BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF HAWAII

In the Matter of	)	
	)	
PUBLIC UTILITIES COMMISSION	)	DOCKET NO. 2009-0108
	)	
Instituting a Proceeding to Investigate Proposed Amendments to the Framework for Integrated Resource Planning	)	

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PRELIMINARY STATEMENT OF POSITION

OF THE HAWAIIAN ELECTRIC COMPANIES

AND

CERTIFICATE OF SERVICE

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PRELIMNARY STATEMENT OF POSITION

This Preliminary Statement of Position ("PSOP") is respectfully submitted by Hawaiian Electric Company, Inc. ("Hawaiian Electric" or the "Company"), Hawaii Electric Light Company, Inc. ("HELCO") and Maui Electric Company, Limited ("MECO") (collectively referred to as the "Hawaiian Electric Companies" or "Companies") pursuant to the Stipulated Procedural Order approved by the Commission in Docket No. 2009-0108, on September 23, 2009.

I. INTRODUCTION

At the time Integrated Resource Planning ("IRP") was established in 1992, the primary energy policy inputs into the planning process included (1) the State Energy Plan, Hawaii Revised Statutes ("HRS") § 226-18; (2) the Public Utility Regulatory Policies Act of 1978, as amended ("PURPA"), which gave preference to Qualifying Cogeneration Facilities, and Qualifying Small Power Production Facilities; and (3) HRS § 269-27.2, which gave preference to "nonfossil fuel producers."

The major changes implemented by IRP were (1) the consideration given to demand-side management ("DSM") measures and programs in addition to the continued

analysis of supply-side generation resources, (2) incentive measures included in the IRP Framework to encourage and facilitate IRP and DSM, (3) the corresponding consideration of "societal costs" (i.e., including externalities) and "total resource costs" (i.e., including costs to implement DSM) in addition to utility costs, and (4) provisions to facilitate public input into the process (including the establishment of IRP Advisory Groups).

The drivers of the resulting IRP plan ("IRP Plan") were the planning assumptions and forecasts, such as (1) the utility's capacity planning criteria, (2) sales and peak forecasts, (3) supply-side fuel cost forecasts, (4) DSM potential estimates, and (5) cost estimates for the supply-side and demand-side resources.

It was contemplated that an optimized master resource plan would be developed, along with an Implementation Plan (or "Action Plan") to acquire the identified resources. Independent Power Producer ("IPP") options were considered in implementing the adopted IRP Plan based on proposals submitted by the IPPs.

The energy planning and implementation landscapes have dramatically changed since 1992, and the proposed Clean Energy Scenario Planning ("CESP") Framework reflects these changes.

Today, the policy inputs into the planning process include, in addition to the three previously applicable inputs (which themselves have been modified significantly):

(1) Renewable Portfolio Standards ("RPS"), HRS § 269-91 et seq., as amended by Act 155 (2009), and as supplemented by decision and orders in Docket Nos. 2007-0008 and 2007-0416;

(2) Energy Efficiency Portfolio Standards ("EEPS"), Act 155 (2009);

(3) Net Energy Metering ("NEM"), HRS § 101 et seq., as supplemented by decision and orders in Docket No. 2006-0084;

(4) Feed-in Tariffs, as supplemented by decision and orders in Docket No. 2008-0273;

(5) Transfer of Energy Efficiency DSM Programs to Third-Party Administrator, HRS § 269-121 et seq., as required by decision and orders in Docket No. 05-0069, and as supplemented in Docket No. 2007-0323;

(6) PAYS Pilot, Act 240 (2006), as implemented by decision and orders in Docket No. 2006-0425;

(7) Green House Gas ("GHG") reduction requirements, Act 234 (2007); and

(8) Policies and tariffs encouraging Distributed Generation ("DG"), as implemented in Docket Nos. 03-0371 and 2006-0497.

Planning assumptions and forecasts are still relevant to the planning process, but it is now recognized that key drivers of the resources that may be acquired by electric utilities and their customers are subject to much more variation than was previously experienced. The experience with world oil prices is illustrative.

World oil prices rose from $30/barrel in November 2003 to a peak of $145/barrel in July 2008, before plunging as low as $30/barrel in December 2008 due to the U.S. and world financial crunch, and resulting recession. The Companies' rates followed a similar cycle, given their reliance on oil-fired generation, and power purchase contracts linked to oil prices. For Hawaiian Electric, residential energy charges peaked at 32.5 cents/kWh in September 2008, before falling to 18.1 cents/kWh in May 2009.

Oil prices, and resulting electricity prices, are not the only planning assumptions that are subject to substantial variation. The costs of renewable energy and energy efficiency resources are directly influenced by State and federal tax incentives. The American Wind Energy Association developed a summary of the historical impact of production tax credit expiration on the annual installation of wind capacity, which identified a 93% drop, a 73% drop, and a 77% drop of wind farm installations following the expiration of production tax credits at the end of 1999, 2001, and 2003, respectively.

Even load can vary substantially, due to changes in economic conditions, and future technological developments (e.g., electrification of segments of the transportation sector).

As a result, it is practical to develop scenarios that attempt to capture some of this potential variation, but the concept of a single, optimized master plan has proven to be unrealistic.

On the implementation side, the Commission has implemented competitive bidding for supply-side resources in Docket No. 03-0372, and has transferred administration of energy-efficiency DSM programs to a Third-Party Administrator. Thus, the outputs of the planning process have changed – from specific supply-side resources to be acquired by the utility (subject to displacement by IPP facilities) and DSM programs to be implemented by the utility – to the identification of blocks of resources with desired attributes to be acquired through competitive bidding, "set-asides" to be acquired through programs such as feed-in tariffs, load management resources to be implemented by the utility, and energy efficiency DSM resources to be delivered by the Third-Party Administrator. And at the end of the day, it is the utility that will have to

integrate all of these resources into a reliable power grid, and carry out contingency and parallel plans if third-parties fail to deliver committed resources.

What has not changed since 1992 is the utility's obligation to serve the electricity requirements of its customers, and the benefits of public input into the planning process. Thus, the proposed CESP Framework continues to recognize the importance of these considerations.

By Decision and Order No. 11523, filed on March 12, 1992, as amended by Decision and Order No. 11630, filed on May 22, 1992, in Docket No. 6617, the Commission established A Framework for Integrated Resource Planning ("IRP Framework"). On April 28, 2009, the Hawaiian Electric Companies, Kauai Island Utility Cooperative ("KIUC") and the Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs ("Consumer Advocate"), requested that the Commission open an investigatory docket to review and establish a CESP Framework that revised the previous IRP Framework, and proposes a planning process to develop generation and transmission resource plan options for multiple 20-year planning scenarios and a 5-year Action Plan based on the range of resource needs identified through the various scenarios analyzed.

On May 14, 2009, the Commission issued its *Order Initiating Investigation*, initiating an investigative proceeding to examine the proposed amendments to the IRP Framework, as set forth in the April 28, 2009 letter from the Hawaiian Electric Companies, KIUC, and the Consumer Advocate. The *Order Initiating Investigation* also set forth intervention deadlines and time periods by which a protective order and stipulated procedural order, as applicable, shall be filed.

The following entities were granted intervention status by the *Order Granting Intervention* filed on July 1, 2009 in this docket: the Department of Business Economic Development and Tourism ("DBEDT"), County of Hawaii, County of Maui, County of Kauai, Life of the Land ("LOL"), Haiku Design and Analysis ("HDA"), Hawaii Renewable Energy Alliance ("HREA"), Blue Planet Foundation ("Blue Planet"), Hawaii Solar Energy Association ("HSEA"), JW Marriott Ihilani Resort & Spa, Waikoloa Marriott Beach Resort & Spa, Maui Ocean Club, Wailea Marriott, and Marriott Hotel Services, Inc., on behalf of Kauai Marriott Resort & Beach Club (collectively "Marriotts")[1], and Forest City Hawaii Residential, Inc. ("Forest City") (collectively "Intervenors").

Pursuant to the *Order Granting Intervention*, on July 29, 2009, the Hawaiian Electric Companies, KIUC, the Consumer Advocate, and the Intervenors (collectively, "Parties") filed a Proposed Stipulated Procedural Order ("Proposed SPO") setting forth the issues, procedures and schedule to govern the proceedings of the docket. All Parties, with the exception of Life of the Land[2], stipulated to the Proposed SPO. On September 11, 2009, a revised stipulated procedural order was filed with the Commission for its consideration and approval. The revised stipulated procedural order clarified the position of LOL on the Proposed SPO, and made a minor modification to the procedural schedule. On September 23, 2009, the Commission approved the Stipulated Procedural Order ("SPO") with modifications to the Statement of the Issues in Section I; the Stipulated

[1] On August 17, 2009, Marriotts filed a letter to inform the Commission that the management of the Kauai Marriott Resort & Beach Club has changed from Marriott Hotels Services, Inc. to Essex House Condominium Corporation, a corporate affiliate of Marriott International, Inc.

[2] On July 29, 2009, Life of the Land (LOL) filed *Comments on Proposed Stipulated Order* stating LOL's support of the Proposed Stipulated Procedural Order with the caveat that for the instant docket, "the Commission limit the number of hard copies to one: the original to be filed with the Commission."

Procedural Schedule in Exhibit A; and the number of copies to be filed with the Commission, set forth in Section II.C.

The Commission modified the Statement of the Issues in the SPO to the following:

1. What are the objectives of CESP and how do they differ from the objectives of IRP?
2. What is the basis for each of the proposed changes to the IRP process, and are these changes reasonable and in the public interest?
3. Whether the proposed changes to the IRP process should include changes to reflect differences between electric cooperatives and investor owned utilities?
4. What should be the role of the state's public benefits fee administrator?

The approved SPO included the following revised procedural schedule:

	PROCEDURAL STEPS	DEADLINE
1.	Technical Session on Proposed CESP Framework	August 11, 2009
2.	Informal Proposed Modifications to the Proposed CESP Framework	August 28, 2009
3.	Technical Session on Informal Proposed Modifications to the Proposed CESP Framework	September 15, 2009
4.	Parties' Preliminary Statement of Position	October 2, 2009
5.	NRRI Comments	November 3, 2009
6.	Parties' Information Requests	November 10, 2009
7.	Parties' Response to NRRI Comments	November 20, 2009
8.	Parties' Response to Information Requests	November 25, 2009
9.	Parties' Final Statement of Position and Final Proposed Framework	December 21, 2009
10.	Prehearing Conference	Week of January 19, 2010
11.	Panel Hearing	Week of January 25, 2010
12.	Opening Briefs	Three weeks after the filing of transcripts
13.	Reply Briefs	Two weeks after the filing of transcripts

II. STATEMENT OF THE ISSUES

1. What are the objectives of CESP and how do they differ from the objectives of IRP?

The IRP Framework has been in place since 1992 and there has been no change to the IRP Framework since then. However, the current planning environment has changed over the past 17 years, and has drastically changed in the last few years. The current planning environment is more dynamic with even greater uncertainties than before: fuel prices are extremely volatile; the economy is in a depression; renewable energy technologies have matured with new and emerging technologies under rapid development; and policies are being developed to institute climate change. The objectives of IRP were focused on selecting a single IRP Plan or "Preferred Plan" based on the "lowest reasonable cost" with an appropriate level of DSM to compliment traditional central-station supply-side resources which may have been suitable in the 1990s but are not suitable under the current environment.

New statutes and laws that have been implemented since 1992 having significant impact on the utility's future planning include, but are not limited to, the following:

a. Framework for Competitive Bidding

In Decision and Order No. 23121 in Docket No. 03-0372, the Commission adopted the Framework for Competitive Bidding ("Competitive Bidding Framework") on December 8, 2006. As stated in Section II.A.3 of the framework, "Competitive Bidding, unless the Commission finds it to be unsuitable, is established as the required

mechanism for acquiring a future generation resource or block of resources . . . ."

The Competitive Bidding Framework also accounted for the integration of competitive bidding into the integrated resource planning ("IRP") process. The Competitive Bidding Framework discusses the general approach as culminating in an IRP developed by the utility that identifies a preferred resource plan including capacity, energy, timing, technologies, and other preferred attributes of future generation resources. The IRP will identify future generation resources for which the utility proposes to hold competitive bidding, will develop a Request for Proposal ("RFP") based on the resource attributes identified in the IRP, then solicit project proposals.

The RFP process will result in a market-based determination of project technology, location, and costs instead of a determination based on the defined project parameters used in the resource optimization modeling analyzed during an IRP process.

The sequence of conducting an IRP process, then a competitive bidding process, followed by the Commission's approval process, will necessarily lengthen the timeline for adding future generation resources to the utility system.

In order to prepare a bid in response to an RFP, participants in the competitive bidding process will be required to make certain assumptions

related to permitting, equipment, interconnection requirements, construction, etc.

This process will result in a certain time element and uncertainty in ultimate technical, operational, and other key project parameters between when project developers prepare and submit their bids and then finding out if their project has been selected. Time will also be required for any selected project to ultimately be approved by the Commission. This time element and uncertainty will result in more risk for project developers in deciding on making commitments in advance of receipt of all approvals.

The utility also bears greater risk and added costs with the competitive bidding process because of its obligation to serve its customers and the requirements to conduct self-build, parallel planning, and contingency planning activities during the competitive bidding process. There are higher risks associated with decisions that the utility will face such as when to stop its parallel planning efforts or when to execute its contingency plan.

b. Renewable Portfolio Standards

The utilities are required to comply with the RPS law (Act 155 signed into law on June 25, 2009) which established the minimum amount of renewable energy that needs to be included in the utility's plan through 2030. The utility's planning process must now focus on how best to comply with RPS targets rather than answer the question of "how much renewable energy is appropriate?"

The utility's planning process needs to consider the probability and likelihood of renewable energy generation contributions by a compliance year. Assumptions will need to be made about the probable date projects being developed could be integrated on the utility system and the probability of the project delivering a prescribed or forecasted amount of generation to contribute to the amount of renewable generation required for a compliance year.

c. Energy-Efficiency Portfolio Standards

The EEPS law is part of Act 155 (2009), which requires the Commission to establish energy-efficiency portfolio standards that will maximize cost-effective energy-efficiency programs and technologies designed to achieve 4,300 GWh of electricity use reductions by 2030.

d. Climate Change and GHG Regulations

Carbon emissions and climate change was not an energy issue when the IRP Framework was established in 1992. This changed with the Kyoto Conference in December 1997, where global climate change assumed international importance as a major energy issue. However, due to legislative uncertainties, it has been very difficult for U.S. regulated utilities and public utilities commissions to incorporate GHG regulation into their long-range planning processes. The uncertainties continue to present day but there are clear indications that State, Federal, and International regulations on GHG emissions will emerge in the near-term.

For Hawaii, concerns over GHG emissions were specifically recognized through the signing of Act 234 into law in 2007. Act 234 set up a process for returning State GHG emissions to 1990 levels by 2020. The implementation process of Act 234 is currently being considered by the State's Greenhouse Gas Emissions Reduction Task Force. Its recommendations will be considered at the next legislative session in early 2010. Hawaii was the second state in the U.S. to pass legislation on statewide emissions reduction.

At the federal level, Congress is actively considering a comprehensive climate change regulation. In July 2009, the House of Representatives passed the Waxman-Markey bill, which set-up a national cap-and-trade system for emissions permits. This ambitious system was designed to reduce CO_2 emissions by approximately 80% by 2050. The Senate is currently considering parallel legislation and is expected to act early in 2010.

The establishment of IRP in the early 1990s ushered in a new era of utility-sponsored energy efficiency programs that allowed customers an opportunity to reduce their electric bills through the installation of energy efficiency measures. However, after 13 years of utility administration, these energy efficiency programs were transferred to a third-party administrator on July 1, 2009.

In Decision and Order No. 23258, ("D&O 23258") issued on February 13, 2007 in Docket No. 05-0069, the Commission ruled that a non-utility Third-Party Administrator ("Public Benefits Fee administrator" or "PBF administrator") was

appropriate for design and implementation of energy efficiency programs in the Hawaiian Electric Companies' service territories. Further, the Commission stated in D&O 23258:

> The commission, through the RFP, will identify goals and incentives for the PBF administrator, consistent with the commission's determinations in this Decision and Order and the IRP Framework. Additionally, the RFP will specify the standards against which the PBF administrator will be evaluated and its performance measured.

This effectively took the responsibility of promoting, implementing, forecasting, monitoring, and managing the size and impacts of the energy efficiency programs away from the utilities and transferred them to the PBF administrator.

Since the establishment of the IRP Framework the Hawaii utilities have moved to the forefront of the nation and the world in experiencing the challenges of managing electrical grids with significant utility-scale and aggregated residential-scale renewable energy resource penetrations. Hawaii, as a state, is blessed with an abundance of renewable energy resource options ranging from wind, solar, geothermal, biomass, wave/ocean, and biofuel options. However, to optimally avail ourselves of these resources, the maturity, compatibility and availability of these resources also needs to be considered, as we transform our existing grid to meet the clean energy goals safely and reliably.

The existing utility systems have evolved over the decades to most economically serve load with a fleet of generators ranging from baseload units to fast starting units. Control systems, operational experience and planning tools have also evolved to operate and reliably manage these more traditional "dispatchable" units. Today, like other utilities in California, Texas and New York, the Companies are considering an abundance of "non-dispatchable" resources like wind and solar on their island grids. These "non-

dispatchable" resources require new information, new operational tools and learned-expertise in order to be optimally managed. As an example, the diurnal and seasonal nature of wind and solar resources requires a level of experience and historical record that currently is not factored into existing resource plans. HELCO and MECO are already contending with the challenges of reliably operating the system with existing wind energy penetrations close to 15% by day and as high as 35% by night, penetration levels that are non-trivial even on interconnected mainland grids. Both utilities have managed current levels and are amassing data that will be helpful to inform future direction and needs as penetration continues to increase and technology improves. As the Hawaiian Electric system also integrates significant levels of "non-dispatchable" resources, new tools and planning capabilities will be needed to inform the utility on how to plan and manage the evolving grid.

Emerging under programs like NEM, Feed-in Tariffs ("FIT") and the pending PV Host program currently under review by the Commission, these small, customer-sited generation resources in addition to new demand-side efficiency, conservation, and response resources can play a significant role in helping to reach clean energy targets, diversify customer choice and help manage intermittency effects on the grid. The characteristic performance features of the these resources (includes photovoltaic ("PV"), solar hot water, local energy storage) to provide generation to meet the customer demand and possibly provide some system support features including reliability, are currently being monitored by Hawaiian Electric but are also being assessed nationally as part of the U.S. Department of Energy Smart Grid initiatives. An interactive and smart grid of the future is being envisioned by many for the islands to be able to accommodate a more

diverse and abundant supply of new demand-side options and distributed generation alternatives, and to manage the intermittency of "non-dispatchable" renewable generation resources. The success of these transformational efforts will require innovative improvements and implementation of advance technologies such as Advanced Metering Infrastructure ("AMI") and other smart-grid enhancements, technological improvements to the utilities' Energy Management System, and communications and control infrastructure, high fidelity characterization of diverse resources, and a robust resource planning framework befitting emerging technologies.

To accommodate a much larger portfolio of renewable energy resources of different technologies, sizes, technical and operational characteristics, rapid technological changes and continued improvements to system control features, system-wide solutions down to local component and demand-side technologies and energy usage behavior changes need to be factored in. As such, the objectives of CESP must be flexible to account for the rapid change in regulations and statutes, technology, and timing of market drivers, while preserving the need to provide reliable power to customers.

2. What is the basis for each of the proposed changes to the IRP process, and are these changes reasonable and in the public interest?

The Companies' proposal to establish a CESP Framework based on revisions to the IRP Framework was developed given the current planning environment described above in response to issue 1. The uncertainties that the utilities currently face warrant a move towards a more dynamic planning process. The past IRP processes focused on "least cost planning", comparing demand-side resources against supply-side resources, and comparing fossil-fueled generation against renewable energy generation. The

signing of Act 155 into law shows the state's commitment to a clean energy future. There are legislatively enacted goals that the utilities (i.e., RPS and GHG emissions), and the Commission (i.e., EEPS), must achieve. The utility's planning process needs to focus on achieving the clean energy goals in the current dynamic environment. The utilities' proposed revisions to the IRP Framework represent an attempt to accomplish this under the CESP process.

The CESP process would focus on the development and evaluation of multiple 20-year resource planning scenarios instead of a single "preferred plan". Each CESP scenario would be developed using a set of planning assumptions. Examples of the kinds of assumptions that would form the basis for a scenario include load forecasts, fuel forecasts (fossil and biofuel), programmatic options, differing market penetrations for demand-side resources and customer-sited distributed generation, GHG regulations, etc. The assumptions would vary for the different CESP scenarios in order to facilitate planning analysis across a wide range of possible futures and uncertainties for achieving the clean energy goals. For each scenario, a 20-year resource plan will be developed based on the assumptions set for the scenario that considers, among other aspects, statutory and regulatory requirements, cost to customers, the achievement of desired levels of reliability, operational requirements and constraints, and risk of the plan not achieving these many objectives.

Instead of selecting only one CESP scenario to develop the 5-year Action Plan, the results of developing the multiple CESP scenarios and the associated 20-year plans for each scenario would be used to develop a single 5-year Action Plan. The Action Plan could include elements or themes from one or multiple CESP scenarios. Since the

proposal is for the utility to conduct a CESP process every three years and there is a greater level of uncertainty with longer-term assumptions and outcomes, the focus of the proposed CESP is on the near-term since the long-term initiatives would likely be changed in the following CESP process to better reflect the current environment at that time.

The Proposed CESP Framework was also updated to reflect the change in the implementation of the energy efficiency programs as discussed in Section II above. The Commission recognized that inputs from the third party administrator would be a necessity in any future system wide planning. In fact the Commission stated in Decision and Order No. 23258:

> Importantly, the PBF administrator will be required to actively participate in the IRP process. The PBF administrator, the HECO Companies and other stakeholders will determine the optimum mix of DSM and supply-side resources within the IRP process subject to commission approval. In determining this optimum mix, stakeholders will consider the PBF administrator's existing and planned Energy Efficiency programs in striving to meet RPS objectives, and set program goals and objectives accordingly.

Consequently, the third-party administrator must be an active participant in the utility's planning process and the Proposed CESP Framework reflects this. Input will be required from the third-party administrator, taking into account the intimate knowledge of its manpower and budget constraints. These inputs will form the basis for the levels of energy efficiency savings that can be achieved and therefore incorporated into the CESP scenarios. The utilities, through modeling software will then test the cost effectiveness of the energy and demand savings provided by the third-party administrator. The Commission will ultimately have the ability to adjust their goals and budgets based on the

results of the cost effectiveness analysis while also meeting the goal established by the EEPS.

The Competitive Bidding Framework has also been incorporated into the Proposed CESP Framework. Because implementing a competitive bidding process results in a market based determination of project technology, location and costs, it is unnecessary for the utility to consider "all" feasible supply-side resource options, as the utility will not know what resource will actually be selected as a result of the RFP. The CESP scenarios will use generic resource type data to help determine issues including but not limited to, the size, timing, location, and operational characteristics of the generation resource or block of generation resources. For example, a CESP scenario could give rise to a determination that a 100 MW firm generation resource is required in 2020 to meet capacity planning criteria with operational characteristics of a baseload unit. The modeling tool used to determine the operational characteristics of the resource will have been based on detailed unit data for a generic biofueled steam unit but that would not preclude any other type of baseload generation unit from providing a proposal in response to the RFP. Therefore, as a result of the RFP issued for competitive bidding, the future resource could be a biofueled steam unit, biomass unit, waste-to-energy unit, or geothermal unit. In addition, because the final location of the generation project built may be different from that identified in CESP in characteristics, size and location, different transmission requirements may result for the actual project compared to what may be modified in the CESP process and Action Plan. Detailed evaluation of all possible resources will not be required in the CESP process, since it is unknown what resource will actually be selected through the competitive bidding process.

The Hawaiian Electric Companies remain committed to having public participation in the proposed CESP process, as was required under the IRP Framework. For all of the past IRP processes, Advisory Groups were formed across a diverse range of members representing both public and private entities in the community. To encourage public participation, the Hawaiian Electric Companies have utilized different methods of incorporating input from the Advisory Group and public in the IRP process. For example, in Hawaiian Electric's IRP-3, Technical Committees were formed for each of the major elements of the planning process (Load Forecasting, Demand-Side, DG/CHP, Supply-Side, Integration) that was co-chaired by a member of the Advisory Group and the utility. Technical Committee meetings were open to the all members of the Advisory Group and public to solicit as much input into the details and technical analyses of the process. Another example is in the Hawaiian Electric and HELCO IRP-3 process where the Advisory Group developed a fuel price forecast separate from what the utility developed and the utility evaluated both fuel price forecasts in the analysis.

Some advisory group members have expressed in the past IRP processes that the utility should be bound to follow the advice of the advisory group. The utility maintains that planning for the <u>utility system</u> must be the decision of the <u>utility</u> since it is the <u>utility's responsibility</u> to comply with statutes and laws. Specifically, the utility has the responsibility and obligation to: (1) ensure that there is an adequate supply of generation, (2) provide reliable service, (3) comply with RPS law, and (4) comply with State and possibly federal GHG regulation. The Hawaiian Electric Companies have received and incorporated input from the advisory group and public in the past IRP processes to the extent <u>technically</u> possible and feasible. It is not expected that consensus could easily or

ever be reached amongst the various stakeholders, so trying to accomplish that would likely only prolong the planning process.

There have also been suggestions that the IRP process should be conducted by an independent third party and not the utility, that an independent third party should do the technical analysis for the utility, and that the utility's modeling software should be accessible for a third party to analyze and review. However, an independent third party would require vast technical knowledge in not only electric utility systems, but the unique parameters of Hawaii's non-interconnected island systems, for which there are not many comparable systems. Second, the independent third party would have to be familiar with the utilities' modeling software and data to understand what is being analyzed and much of the utilities' modeling software has been tailored over time to better model Hawaii's island systems.

Although it is possible for an independent third party to learn about the Companies' island utility grids and modeling software, it would take a lot of time and resources which in the end means a significant cost impact to customers. The Hawaiian Electric Companies believe that having an independent third party would place an unnecessary burden on its customers. The Hawaiian Electric Companies proposed CESP process continues to support public participation and transparency, and if the Hawaiian Electric Companies efforts are not sufficient, then there are also other opportunities for advisory group or public members to intervene in the docket and present their positions to the Commission.

The proposed CESP Framework includes provisions regarding the Commission's responsibilities in the CESP process. As proposed, the Commission's responsibility is to

"review and approve in whole or in part the utility's CESP as a reasonable course for meeting the energy needs of the utility's customers . . . ." and a decision to be issued within six months from the date that a CESP Action Plan is filed for review. If a decision is not issued within that period of time, the CESP Action Plan would be deemed "approved". It should be noted that approval of the CESP Action Plan would elevate the status of the preferred resource options in the Action Plan, such as energy-efficiency programs administered by the PBF administrator, demand response programs, third-party IPP projects, and utility resources, to give them a presumption of need in any subsequent siting proceeding.

This proposed amendment regarding "automatic approval" of a CESP Action Plan was developed due to a concern that plans need to be developed and approvals must be obtained in a manner that allows timely execution of initiatives to implement the Action Plan and ultimately ensure the completion of a proposed project. Timely review and approvals of resource plans are more critical than before because of the longer resource procurement and development cycle as a result of the Competitive Bidding Framework, greater permitting requirements for generation and transmission projects, and the more dynamic nature of electric utility planning due to more rapid changes in economic assumptions, new customer end-users and changes in usage behavior, development of new generation and T&D technologies, and other parameters that can have a significant impact on resource planning and the timing for new generation and transmission.

In addition, the current IRP Framework states that "The integrated resource plan and program implementation schedule approved by the commission shall govern all utility expenditures for capital projects, purchased power, and demand-side management

programs." IRP Framework, §III.D.5 This provision is also proposed to be amended to reflect references to the new CESP Framework and PBF administrator who will implement the energy efficiency programs.

During the development of the "automatic approval" provision in the proposed CESP Framework, the Hawaiian Electric Companies examined two alternatives: 1) the lack of a timely approval for the CESP Action Plan from the Commission, and 2) allowing the current IRP Framework to remain as is.

In the first alternative, lack of timely approval by the Commission of the CESP Action Plan may result in utility expenditures on projects that involve multiple years and high investment amounts that would go before the Commission much sooner in the project's schedule and be subject to the question of actual need (i.e., timing) for the project. For example, without the Commission's approval of the CESP Action Plan, the utility may not have a clear indication on the timing of issuing a RFP for needed generation or renewable resources in compliance with the Competitive Bidding Framework. In another instance, non-approval of the Action Plan may lead to uncertainty as to the required studies to complete for a project, as the need for the project itself would be questioned.

Under the second alternative, allowing the IRP Framework to remain in its current form may result in a delay of review and approval of an IRP Plan and Action Plan, and the subsequent ability of the utility to implement Action Plan items in a timely manner. The delayed timing of review and approval of past IRP Plans and Action Plans has raised concerns that assumptions used in the analyses of the IRP Plan become outdated. This delay places analyses under question and in turn, places Action Plan items in a state of

uncertainty. The delayed timing of review and approval of an Action Plan would also impact the timing of implementing required studies and obtaining subsequent regulatory approvals.

Since the above two alternatives would result in more risks and uncertainties for the utility, and possibly jeopardize the schedule for adding new renewable energy resources or demand response programs, the utility is proposing the approval process described in the Proposed CESP Framework.

In an effort to keep the Commission and public informed of changes to assumptions used in the CESP process, the Hawaiian Electric Companies have added that the Advisory Committees will continue to meet at least quarterly between full cycles of the CESP and that at minimum one evaluation report would be filed to update the Action Plan. If circumstances in the planning environment change, the Hawaiian Electric Companies would hold Advisory Committee meetings and file evaluation reports more frequently in response to those changes. The Hawaiian Electric Companies' Proposed CESP Framework sets the minimum requirements for meetings and evaluation reports.

The Hawaiian Electric Companies are also adding two new planning initiatives to the Proposed CESP Framework: Renewable Energy Zones ("REZ") and Locational Value Maps ("LVM"). The REZ is proposed to identify areas that contain significant renewable energy resource potential and identify the possible transmission infrastructure required to integrate the renewable energy resources in the REZ. An example of REZ was developed in Texas through a Senate Bill ("SB") to access its large wind potential known as Competitive Renewable Energy Zone ("CREZ") which has been a model for a number of national and regional efforts. "CREZ is a SB 20 mechanism meant to get

transmission out to prime wind energy areas before wind farms have even been developed. To ensure that sufficient transmission infrastructure exists to meet the state's goal for renewable energy SB 20 requires that CREZs be designated in the best areas in the state and that an electric transmission infrastructure be constructed to move renewable energy from those zones to markets where people use energy." (http://www.seco.cpa.state.tx.us/re_wind-transmission.htm)

Larger regional efforts including the Western Governors Association's Western Renewable Energy Zone ("WREZ") (http://www.westgov.org/wga/initiatives/wrez/) and the U.S. Department of Energy sponsored wind study efforts for the western US (Western Wind and Solar Integration - WWSI) and eastern US (Eastern Wind Integration and Transmission Study – OWITS) (www.nrel.gov), are also nationally funded initiatives to facilitate and inform regional planning efforts by utilities to integrate large amounts of wind, solar, geothermal and other resources across the United States. Hawaii, as a non-contiguous state, is not included in many of the national study efforts and must implement its own studies to investigate implementation of renewable resource options and transmission infrastructure needs.

In California, similar efforts were known as Strategic Value Analysis ("SVA") and the Intermittency Analysis Program ("IAP") and utilized a scenario based analysis approach to conceptualize future transmission infrastructure needed to access renewable energy resources and also to assess the impact of renewable energy resources on grid operations. Initiated as a state-wide resource study to meet the RPS, the SVA process identified RPS eligible renewable resources (wind, CSP solar, PV solar, biomass, MSW, geothermal, in-line hydro) throughout California and systematically focused on the key

in-state resource areas. The total MW and GWh potential in the state were then calculated. The follow-on IAP effort then applied scenario based study analysis to identify the locational value of developing the renewable resources at particular locations based on the value added to relieving congestion or other transmission constraint. Due to the California Solar Initiative which required 3000 MW of solar PV coming from new homes, distributed impact of residential solar on the system was also included as part of the IAP portfolio analysis. Results and findings concluded that though renewable resources can be thus identified and large scale system impacts can be identified, higher fidelity and detailed integration planning would need to be pursued by the respective utilities to deploy and achieve commercially viable projects to comply with RPS. As a result of SVA and IAP, the California Energy Commission funded follow-on work: (1) a utility-led initiative called the Regional Integration of Renewables ("RIR") to conduct "least-regrets" transmission planning focused on northern California to tap renewable resources across the larger Western Electricity Coordinating Council (http://www.pge.com/rir/), and (2) a stakeholder Renewable Energy Transmission Initiative ("RETI") (http://www.energy.ca.gov/reti/).

In all these initiatives, utility participation and buy-in was necessary to begin to chart the necessary transmission infrastructure, identify markets and forecast impacts/benefits for the various renewable energy and DSM projects. However the integration and interconnection details fall back to the respective and responsible utilities. The Locational Value planning process developed as part of the California IAP has helped to shape the development of "the lowest hanging fruit" for California utilities to tap in-state resources and local generating resources that alleviate pockets of distribution

and sub-transmission congestion. This Locational Value approach has also been adopted by states like New York with limited land for developing large renewable resources (vs. a REZ). Thus, the LVM planning concept provides a more detailed level of planning that integrates large REZ but also enable the maximization and siting of distributed resources via AMI, DSM and future smart grid community programs onto the grid.

Initial LVM that integrates longer-term customer load forecasts, coupled with distribution level planning and resource needs are being initiated under the Proposed CESP Framework. LVM efforts will provide more robust foresight to plan customer choice options under NEM, FIT and PV-Host and future DSM programs to encourage energy efficiency.

3. Whether the proposed changes to the IRP process should include changes to reflect differences between electric cooperatives and investor owned utilities?

The Hawaiian Electric Companies' Proposed CESP Framework that was filed on April 28, 2009 provided for waivers and exemptions from the framework for electric cooperatives based on discussions with KIUC at that time. As a party in this docket, KIUC may propose changes to reflect differences between electric cooperatives and investor owned utilities and the Hawaiian Electric Companies have no objections to KIUC proposing revisions as it pertains to electric cooperatives.

4. What should be the role of the state's public benefits fee administrator?

As explained under issues 1 and 2 above, the PBF administrator must be an active member throughout the proposed CESP process. The PBF administrator will be responsible for forecasting and developing the energy-efficiency programs under different market penetrations (i.e., to meet the EEPS) for use in the scenario analyses,

will be responsible for the expected savings and expenditures for energy-efficiency programs included in the Action Plan, and will also be responsible for providing information for any evaluation report that the Hawaiian Electric Companies must file. The PBF administrator will need to work collaboratively with the Hawaiian Electric Companies to address substantial differences between original forecasted estimates and actual achieved impacts and how it could impact the Hawaiian Electric Companies' Action Plan items.

III. OVERVIEW OF THE DOCKET PROCESS TO DATE

On August 11, 2009, a technical session was held at which the Hawaiian Electric Companies presented the proposed modifications to the IRP Framework, and the reasons and objectives for the modifications. Informal comments and questions were fielded from the Parties and clarifications were provided.

On August 28, 2009, the Parties circulated informal proposed modifications to the proposed IRP Framework filed on April 28, 2009. The informal proposed modifications offered by the Parties covered a variety of areas, including and not limited to: governing principles for IRP/CESP; modeling and analysis; presumption of need; the intervention of interested parties; the composition and role of the advisory committee; the role and responsibilities of the utilities, the Commission, Consumer Advocate, and PBF Administrator; cost recovery; locational value maps; and renewable energy zones.

On September 15, 2009, the Parties held a second technical session to discuss the informal proposed modifications circulated by the Parties on August 28, 2009. The discussion at the second technical session focused on the purpose, goals and uses of the IRP/CESP plan and action plans; identification of proposed guiding principles and

policies; and identification, explanation and clarification of the Parties informal proposed modifications. Specific topics discussed included, but were not limited to: public participation in the IRP/CESP process (i.e., having third-party analysis, opening the models to the public, understanding decision points in the analyses, and streamlining the process); cost recovery and incentives (i.e., new utility incentives, recovery is subject to Commission approval, and having mechanisms in place for cost recovery); the application of the proposed CESP Framework to other utilities such as KIUC and The Gas Company; and the ability to achieve timely approvals and matching the level of plan specificity to the level of approval.

IV. MODIFICATIONS TO THE PROPOSED CESP FRAMEWORK

Based on the discussions with the other parties in this docket process to date, the Hawaiian Electric Companies have incorporated the following changes to the proposed CESP Framework the Hawaiian Electric Companies filed on April 28, 2009 as follows:

1. Remove references to the HCEI Energy Agreement.
2. Incorporate the requirements of Act 155 (i.e., revised RPS and the newly established EEPS).
3. Clarify terminology on the CESP process, CESP scenarios, CESP scenario plans, and CESP Action Plan.

Attachment A shows red-line revisions discussed above to the proposed CESP Framework that the Hawaiian Electric Companies filed on April 28, 2009 as Attachment 1.

V. CONCLUSION

The Hawaiian Electric Companies' Preliminary Statement of Position reflects the Hawaiian Electric Companies' initial position on its proposed amendments to the IRP Framework filed on April 28, 2009. The Hawaiian Electric Companies will continue to work with the Parties to discuss proposed recommendations and issues to arrive at proposed amendments to the IRP Framework that are reasonable and in the public interest.

DATED: Honolulu, Hawaii, October 2, 2009.

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Attorneys for
HAWAIIAN ELECTRIC COMPANY, INC.,
HAWAII ELECTRIC LIGHT COMPANY, INC.
and MAUI ELECTRIC COMPANY, LIMITED

A PROPOSED FRAMEWORK FOR CLEAN ENERGY SCENARIO PLANNING

April 28, 2009

Hawaiian Electric Company, Inc.
Hawaii Electric Light Company, Inc.
Maui Electric Company, Ltd.
Division of Consumer Advocacy, Department of Commerce and Consumer Affairs

A PROPOSED FRAMEWORK FOR CLEAN ENERGY SCENARIO PLANNING
April 28, 2009

I. Definitions

Unless otherwise clear from the context, as used in this framework:

"Action Plan" means a program implementation schedule representing a strategy or timetable based on the scenarios analyzed for achieving the utility's clean energy objectives over the first five-year period of the 20-year planning horizon. The five-year period of the Action Plan is updated with the utility's evaluation report by dropping the preceding year from the schedule and including a new year.

"CHP" means combined heat and power system which is an electricity generating system whose waste heat is captured and used for heating and/or cooling applications.

"Clean energy" means electrical energy generated using renewable energy as a source or as electrical energy savings brought about by the use of renewable displacement or off-set technologies or energy efficiency technologies as defined as "renewable electrical energy" in HRS ch. 269, part V, section 269-91.

"Clean Energy Investment Zones" means areas shown on the Locational Value Map where there is a high value to incremental investment in distributed generation, demand response, energy efficiency, or CHP.

"Clean energy objectives" means moving Hawaii towards achieving a sustainable, clean, flexible, and economically vibrant energy future.

"Clean Energy Scenario Planning" or "CESP" means the process governed by this framework which is a mandatory guide for the utilities.

"Demand-side management" or "DSM" means programs designed to influence utility customer uses of energy to produce desired changes in demand. It includes conservation, energy efficiency, demand response, and renewable substitution.

"Distributed Generation" or "DG" means small-scale electric generating technologies installed at, or in close proximity to, the end-user's location.

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"Energy Agreement" means the October 2008 Energy Agreement Among the State of Hawaii, Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs, and the Hawaiian Electric Companies.

"Feed-in-Tariff" or "FIT" means a mechanism for the procurement of renewable resources in the HECO Companies' service territories. The general principles for the implementation of FIT will apply to photovoltaic, concentrated solar power, onshore wind, and in-line hydropower projects up to 5MW depending on technology and location. FIT rates will be based on the project cost and reasonable profit of a typical project with rates differentiated by technology or resource, size and interconnection costs.

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"Hawaii Revised Statutes" or "HRS" means current laws governing the State of Hawaii.

"Hawaii Clean Energy Initiative" or "HCEI" means the Memorandum of Understanding between the Governor of the State of Hawaii and the U.S. Department of Energy signed in January 2008, having the goal to decrease energy demand and accelerate use of renewable, indigenous energy resources in Hawaii in residential, building, industrial, utility, and transportation end-use sectors, so that efficiency and renewable energy resources will be sufficient to meet 70% of Hawaii's energy demand by 2030.

"Locational Value Map" or "LVM" means geographic areas of distribution system growth within the next 3-5 years where distributed resources and energy efficiency could be beneficial within the existing transmission and distribution system limits.

"Net Energy Metering" or "NEM" means measuring the difference between the electricity supplied through the electric grid and the electricity generated by an eligible customer-generator and fed back to the electric grid over a monthly billing period as defined in HRS ch. 269, part VI, section 269-101.

"Program" means resources and/or activities in the CESP scenarios and/or CESP Action Plan.

"Public Benefit Fee Administrator" or "PBF Administrator" means the third-party administrator of energy efficiency demand-side management programs as defined in HRS ch. 269, part VII, section 269-122.

"Renewable Energy Infrastructure Program" or "REIP" means a mechanism designed to timely recover costs incurred by the electric utility for the development of and investment in renewable energy infrastructure projects in order to facilitate third-party development of renewable energy resources and maintain current renewable energy resources. The REIP includes the Clean Energy Infrastructure Surcharge included in the Energy Agreement.

"Renewable Energy Zones" or "REZ" means identification of areas that contain significant renewable energy potential.

"Renewable Portfolio Standards" or "RPS" means the current law governing the State of Hawaii as defined in HRS ch. 269, part V, as modified by Act 155.

"Request for Proposal" or "RFP" means a written request for proposal issued by the electric utility to solicit bids from interested third-parties, and where applicable from the utility or its affiliate, to supply a future generation resource of a block of generation resources to the utility pursuant to the competitive bidding process.

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"Scenarios" means a range of possible futures reflecting possible energy-related policy choices and risks facing the utility and its customers.

"Supply-side programs" means programs designed to supply power. It includes renewable energy.

"Total resource cost" means the total cost composed of the utility costs and the costs by participants in the demand-side management programs.

"Utility costs" means the costs to the utility (including ratepayers), excluding costs incurred by participants in a demand-side management program.

II. Introduction

A. Goal of Clean Energy Scenario Planning

The goal of Clean Energy Scenario Planning ("CESP") is to develop CESP scenarios that will provide high level guidance on a long term (10-20 years) direction, which will then be utilized to develop a CESP Action Plan for near term initiatives (5 years), balancing how the utility will meet clean energy objectives, customers' expected energy needs, and protecting system reliability at reasonable costs under various scenarios.

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B. Governing Principles (Statements of Policy)

1. The development of the CESP scenarios and the CESP Action Plan are the responsibility of each utility.

2. CESP scenarios and the CESP Action Plan shall comport with state and county environmental, health, and safety laws and formally adopted state and county plans.

3. CESP scenarios and the CESP Action Plan shall be developed upon consideration and analyses of the costs, effectiveness, and benefits, and risks of appropriate, available, and feasible supply-side and demand-side options that meet Hawaii's Renewable Portfolio Standard Law, as defined in HRS ch. 269, part V, section 269-91 most recently modified by Act 155.

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4. CESP scenarios and the CESP Action Plan shall give consideration to the plans' impacts upon the utility's consumers, the environment, culture, community lifestyles, the State's economy, and society.

5. CESP scenarios and the CESP Action Plan shall take into consideration the need to preserve a stable electric grid and financially sound electric utility as vital components of our renewable energy future.

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6. Clean energy scenario planning shall be an open public process. Opportunities shall be provided for participation by the public and governmental agencies in the development and in Commission review of the CESP scenarios and CESP Action Plan.

7. The utility is entitled to recover all appropriate and reasonable clean energy scenario planning and implementation costs.

8. The clean energy scenario planning process shall be focused on planning scenario analyses that provides flexibility across a wide range of potential futures and uncertainties that meet Hawaii's Renewable Portfolio Standard Law, as defined in HRS ch. 269, part V, section 269-91 most recently modified by Act 155.

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C. Utility's Responsibility

1. Each utility is responsible for developing a reasonable number of CESP scenarios for meeting the energy needs of its customers to reflect a range of possible energy-related policy choices and risks facing the State, its utilities, and citizens. The CESP scenarios will be evaluated to help formulate the CESP Action Plan, covering a 5-year implementation period.

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2. The utility shall prepare and submit to the Commission a CESP filing which will include the CESP scenarios and CESP Action Plan and seek Commission approval at the time or times specified in this framework the utility's CESP Action Plan.

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3. The utility shall execute the Commission approved CESP Action Plan in accordance with the CESP Framework. As part of this execution, the utility shall file for Commission review and approval individual applications for programs or elements of the CESP Action Plan that requires specific Commission approval.

4. In its development of the CESP scenarios and CESP Action Plan, the utility shall comply with State initiatives and Commission proceedings that consider such issues, but not limited to: 1) Competitive Bidding for future generation; 2) State Renewable Energy Portfolio Standards; 3) Energy Efficiency; 4) Renewable Energy Infrastructure Programs; 5) Distributed Generation; 6) Net Energy Metering; 7) Feed-in Tariffs; 8) Advanced Metering Infrastructure ("AMI"); 9) Energy Efficiency Portfolio Standards ("EEPS"); and 10) Greenhouse Gas "(GHG") initiatives.

D. Commission's Responsibility

1. The Commission's responsibility, in general, is to determine whether the utility's CESP scenarios and CESP Action Plan represents a reasonable course for meeting the energy needs of the utility's customers, is in the public interest, is consistent with this Clean Energy Scenario Planning Framework, and provides strategic guidance for future utility planning to meet Hawaii's Renewable Portfolio Standard Law as defined in HRS ch. 269, part V, section 269-91 most recently modified by Act 155.

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2. The Commission will review and approve in whole or in part the utility's CESP filing as a reasonable course for meeting the energy needs of the utility's customers, is in the public interest, and is consistent with this Clean Energy Scenario Planning Framework. The Commission will review the utility's CESP filing and issue an order approving or denying the CESP Action Plan within six (6) months of the filing. If the Commission does not issue a decision within the six month period, the CESP Action Plan is automatically deemed "approved". Approval should elevate the status of the preferred resources identified in the CESP Action Plan, including DSM programs administered by the Public Benefit Fee Administrator, third-party Independent Power Producer ("IPP") projects, and utility resources, to give them a presumption of need in any subsequent siting proceeding. If the Commission rejects all or parts of the CESP filed, there should be an explanation for non-approval and the implications of that non-approval on the utility's asset investment and strategic choices for the upcoming three-year period.

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3. The Commission acknowledges that the purpose of the CESP process is to provide strategic guidance for future utility planning to achieve Hawaii's clean energy future, and that its review and any approval given to the CESP process will apply only to high level planning issues. Thus, the utility will file for Commission review and approval individual applications for programs or elements of the CESP Action Plan that requires specific Commission approval. The utility may file such applications before the Commission issues a final decision approving the CESP Action Plan and the Commission may review these individual applications for programs in parallel with the review of the CESP Action Plan.

E. Consumer Advocate's Responsibility

1. The Director of Commerce and Consumer Affairs, as the Consumer Advocate and through the Division of Consumer Advocacy, has the statutory responsibility to represent, protect, and advance the interest of consumers of utility services. The Consumer Advocate, therefore, has the duty to ensure that the utility's CESP scenarios and CESP Action Plan promotes the interest of utility consumers.

2. The Consumer Advocate shall be a party to each utility's clean energy scenario planning docket and a member of any and all advisory committees established by the utility in the development of its CESP scenarios and CESP Action Plan. The

Consumer Advocate shall also participate in all public hearings and other sessions held in furtherance of the utility's efforts in clean energy scenario planning.

F. Public Benefit Fee ("PBF") Administrator's Responsibility

1. The PBF Administrator's responsibility, in general, is to administer all energy efficiency programs in accordance with Public Benefits Fee HRS ch. 269, part VII and Docket No. 2007-0323.

2. The PBF Administrator shall be a party to each utility's clean energy scenario planning docket and a member of any and all advisory committees established by the utility in the development of its CESP scenarios and CESP Action Plan. The PBF Administrator shall also participate in all public hearings and other sessions held in furtherance of the utility's efforts in clean energy scenario planning.

III. The Planning Context

A. Major Steps

There are three major steps in the clean energy scenario planning process: planning, programming, and implementation.

1. Planning is that process in which the utility's needs are identified; the assumptions, costs, risks, and uncertainties are clarified; Locational Value Maps are developed; and resource and program choices are subjected to scenario analyses to reflect a range of the possible energy-related policy choices and risks facing the utility systems and citizens. The product of this process is the utility's CESP scenarios. The planning horizon for the utility CESP is 20 years. Unless otherwise ordered by the Commission, the 20-year period begins January 1 following the completion of the CESP process.

2. Programming is that process by which the utility's CESP scenarios are evaluated and programs or elements from one or more scenarios are scheduled for implementation over a five-year period. In this process, a determination is made as to the order in which the selected program options are to be implemented; the phases or steps in which each program is to be implemented; the expected target group and the annual size of the target group or annual level of penetration of demand-side management programs; the expected annual supply-side capacity additions and the identification of the resource procurement method; transmission system additions; and the annual expenditures required to be made by the utility to support implementation of the programs. The result of this process is a program implementation schedule or CESP Action Plan. The CESP Action Plan represents a strategy or timetable for program implementation.

3. Implementation is that process by which the resource program options to be implemented are acquired and instituted in accordance with the utility's CESP Action Plan.

B. The Planning Cycle

1. Each utility shall conduct its initial CESP process for submittal to the Commission by the following dates:

   a. Hawaiian Electric Company, Inc.: 18 months after issuance of D&O for this framework.

   b. Hawaii Electric Light Company, Inc.: 18 months after issuance of D&O for this framework.

   c. Maui Electric Company, Limited: 18 months after issuance of D&O for this framework.

   d. Kauai Island Utility Cooperative: To be determined.

   Utilities that are affiliated shall conduct their clean energy scenario planning in coordination with each other or in parallel since the clean energy scenario plan for one island utility may affect the choices and actions of another island utility.

2. Each utility shall conduct a major review of its CESP every three years. In such a review, a new 20-year time horizon shall be adopted, the planning process repeated, and the utility's resource programs re-analyzed fully. A major review shall be conducted by each utility, resulting in the submission to the Commission of new CESP scenarios and CESP Action Plan in the same month every three years from the filing of the initial CESP.

C. The Docket

1. Each planning cycle for a utility will commence with the issuance of an order by the Commission opening a docket for CESP.

2. The docket will be maintained throughout the planning cycle for the filing of documents, the resolution of procedural disputes, and other purposes related to the utility's CESP scenarios and CESP Action Plan.

3. Within 30 days after the opening of the docket, the utility shall prepare, in consultation with the Consumer Advocate, and file with the Commission a schedule that it intends to follow in the development of its CESP scenarios and CESP Action

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Plan. The schedule may be amended upon the formation of an advisory committee or committees and thereafter as appropriate.

4. The utility shall complete its CESP scenarios and CESP Action Plan within one year of the commencement of the planning cycle.

D. Submissions to the Commission

1. The utility shall submit its CESP, which will include the CESP scenarios and CESP Action Plan as follows.

a. The utility shall include in its CESP a detailed description of:

(i) The factors and assumptions underlying the development of each scenario, which includes but is not limited to: (a) the generation and transmission needs identified; (b) the proposed procurement method for generation resources identified in the plans; (c) the forecasts made; (d) the assumptions underlying the forecasts; (e) the assumptions and the basis of the assumptions underlying the plans; (f) the risks and uncertainties associated with the plans; (g) the total resource cost of the plans; (h) the expected impact of the plans on demand; and (i) estimates of potential impact of the plans on customer rates and bills.

(ii) Locational Value Maps identifying geographic areas of distribution system growth.

(iii) Renewable Energy Zones identifying potential areas of renewable energy development.

b. A reasonable number of CESP scenarios shall be analyzed and developed to reflect a range of possible energy-related policy choices and risks facing the utility systems and citizens. These scenarios may feature different policy backdrops, such as major increases or decreases in oil prices, policy changes such as federal or international carbon regulation or the adoption of plug-in hybrid electric vehicles/electric vehicles, as well as different resource policies such as higher levels of energy efficiency, demand response, and renewable substitution (e.g., solar water heating and seawater-cooled air conditioning). In addition, these scenarios may feature different economic and financial backdrops, such as ranges of future State economic health and ranges of future financial market conditions. The CESP scenarios will guide the utility to develop its CESP Action Plan.

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c. The submissions should be simple and clearly written and, to the extent possible, in non-technical language. Charts, graphs, and other visual devices

may be utilized to aid in understanding its plan and the analyses made by the utility. The utility shall provide an executive summary of the plan and of the analyses and appropriately index its submissions.

2. The utility shall submit its CESP Action Plan as follows.

   a. The CESP Action Plan will be developed based on the CESP scenarios analyzed. The CESP Action Plan may contain elements or programs from one or more of the CESP scenarios. The evaluation of which elements to be included in the CESP Action Plan should be based on factors including but not limited to: (i) achieving state clean energy objectives; (ii) timing flexibility; and (iii) preserving a stable electric grid for the state's renewable energy future.

   b. Information pertaining to energy efficiency demand-side management programs shall be provided to the utility from the PBF Administrator. The PBF Administrator shall include its projection of the energy and demand savings resulting from its energy efficiency programs and the expenditures required to be made to support the implementation of the energy efficiency programs.

   c. The utility shall include its projection of the energy and demand savings resulting from its demand response programs and any pilot DSM programs and the expenditures required to be made to support the implementation of these programs.

   d. The utility shall include the expected supply-side capacity additions, the proposed procurement method for the supply-side additions (including the use of exemption or waiver from Competitive Bidding), and the cost required to be made by the utility to support the implementation of the supply-side resource options.

   e. The utility shall include the expected transmission system additions and the estimated cost required to be made by the utility to support the implementation of the transmission additions.

   f. The utility shall include identification of smart grid improvements and upgrades to the utility system and the estimated cost required to be made by the utility to support the implementation of any smart grid improvements.

   g. The utility shall file with its CESP Action Plan a full description of the analysis upon which the schedule is based.

   h. The CESP Action Plan shall also be accompanied by the utility's estimated costs and proposals for cost recovery, as appropriate.

i. The CESP Action Plan shall include any effort related to the implementation of the Framework for Competitive Bidding, including, but not limited to, the development of the request for proposal, parallel planning, and contingency planning.

3. The utility shall submit an evaluation report as follows.

a. The utility shall submit a minimum of one evaluation report between CESP cycles, preferably in the middle of the three years.

b. The utility shall include in its evaluation, an assessment of the continuing validity of the forecasts and assumptions upon which its CESP Action Plan was fashioned, and update these assumptions as appropriate. Information pertaining to energy efficiency demand-side management programs shall be provided to the utility from the PBF Administrator.

c. The utility and the PBF Administrator shall also include for each demand response and energy efficiency program respectively included in the CESP Action Plan for the immediately preceding year a comparison of:

(1) The expenditures anticipated to be made and the expenditures actually made.

(2) The level of achievement of energy and demand impacts anticipated and the level actually attained.

d. The utility and the PBF Administrator shall provide an assessment of all substantial differences between original estimates and actual experience and of what the actual experience portends for the future. The PBF Administrator shall provide relevant information to the utility for incorporation into its evaluation report.

e. As part of its evaluation, the utility shall submit a revised CESP Action Plan that drops the immediately preceding year(s) from the schedule of the CESP Action Plan and include a corresponding new year(s). The CESP Action Plan must always reflect a five-year time span.

4. The utility may at any time, as a result of its evaluation or change in conditions, circumstances, or assumptions, revise or amend its CESP Action Plan, including LVMs and REZ. All revisions and amendments must conform to the appropriate requirements of this part D.

5. The utility may, at any time, request a waiver from the Commission from any or all of the provisions of the CESP Framework. A utility seeking such a waiver shall have the burden of showing, to the Commission's satisfaction, that compliance with the CESP Framework, or any of its provisions, is impossible, impractical, inappropriate or economically infeasible. Any waiver that a utility may seek should be sought at the earliest feasible and possible moment, at least not later than the moment it becomes apparent that the utility does not intend to comply with a particular CESP Framework requirement.

6. Notwithstanding the above, the Commission, upon a showing or submission that a utility has an ownership structure in which there is no substantial difference in economic interests between its owners and its customers[1], may waive or exempt that utility from any or all of the provisions of the CESP Framework.

7. The CESP Action Plan approved by the Commission shall provide guidance for all utility expenditures for capital projects, purchased power, and demand response programs, and the PBF Administrator's expenditure for energy efficiency programs. Notwithstanding approval of the CESP Action Plan: (a) an expenditure for any capital project in excess of $2,500,000, excluding customer contributions, shall be submitted to the Commission for review as provided in paragraph 2.3. g. 2 of General Order No.7 (as amended by Decision and Order No. 21002, filed May 27, 2004 in Docket No. 03-0257); and (b) no obligation under any purchased power contract shall be undertaken and no expenditure for any specific demand-side management program included in the CESP Action Plan shall be made without prior Commission approval of the purchased power contract or demand-side management program. Projects and programs do not have to be included in the approved CESP Action Plan to be consistent with the CESP. Specific capital expenditures projects may not be identified or discussed in the CESP process because they are generally described as generic projects. All power purchases from qualifying facilities and independent power producers shall be subject to statute and Commission rules and also may not be identified or specifically discussed in the CESP because proposals may be received at unforeseen times. Other types of projects, such as distribution projects, generally will not be analyzed in the CESP process but the distribution planning process is coordinated with the CESP.

8. The CESP scenarios and CESP Action Plan resulting from this planning framework is not fixed and unchanging. The CESP scenarios and CESP Action Plan shall be flexible enough to account for changes in planning assumptions and forecasts. This will allow for major decisions regarding the implementation of program options (both supply-side and demand-side resources) to be made incrementally, based on the best available information at the time decisions must be made. The CESP scenario

[1] Such as a member-owned cooperative.

analyses shall identify what information is critical to the decision making process, and also identify when the strategic decisions need to be made.

E. Public Participation

To encourage public participation in each utility's clean energy scenario planning process, opportunities for such participation shall be provided through advisory committees to the utility, public hearings, and interventions in formal proceedings before the Commission.

1. Advisory Committees

a. The utility shall organize in each county in which the utility provides service or conducts utility business a group or groups of representatives of public and private entities to provide input to the utility and the PBF Administrator in the development of its CESP. A separate advisory committee may be formed for each stage of the planning process, as appropriate. The utility shall chair each advisory committee.

b. The public and private entities includable in an advisory committee are those that represent interests that are affected by the utility's CESP scenarios and that can provide significant perspective or useful expertise in the development of the scenarios. These entities include state and county agencies and environmental, cultural, business, and community interest groups. An advisory committee should be representative of as broad a spectrum of interests as possible, subject to the limitation that the interests represented should not be so numerous as to make deliberations as a group unwieldy and to allow for the timely completion and filing of a CESP.

c. The utility shall hold meetings with the advisory committee during key phases of the process with a minimum quarterly participation to the extent meaningful and practical. The PBF Administrator shall attend meetings to support their forecast of energy efficiency programs.

Deleted: [From HECO/HELCO/MECO IRP-3 Stipulations and HELCO/MECO Orders approving IRP-3]

d. The utility shall consider the input of each advisory committee; but the utility is not bound to follow the advice of any advisory committee.

e. All data reasonably necessary for an advisory committee to participate in the utility's clean energy scenario planning process shall be provided by the utility, subject to the need to protect the confidentiality of customer-specific and proprietary information.

f. The use by the advisory committees of the collaborative process is encouraged to arrive at a consensus on issues.

g. All reasonable out-of-pocket costs incurred by participants in advisory committees (other than governmental agencies) shall be paid for by the utility, subject to recovery as part of the utility's cost of clean energy scenario planning.

2. Public hearings

a. The utility is encouraged to conduct public meetings or provide public forums at the various, discrete phases of the planning process for the purpose of securing the input of those members of the public who are not represented by entities constituting advisory committees.

b. Upon the filing of requests for approval of a CESP Action Plan, the Commission may, and it shall where required by statute, conduct public hearings for the purpose of securing public input on the utility's proposal. The Commission may also conduct such informal public meetings as it deems advisable.

3. Intervention

a. Upon the filing of its CESP, the utility shall cause to be published in a newspaper of general circulation in the State a notice informing the general public that the utility has filed its proposed CESP Action Plan with the Commission for the Commission's approval.

b. To encourage public awareness of the filing of the CESP, a copy of the CESP Action Plan and the supporting analysis shall be available for public review at the Commission's office and at the office of the Commission's representative in the county serviced by the utility. The utilities shall provide copies of these documents online on its website. Each utility shall note the availability of the documents for public review at these locations in its published notice. The utility shall make copies of the executive summary of the plan and the analysis available to the general public at no cost, except the cost of duplication.

c. Applications to intervene or to participate without intervention in any proceeding in which a utility seeks Commission approval of its CESP Action Plan are subject to the rules prescribed in Hawaii Administrative Rules, Chapter 6-61 (Rules of Practice and Procedure before the Public Utilities Commission); except that such applications may be filed with the Commission not later than 20 days after the publication by the utility of a notice informing the general public of the filing of the utility's application for Commission approval of its CESP Action Plan, notwithstanding the opening of the docket before such publication.

d. A person's status as an intervenor or participant shall continue through the life of the docket, unless the person voluntarily withdraws or is dismissed as an intervenor or participant by the Commission for cause.

4. Intervenor funding

a. Upon the issuance of the Commission's final order on a utility's CESP Action Plan or any amendment to the CESP Action Plan, the Commission may grant an intervenor or participant (other than a governmental agency, a for-profit entity, and an association of for-profit entities) recovery of all or part of the intervenor's or participant's direct out-of-pocket costs reasonably and necessarily incurred in intervention or participation. Any recovery and the amount of such recovery are in the sole discretion of the Commission. All intervenors and participants (who plan to seek intervenor funding) must file a budget with the Commission within 30 days after intervention is granted, setting forth:

(1) the estimated cost of intervention or participation;

(2) the level of funding expected to be funded from other sources; and

(3) the net amount expected to be recovered from utility ratepayers.

b. To be eligible for such recovery:

(1) The intervenor or participant must show a need for financial assistance;

(2) The intervenor or participant must demonstrate that it has made reasonable efforts to secure funding elsewhere, without success;

(3) The intervenor or participant must maintain accurate and meaningful books of account on the expenditures incurred; and

(4) The Commission must find that the intervenor or participant made a substantial contribution in assisting the Commission in arriving at its decision.

c. The intervenor's or participant's books of account are subject to audit, and the Commission may impose other requirements in any specific case.

d. Such allowance may be made only upon the application of the intervenor or participant within 20 days after the issuance of the Commission's final order, together with justification and documented proof of the costs incurred.

e. The costs of intervenor funding shall be paid for by the utility, subject to recovery as part of its costs of clean energy scenario planning.

F. Cost Recovery and Incentives

1. The utility is entitled to recover its clean energy scenario planning and implementation costs that are reasonably incurred, including the costs of planning and implementing pilot and full-scale utility demand-side management programs.

   a. The cost recovery may be had through the following mechanisms:

      (1) Base rate recovery--the inclusion of costs in the utility's base rate during each rate case. The utility shall record costs associated with the clean energy scenario planning in separate accounts to allow review of the actual costs incurred to the forecasted costs presented in each rate case.

      (2) Ratebasing--the inclusion of costs that are capital in character (i.e., expenditures considered to produce long-term savings or benefits, such as appliance rebates, loans, etc.), with accumulated AFUDC, in the utility's rate base at its next rate case. The costs are to be amortized over a period set by the Commission.

      (3) Escrow accounting--the accumulation, with interest, of costs, not capital in character, incurred between rate cases and not otherwise recovered through the utility's base rates, adjustment clause, or rate base, in a deferred account, to be amortized over a period set by the Commission.

   b. The Commission will determine the appropriate mechanism for the recovery of costs associated with demand-side management programs when specific demand-side management programs are submitted for Commission approval. Cost recovery for other CESP programs generally will be addressed in each utility's rate case.

2. Under appropriate circumstances, the Commission may provide the PBF Administrator with incentives to encourage participation in and promotion of full-scale energy efficiency programs.

   a. The incentives may take any form approved by the Commission. Among the possible forms are:

      (1) Granting the PBF Administrator a percentage share of the gross or net benefits attributable to energy efficiency programs (shared savings).

(2) Granting the PBF Administrator a percentage of certain specific expenditures it makes in energy efficiency programs (mark-up).

b. The Commission will determine whether the PBF Administrator will be provided with incentives and the form of such incentives, if any, when specific energy efficiency programs are submitted for approval. The PBF Administrator may propose incentive forms for a particular program, based on the particular attributes of the program and the results to be attained.

c. The Commission may terminate any and all incentives whenever circumstances or conditions warrant such termination.

IV. Planning Considerations

A. Energy and Demand Forecasts

1. The utility shall develop forecasts of the amount of energy consumers will need and the expected annual peak demand over the planning horizon. It shall develop load forecasts for a reasonable number of scenarios that are developed as necessary or appropriate in the development of its CESP scenarios. The utility may retain expert consultants to assist in the development of an economic outlook and for other specialized and technical needs related to this purpose.

2. The utilities may initiate various research programs to obtain detailed energy usage information about Hawaii energy customers so this information can be used to develop energy efficiency program designs and forecasts for future energy planning efforts.

3. To the extent practical, the utility should provide load by geographic location on its system.

B. Fuel Forecasts

1. The utility shall develop forecasts of the cost of fuel over the planning horizon. It shall develop fuel forecasts for a reasonable number of scenarios that are developed as necessary or appropriate in the development of its CESP scenarios. The utility may retain expert consultants to assist in the development of the fuel forecasts and for other specialized and technical needs related to this purpose.

C. Demand-Side Management Forecasts

1. Energy Efficiency – The PBF Administrator shall administer all energy efficiency programs in accordance with Public Benefits Fee HRS ch. 269, part VII and Docket

No. 2007-0323. The utilities shall support and participate in the PBF Administrator's implementation of the energy efficiency programs.

a. The PBF Administrator, utilities, and stakeholders, such as the advisory committee, shall work together in a collaborative process to design effective, high-impact energy efficiency programs that will be implemented in the Action Plan.

b. The PBF Administrator shall lead, in collaboration with the utility and the State, new studies and forecasts to determine the technical and economic potential for a broad variety of energy efficiency measures within Hawaii.

2. Demand Response – The utility shall be responsible for the administration of demand response and load management programs because of the need to monitor electrical system status while deciding when and to what degree to invoke the demand reductions available through demand response programs. Third-party demand response and load curtailment aggregators should be allowed to support and participate in the utilities' implementation of the demand response programs.

a. Program costs for existing load management and any new pilots and full-scale demand response programs shall be recovered through the appropriate cost recovery mechanism.

b. The utility shall lead, in collaboration with the PBF Administrator and the State, new studies and forecasts to determine the technical and economic potential for a broad variety of demand response measures within Hawaii.

D. Distributed Generation Forecast

1. The utility shall develop a forecast of the amount of distributed generation that could be installed by utility customers, third parties, or the utility over the planning horizon. The distributed generation resources considered in the forecast shall include, but not be limited to, the following:

a. Biofueled and fossil fueled generating resources;

b. Combined heat and power resources;

c. Photovoltaic resources;

d. Small wind and hydro resources; and

e. Other small renewable energy resources as defined by HRS §269-91 of the State's RPS.

2. The distributed generation forecast shall include reexamination of the following:

   a. NEM limits in accordance with Docket No. 2006-0084; and

   b. FIT provisions in accordance with Docket No. 2008-0273.

E. Resource Options

1. In the development of its CESP scenarios, the utility shall consider supply-side and demand-side resource options appropriate to Hawaii and available within the years encompassed by the clean energy scenario planning horizon to meet the stated governing principles and planning context.

2. The utility shall consider among the options the supply-side and demand-side resources or mixes of options currently in use, promoted, planned, or programmed for implementation by the utility. Supply-side and demand-side resource options include those resources that are or may be supplied by persons other than the utility.

3. The utility shall integrate the Competitive Bidding Framework, Docket No. 03-0372. The CESP scenarios and CESP Action Plan shall identify those resources for which the utility proposes to acquire through competitive bidding, those resources that may be exempt from competitive bidding, and those resources for which the utility will need to seek waivers from competitive bidding, and shall include an explanation of the facts supporting waivers.

   Deleted: [Framework for Competitive Bidding section II.C.4.a]

   a. The CESP scenarios and CESP Action Plan shall specify the proposed scope of the Request for Proposal for any specific generation resource or block of generation resources that the CESP states will be subject to competitive bidding, including but not limited to the size, timing, and operational characteristics of the generation resource or block of generation resources.

   Deleted: [Framework for Competitive Bidding section II.B.1]

   b. The utility is unable to predict what type of resource and associated costs will be selected as an outcome of implementing the competitive bidding framework. For the purposes of developing the CESP scenarios, the utility may use generic resource data (i.e., biofueled combustion turbine, wind, PV) available for determining the size, timing, and operational characteristics of future resources. The utility shall provide all resource data used in the development of the CESP scenarios.

4. The costs and benefits shall, to the extent possible and feasible, be (a) quantified and (b) expressed in dollar terms. When it is neither possible nor feasible to quantify any cost or benefit, such cost or benefit shall be qualitatively measured. The methodology used in quantifying or in qualitatively stating costs and benefits shall be detailed.

F. Locational Value Maps

Deleted: [Energy Agreement Initiative No. 33, subpart i, page 39]

1. The utility shall identify general geographic areas of distribution system growth within the next 3-5 years where distributed resources and energy efficiency could be beneficial within the existing transmission and distribution system limits.

2. The utility shall identify general geographic areas rather than individual circuits to maximize benefits and incorporate back-up system needs.

3. The information from the Locational Value Maps shall be provided to parties such as the PBF Administrator so that energy efficiency DSM can be focused into geographic areas that would most benefit from energy efficiency DSM programs.

4. The utility should use the Locational Value Map to identify Clean Energy Investment Zones. The utility should publicize the existence of these zones in conjunction with the utility's education efforts following the completion of the CESP.

Deleted: [Energy Agreement Initiative No. 33, subpart j, page 40]

G. Renewable Energy Zones

Deleted: [Energy Agreement Initiative No. 33, subpart f, page 39]

1. The utility shall identify Renewable Energy Zones where areas of its service territory contain significant renewable resource potential. The CESP shall identify possible infrastructure requirements needed to interconnect the utility's grid to the REZ and operationally integrate renewable resources that may be developed in the REZ with the utility's system.

H. Assumptions; Risks; Uncertainties

1. The utility shall identify the assumptions underlying any forecast, resource option, the cost or benefit of any option or any analysis performed.

2. The utility shall also identify the risks and uncertainties associated with each forecast and resource option.

3. The utility shall further identify any technological limitations, infrastructural constraints, legal and governmental policy requirements, and other constraints that impact on any option or the utility's analysis.

I. Models

1. The utility may utilize any reasonable model or models in comparing resource options and otherwise in analyzing the relative values of the various options or combinations of options.

2. Each model used must be fully described and documented.

J. Analyses

1. The CESP scenarios should focus on higher level planning using a portfolio of energy resources/types rather than identifying specific details on individual resources in the plan.

Deleted: [Energy Agreement Initiative No. 33, subpart a, page 38]

2. The utility shall review the CESP scenarios to look for common themes, assets and strategies that demonstrate robust value to balance costs and risks across many of the scenarios evaluated. Resources and strategies that provide the greatest value and flexibility across a wide range of potential futures and uncertainties shall be identified.

Deleted: [Energy Agreement Initiative No. 33, subpart l, page 40]

3. The CESP scenarios shall identify the preferred energy contributions from various resources, taking into account the differing renewable energy impact, emissions, fossil fuel usage and cost (utility and total resource cost perspective) into consideration. All existing contractual and forward looking operational requirements and constraints on the utility grid shall be factored into the analysis.

Deleted: [Energy Agreement Initiative No. 33, subpart c, second paragraph, page 38]

4. The utility shall compare the CESP scenarios on the present value basis. For this purpose, the utility shall discount the estimated annual costs (and benefits, as appropriate) at an appropriate rate. The utility shall fully explain the rationale for its choice of the discount rate.

5. The CESP scenarios shall be supported by quantitative and qualitative analyses to the extent reasonably possible and feasible.

Deleted: [Energy Agreement Initiative No. 33, subpart c, first paragraph, page 38]

6. Technical analyses shall be performed to determine the extent to which renewable resources with certain types of characteristics (e.g., variable, as-available resources, or fixed dispatched resources) can be integrated into the utility system grid while maintaining stability and reliability.

Deleted: [Energy Agreement Initiative No. 33, subpart c, third paragraph, page 38]

7. The utility shall conduct a high-level load flow transmission system analysis building on the base case planning considerations, evaluating grid conditions and flows for no less than a three-year period. The CESP scenarios shall evaluate system level distributed generation and DSM impact, taking into account the aggregate system impact to load and load flows on the transmission system to determine transmission and generation system benefits. New transmission assets triggered by load growth, addition of new or expanded generation, or a change in planning criteria that require Commission approval shall be identified.

Deleted: [Energy Agreement Initiative No. 33, subpart g, page 39]

8. The utility shall provide estimates of potential impacts of the CESP scenarios on customer rates and bills.

9. The CESP scenarios shall identify the size, timing, and operational characteristics of future resources in accordance with the Competitive Bidding Framework, Docket No. 03-0372.

10. The CESP scenarios shall provide guidance for the utilities to develop the CESP Action Plan.

V. Pilot Demand-Side Management Programs

A. Purposes

1. A purpose of piloting demand-side management programs is to ascertain whether a given program, not yet proven in Hawaii, is cost-effective--whether it will achieve the objectives as originally believed.

2. A second purpose of piloting demand-side management programs is to determine whether the program design and configuration (including how it is managed and promoted) are such as to permit implementation of the program as efficiently and effectively as desired.

B. Utility Pilot Programs

1. A utility may implement on a full-scale basis (without pilot testing) any demand response program that has been proven cost effective as a result of a full-scale or pilot implementation of the program in another service territory or as a result of pilot testing in Hawaii.

2. The utility may develop appropriate pilot demand response programs for implementation without awaiting Commission approval of the utility's CESP Action Plan.

3. All utility proposed pilot demand response programs are subject to Commission approval.

CERTIFICATE OF SERVICE

The foregoing Preliminary Statement of Position of the Hawaiian Electric Companies was served on the date of filing by hand delivery, or mail, postage prepaid and properly addressed, or electronically transmitted to each such Party, as indicated below.

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