefits fund; authorization. (a) The public utilities commission, by order or rule, may redirect all or a portion of the funds collected through the current demand-side management surcharge by Hawaii's electric utilities into a public benefits fund that may be established by the public utilities commission.

(b) If the public utilities commission establishes a public benefits fund, the surcharge shall be known as the public benefits fee. Moneys in the fund shall be ratepayer funds that shall be used to support energy-efficiency and demand-side management programs and services, subject to the review and approval of the public utilities commission. These moneys shall not be available to meet any current or past general obligations of the State.

§269-B Public benefits fund administrator; establishment. (a) If the public utilities commission establishes a public benefits fund, the public utilities commission shall appoint a fund administrator to operate and manage any programs established under [HRS] section 269-A. The fund administrator shall not expend more than ten per cent of the fund in any fiscal year, or other reasonable percentage determined by the public utilities commission, for administration of the programs established under [HRS] section 269-A.

(b) The fund administrator shall be subject to regulation by the public utilities commission, including pursuant to [HRS] sections 269-7, 269-8, 269-8.2, 269-8.5, 269-9, 269-10, 269-13, 269-15, 269-19.5, and 269-28, and shall report to the public utilities commission on a regular basis. Notwithstanding any other provision of law to the contrary, the fund administrator shall not be an electric public utility or an electric public utility affiliate.

§269-C Requirements for the public benefits fund administrator. (a) Any fund administrator appointed pursuant to [HRS] section 269-B shall satisfy the qualification requirements established by the public utilities commission by rule or order. These requirements may include experience and expertise in:

- (1) Energy-efficient and renewable energy technologies and methods; and
- (2) Identifying, developing, administering, and implementing demand-side management and energy-efficiency programs.

(b) The fund administrator's duties and responsibilities shall be established by the public utilities commission by rule or order, and may include:

- (1) Identifying, developing, administering, promoting, implementing, and evaluating programs, methods, and technologies that support energy-efficiency and demand-side management programs;
- (2) Encouraging the continuance or improvement of efficiencies made in the production, delivery, and use of energy-efficiency and demand-side management programs and services;
- (3) Using the energy-efficiency expertise and capabilities that have developed or may develop in the State and consulting with state agency experts;
- (4) Promoting program initiatives, incentives, and market strategies that address the needs of persons facing the most significant barriers to participation;
- (5) Promoting coordinated program delivery, including coordination with electric public utilities regarding the delivery of low-income home energy assistance, other demand-side management or energy-efficiency programs, and any utility programs;
- (6) Consideration of innovative approaches to delivering demand-side management and energy-efficiency services, including strategies to encourage third party financing and customer contributions to the cost of demand-side management and energy-efficiency services; and
- (7) Submitting, to the public utilities commission for review and approval, a multi-year budget and planning cycle that promotes program improvement, program stability, and maturation of programs and delivery resources.

§269-D Transitioning from utility demand-side management programs to the public benefits fund. If the public utilities commission establishes a public benefits fund pursuant to [HRS] section 269-A, the public utilities commission shall:

- (1) Develop a transition plan that ensures that:
 - (A) Utility demand-side management programs are continued, to the extent practicable, until the transition date; and
 - (B) The fund administrator will be able to provide demand-side management and energy-efficiency services on the transition date;
- (2) Encourage programs that allow all retail electricity customers, including state and county agencies, regardless of the retail electricity or gas provider, to

have an opportunity to participate in and benefit from a comprehensive set of cost-effective demand-side management and energy-efficiency programs and initiatives designed to overcome barriers to participation;

(3) Encourage programs, measures, and delivery mechanisms that reasonably reflect current and projected utility integrated resource planning, market conditions, technological options, and environmental benefits;

(4) Facilitate the delivery of these programs as rapidly as possible, taking into consideration the need for these services and cost-effective delivery mechanisms;

(5) Consider the unique geographic location of the State and the high costs of energy in developing programs that will promote technologies to advance energy efficiency and use of renewable energy and permit the State to take advantage of activities undertaken in other states, including the opportunity for multi-state programs; [and]

(6) Require the fund administrator appointed by the public utilities commission under [HRS] section 269-B to deliver programs in an effective, efficient, timely, and competent manner and to meet standards that are consistent with state policy and public utilities commission policy

2006 Haw. Sess. L. Act 162, § 1 at 640-42.

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing **DIVISION OF CONSUMER ADVOCACY'S OPENING BRIEFS** 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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