BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

----- In the Matter of -----

PUBLIC UTILITIES COMMISSION

DOCKET NO. 2011-0038

Instituting a Proceeding
Related to a Competitive
Bidding Process for Firm
Generating Capacity on Maui.

ORDER NO. 31357

CLOSING PROCEEDING
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CLOSING PROCEEDING

By this Order, the commission closes this proceeding, convened in connection with MAUI ELECTRIC COMPANY, LIMITED's ("MECO") plan to proceed with a competitive bidding process to acquire up to approximately 50 megawatts ("MW") of new, renewable firm dispatchable capacity generation resources on the island of Maui.

I.

Background

By Order issued on February 24, 2011, the commission opened this investigation in response to a letter filed by MECO dated and filed on January 31, 2011, in which MECO requested that the commission "open a new docket for the purposes of receiving filings, reviewing approval requests, and resolving
disputes, if necessary, related to MECO's plan to proceed with a competitive bidding process to acquire up to approximately 50 MW of new, renewable firm dispatchable capacity generation resources on the island of Maui, with the initial increment coming on line in the 2015 time frame.\textsuperscript{1} MECO also requested commission approval of a contract between Hawaiian Electric Company, Inc. ("HECO") and Van Horn Consulting ("Van Horn") to act as an independent observer ("IO") to oversee the Maui RFP.

Instead of approving HECO's contract with Van Horn, as requested by MECO, the commission selected Boston Pacific Company, Inc. as its IO to monitor the competitive bidding process and report on the progress and results to the commission in the instant proceeding.\textsuperscript{2}

II.

Discussion

MECO's January 31, 2011 request to open the instant proceeding was done at a time when the commission was still revising the Integrated Resource Planning ("IRP") Framework and

\textsuperscript{1}Order Opening Docket, filed on February 24, 2011, at 5 (quoting MECO's January 31, 2011 letter at 1).

\textsuperscript{2}See Order Selecting Independent Observer, filed on November 16, 2011.
when MECO's most recently approved IRP Action Plan was not current.³

MECO appears to have a great deal of uncertainty surrounding how it will meet its generation needs.⁴ A review of MECO's IRP Report and Action Plan, filed with its affiliates, HECO, and Hawaii Electric Light Company, Inc., on June 28, 2013, in Docket No. 2012-0036, raises a number of issues that call into question whether this RFP process is appropriate at this juncture, and whether this proceeding is premature. MECO's Adequacy of Supply letter ("AOS"), filed on January 30, 2013,


⁴MECO's last approved IRP Action Plan was in MECO's third round of IRP ("IRP-3"), when by Decision and Order, issued on July 18, 2008, in Docket No. 04-0077, the commission approved MECO's IRP-3 and Action Plans. By letter dated and filed on November 6, 2008, in Docket No. 04-0077, MECO and the Division of Consumer Advocacy requested, as a result of the Energy Agreement signed in October 2008, that the commission suspend the filing of MECO's IRP-4, and open a new docket to establish a Clean Energy Scenario Planning process. The commission closed Docket No. 04-0077 and directed MECO to suspend all activities pursuant to the 1992 IRP Framework to allow for resources to be diverted to the development of a revised framework. See Order Closing Docket, filed on December 8, 2008, in Docket No. 04-0077.

⁴MECO further demonstrates hesitancy to complete this process, given that over two years have passed and a draft RFP has yet to be issued.
also suggests some uncertainty as to whether this RFP is appropriately before the commission at present.  

MECO's IRP Report, which references its AOS, suggests:

MECO's most recent Adequacy of Supply letter was filed with the Commission on January 31, 2013 (January 2013 AOS letter). Based on its June 2012 peak forecast, its total firm capacity of 262.3 MW-net, and a reduction in firm capacity by 16 MW at the end of 2014 assuming [Hawaiian Commercial & Sugar Company, an independent power producer providing MECO capacity and energy under a power purchase agreement] no longer provides capacity and energy to MECO, MECO concluded that it expects to have an adequate amount of firm capacity for Maui to meet all reasonably expected demands for service and provide reasonable reserves for emergencies for the period 2012 to 2018, but also anticipated needing additional firm capacity in the 2019 timeframe. The retirement of [Kahului Power Plant] units would increase the amount additional firm capacity needed in the year KPP is retired by 35.9 MW-net. 

IRP Report, filed in Docket No. 2012-0036, on June 28, 2012, at 22-5 (emphasis added; footnote omitted); and IRP Report at 18-49. 

MECO's AOS describes other considerations that affect the timing of unit additions, including: changes in the system peak compared to forecasts; DSM programs with peak reductions less than projected; environmental standards for air emissions that cause a change in normal operation of existing units; the 

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5See AOS, filed on January 31, 2013, which suggests that "there are projected reserve capacity shortfalls starting in 2019." AOS at 9.
impact from distributed generation; and pending power purchase
agreement negotiations with Hawaiian Commercial & Sugar Company,
which provides MECO with capacity and energy.  

Further, MECO's IRP Report and Action Plan appears to
suggest MECO should not conduct an RFP without first exhausting
other means to ensure demand is met.  

Specifically, MECO explains in its IRP Report:

Scenarios for Maui show an eventual need for
additional firm capacity. Additionally, as discussed
in the Retirements section of this action plan, the
planned retirement of the Kahului Power Plant (KPP)
results in a firm capacity need. MECO will pursue the
following measures in efforts to defer or reduce the
need for new firm capacity:

* Demand Response (DR) Programs. DR programs can
  reduce system demand (and thereby reduce the need
  for reserve capacity) by (1) automatically
  separating certain customer loads from the system
  through underfrequency load shedding, or (2)
  reducing certain customer loads through utility
  control with or without a certain amount of
  notice, or (3) providing economic incentives to
  customers to reduce consumption during peak
times. MECO plans to begin implementation of
direct load control pilot programs by the end of
2015 and pursue other DR opportunities as
discussed in the Demand Response section of this
action plan.

6See AOS at 8 – 11.

7Note that references to MECO's IRP Report and Action Plan
should not be read as an inference that the commission intends,
at this juncture, to approve the Action Plan. The commission
intends, in Docket No. 2012-0036, to review the Action Plan
using commentary from the commission's Independent Facilitator,
Advisory Group, and the docket parties and participants, if any,
to determine whether the Action Plan is reasonable.
Battery Energy Storage System (BESS). If BESSs can be designed to provide steady output over peak periods under dispatch control by the utility (and recharged in off-peak periods), they can provide firm capacity that would otherwise be provided by conventional generating units. As outlined in the Energy Storage section of this action plan, MECO plans to evaluate the use of a BESS on the Maui system and, if cost effective, proceed with procurement and installation. Currently that the most beneficial use of a BESS on the Maui system appears to be the ability to provide regulating reserve, which will help reduce curtailment of as-available renewable generation. The capacity deferral benefits of a BESS will also be part of the Company's evaluation.

Capacity Value of Wind Generation. There are various probabilistic calculation techniques that can be used to estimate the capacity value of as-available generation. In addition, historical data are used to draw a correlation between the availability of generation from the as-available resources and the periods of peak demand on the system. MECO will continue to collect and analyze hourly power output data from the three wind farms. At this time, MECO is not assigning any capacity value to the wind generation, but as more information is collected and analyzed, MECO expects to assign some capacity value to each wind generation resource. MECO's final report on its assessment of wind capacity value is included in Chapter 15 of this report.

If, even after accounting for any firm capacity contribution of DR, BESS and as-available generation, additional firm capacity is needed to satisfy MECO's capacity planning criteria, MECO will acquire that firm capacity through a Request For Proposal (RFP) in accordance with the Commission's Competitive Bidding Framework. The RFP is planned per the schedule outlined below in parallel to the other initiatives mentioned above.
<table>
<thead>
<tr>
<th>RFP Milestones</th>
<th>Timing</th>
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<tbody>
<tr>
<td>Develop and issue draft RFP</td>
<td>Q4 2013</td>
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<tr>
<td>PUC approval of RFP</td>
<td>Q1 2014</td>
</tr>
<tr>
<td>Issue RFP</td>
<td>Q1 2014</td>
</tr>
<tr>
<td>Complete PPA Negotiations</td>
<td>Q4 2015</td>
</tr>
<tr>
<td>Submit PPA to PUC</td>
<td>Q4 2015</td>
</tr>
<tr>
<td>Commercial Operation</td>
<td>Q1 2019</td>
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</tbody>
</table>

Given MECO's AOS and IRP Report, which detail the utility's planning process for determining need for firm capacity, it appears that this RFP and proceeding governing such RFP process are premature. Accordingly, the commission determines that this proceeding shall be closed. The commission will consider future requests by MECO to open another proceeding to conduct an RFP for generation upon a demonstration of need and a plan focused on customer needs.

III.

Order

THE COMMISSION ORDERS that this proceeding is closed.
DONE at Honolulu, Hawaii       JUL 1 1 2013

PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

By

[Signature]
Hermina Morita, Chair

By

[Signature]
Michael E. Champlcy, Commissioner

By

[Signature]
Lorraine H. Akiba, Commissioner

APPROVED AS TO FORM:

[Signature]
Catherine P. Awakuni
Commission Counsel
CERTIFICATE OF SERVICE

The foregoing order was served on the date of filing by mail, postage prepaid, and properly addressed to the following parties:

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