



March 22, 2010

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Vice President
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The Honorable Chairman and Members of the
Hawaii Public Utilities Commission
465 South King Street, First Floor
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Honolulu, Hawaii 96813

FILED
2010 MAR 22 P 4:02
PUBLIC UTILITIES
COMMISSION

Dear Commissioners:

Subject: Docket No. 2006-0084 – Net Energy Metering Law Investigation
Notification of MECO Net Energy Metering Program Status

Pursuant to the Commission's December 26, 2008 *Order Approving, In Part, And Denying, In Part, Stipulations Filed On December 3, 2008* ("Order"), Maui Electric Company, Limited ("MECO") respectfully notifies the Commission that Net Energy Metering ("NEM") applications on the MECO system now exceed 75% of 3.0% of system peak demand for either systems less than or equal to 10 kW or greater than or equal to 10 kW.¹ Accordingly, MECO will increase the NEM system cap from 3.0% to 4.0% of system peak demand. This increase in the system cap will accommodate the continuation of NEM growth on the Maui system in the near term.

Consistent with MECO's, as well as Hawaiian Electric Company, Inc. ("HECO") and Hawaii Electric Light Company, Inc. ("HELCO") (collectively "Hawaiian Electric Companies") filings in this proceeding, it is imperative for all of MECO's customers, including NEM customers, that the reliability of both the MECO system and quality of service is maintained during the transition to the 4.0% of system peak demand program cap. Therefore, MECO, together with HECO and HELCO have committed to work closely and collaboratively with representatives of the industry, as well as industry technical experts, to more fully identify potential system impacts and necessary mitigation measures as the NEM program moves forward. The Hawaiian Electric Companies' proposal to convene a Reliability Standards Working Group in Docket No. 2008-0273 is further intended to determine how penetration levels beyond this level for NEM as well as other variable generation resources, may be achieved so that the Hawaiian Electric Companies as a whole may continue their collective efforts to move aggressively towards additional renewable resources on each of the major islands. As stated in

¹ Specifically, systems less than or equal to 10 kW now exceed 75% of the 40% (of the 3% cap) allocated to systems less than or equal to 10 kW.

the Companies' February 26, 2010 correspondence to the Commission in Docket No. 2008-0273, time is of the essence in convening the Working Group in order to deliver near-term recommendations quickly and effectively in support of the renewables industry, in particular on Maui and the Island of Hawaii.

I. Procedural Background

A. December 3, 2008 Stipulation

On December 3, 2008, HELCO, MECO and the Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs ("Consumer Advocate") submitted for Commission approval stipulations regarding proposed changes to the NEM program system caps for both HELCO and MECO.² The stipulations were virtually identical. This correspondence will focus on the stipulation as it concerns the MECO system. MECO and the Consumer Advocate proposed that increases to the NEM program caps be accomplished in three distinct steps:

In Step 1, MECO and the Consumer Advocate proposed to increase the program cap from 1.0% to 3.0% of system peak demand. It was contemplated that this increase would provide sufficient NEM opportunities for all customers while removing the near-term need to revisit NEM program limits in the then applicable IRP process. The maximum size of the eligible customer-generator qualifying for a NEM arrangement would remain at 100 kW. MECO and the Consumer Advocate also proposed to reserve 40% of the 3.0% system peak demand for small systems that have a NEM generator size of 10 kW or less, leaving 60% of the 3.0% system peak demand for systems with a NEM generator size over 10 kW. (Order at 9-10)

In Step 2, MECO and the Consumer Advocate proposed to increase the program cap from 3.0% to 4.0% of system peak demand at the point when approved NEM applications equal or exceed 75% of the then existing 3.0% of system peak demand cap for either ≤ 10 kW systems or > 10 kW systems. The maximum size of the eligible customer-generator that would qualify for a NEM arrangement would remain at 100 kW. MECO and the Consumer Advocate proposed to reserve 30% of the 4.0% system peak demand for small systems that have a NEM generator size of 10 kW or less, leaving 70% of the 4.0% system peak demand for systems with a NEM generator size over 10 kW. A significant part of the rationale for modifying the allocation of program capacity by project size was an expectation, by industry in particular, that systems larger than 10 kW would make up a majority of the new NEM projects coming on to the system.

² It was noted in the Stipulation that the other parties to the docket, the Hawaii Renewable Energy Alliance ("HREA") and the Hawaii Solar Energy Association ("HSEA") reviewed and found acceptable the proposed stipulation between MECO and the Consumer Advocate. December 3, 2008 Stipulation ("Stipulation") at page 2 of Exhibit 2.



MECO and the Consumer Advocate also proposed to notify the Commission when the increase in the program cap to 4.0% of system peak demand goes into effect. (Order at 10)

In Step 3, MECO and the Consumer Advocate proposed that potential increases to the maximum size of eligible NEM generators and to the system cap in excess of 4.0% of system peak demand would be analyzed in each electric utility's IRP process. For any IRP advisory group member to propose an increase in the NEM limits, the approved NEM applications (versus NEM installations) would have to be at least 75% of the current peak demand limit for that utility. (Order at 11)

MECO and the Consumer Advocate also proposed that MECO would report to its IRP Advisory Group, the Consumer Advocate, and the Commission when NEM participation affects or is anticipated to impact system reliability, system safety, and/or power quality, as well as when NEM participation requires necessary changes to the utility interconnection standards in Rule No. 14. (Stipulation at pages 4-5 of Exhibit 2)

B. December 26, 2008 Order

On December 26, 2008, the Commission issued its Order, which approved, among other things, steps 1 and 2 above for increasing the NEM program limits. Although the Commission did not approve the sections of the Stipulation that propose to review future increases to NEM program limits in the utility's IRP process (due to the fact that MECO's IRP docket had been closed by the Commission at the time of the Order), the fact remains that integration of expansions to existing programs, as well as new procurement programs, with utility resource planning, is critical to ensuring system reliability. Consequently, on February 11, 2009 and October 27, 2009, the Hawaiian Electric Companies and the Consumer Advocate proposed that any potential increases to the NEM program limits for the Hawaiian Electric Companies would be reviewed in each Company's respective Clean Energy Scenario Planning process.

C. August 14, 2009 Proposed Plan

On August 14, 2009, in response to a Commission directive to submit a stipulated proposed plan for the parties to address the "NEM agreement, as set forth in the Energy Agreement," the Hawaiian Electric Companies and the Consumer Advocate submitted their proposed plan.³ (Order at Ordering Paragraph 4) Through the joint filing, the Companies and Consumer Advocate stated:

³ In part, the Energy Agreement proposed to remove system-wide caps on net energy metering and replace those caps with appropriate limitations on the interconnection of distributed generation including, in certain circumstances, a circuit-specific analysis to determine whether a particular limit may be increased. (Energy Agreement at Section 19)



In Docket No. 2008-0273, the HECO Companies and the Consumer Advocate have proposed a FIT with annual and overall program limits, based on regular assessments of grid reliability, cost, and potential curtailment impacts on existing renewable resources. If NEM is not replaced by such a FIT, NEM system-wide caps should only be modified following appropriate technical assessments and determinations of technical feasibility for each island.

(August 14, 2009 correspondence at 3)

Additionally, and as a part of the proposed plan, the Hawaiian Electric Companies and Consumer Advocate expressly recognized that:

... since the signing of the Energy Agreement in October 2008, there have been developments that indicate that HELCO (and possibly MECO) is in an advanced state of renewable energy penetration which could affect its ability to integrate more variable renewable without negatively affecting grid stability or existing renewable resources, and which may require that additional resources acquired through any mechanism – including but not limited to NEM, FIT, and customer self-generation – be subject to a system-wide penetration limit.

(August 14, 2009 correspondence at 4)

On September 25, 2009, the Commission issued its Decision and Order in the FIT docket (Docket No. 2008-0273) and determined in part that the NEM program should be allowed to continue as just one of a number of utility renewable energy procurement programs. (September 25, 2009 Decision and Order at 20-22).

D. January 7, 2010 Stipulation

On January 7, 2010, the Hawaiian Electric Companies and the Consumer Advocate filed their *Stipulation on Hawaiian Electric Companies' Net Energy Metering System Cap*. Through that Stipulation, the Companies and Consumer Advocate stated:

... there needs to be a formal process identified and in place to assess and routinely review the changes on distribution circuit demand and aggregated impact of distributed generation connected at the distribution level on the overall system for each of the Hawaiian Electric utility's grids. As stated in the Proposed Plan for NEM, removal of system-wide caps needs to be assessed and reviewed in order to ensure circuit reliability, safety and overall grid stability on all the grids.

(January 7, 2010 Stipulation at page 4 of Exhibit 1)



In discussing the basis for moving forward with future expansion of the NEM program, the Hawaiian Electric Companies and Consumer Advocate noted:

As part of the FIT, the Company is pursuing development of Reliability Standards to formalize system operational requirements to ensure overall system reliability, manageability and security of the grid. These Standards along with Rule 14H Interconnection Standards form a set of measures by which all resources interconnecting to the island grids must conform to and satisfy. These measures are the basis by which the Company will be able to assess the system as a whole versus in parts, which has sometimes been the result of the rapid deployment of multiple renewable procurement programs. This consolidation of measures into a consistent set of Standards will increase transparency as well as focus efforts when changes are required. The move toward a more strategic integrated assessment approach (basis and process) provides additional advantages for optimizing the overall manageability of resources (central station to customer-based resources) as well as to better position the island grids to be able to assess and adopt new technologies for managing intermittency.

(January 7, 2010 Stipulation at page 6 of Exhibit 1)

E. February 26, 2010 Correspondence Regarding Reliability Standards Working Group

On February 26, 2010, the Hawaiian Electric Companies filed their *Response to Commission letter of February 19, 2010* in Docket No. 2008-0273. The February 26, 2010 correspondence clarified the Companies' proposal to defer distributed generation interconnections under certain circumstances and elaborated on the Companies' proposal to convene a Reliability Standards Working Group. The Hawaiian Electric Companies noted that on certain islands, including Maui, the high amount of intermittent renewables already in operation or planned for the near term constrains the amount of intermittent renewable energy sources that can be added without causing noticeable impacts on grid reliability and/or curtailment of other renewable energy generators. Notably, the percentage of installed megawatts of intermittent renewables on Maui versus the system-wide peak power use level in 2009 was already at 17.3%. With the addition of two more wind farms on Maui which are currently under power purchase contract negotiation, Maui will be at nearly 40% installed intermittent renewable energy versus peak load. (February 26, 2010 correspondence at 2)

The February 26, 2010 correspondence also proposed that given the integration and reliability issues present on the MECO grid (as discussed above), that the transition to a 4% of peak load NEM program limit for MECO be further evaluated as a part of the Reliability



Standards Working Group process as it may be approved by the Commission. (February 26, 2010 correspondence at 3)

II. Discussion

A. Commitment to Achieving a 4% Program Cap

As discussed above, NEM applications on the MECO system for systems less than or equal to 10 kW now exceed 75% of the 40% (of the 3% program cap) allocated to systems of this size. Accordingly, and pursuant to the Commission's December 26, 2008 Order, MECO respectfully notifies the Commission that it intends to increase the NEM program cap from 3.0% to 4.0 % of system peak demand. As a part of this transition, and as detailed above, movement to the 4.0 % of system peak demand limit should appropriately consider Commission directives in this and other proceedings related to the interconnection of resources at the distribution level. Due to the existing levels of renewable resource penetration of the MECO system, it is no longer prudent to consider a specific program in a vacuum or without regard to critical Commission determinations on reliability and other issues in related proceedings. Consequently, MECO, together with HECO and HELCO have committed to work closely and collaboratively with representatives of the industry, as well as industry technical experts, through the forum of a Reliability Standards Working Group, or any similar vehicle established by the Commission, to more fully identify potential system impacts and necessary mitigation measures as the NEM program moves forward. This collaborative process is also intended to determine how penetration levels beyond this level for both NEM as well as other generation resource procurement programs, may be achieved.

B. Project Size Allocations

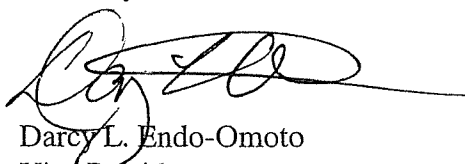
As noted above, under Step 1 of the Companies' and Consumer Advocate's proposal to increase the NEM program cap from 1.0% to 3.0% of system peak demand, it was proposed to reserve 40% of the 3.0% system peak demand for small systems that have a NEM generator size of 10 kW or less, leaving 60% of the 3.0% system peak demand for systems with a NEM generator size over 10 kW. (Order at 9-10) In Step 2 (increase from 3.0% to 4.0% of system peak demand) it was proposed to reserve 30% of the 4.0% system peak demand for small systems that have a NEM generator size of 10 kW or less, leaving 70% of the 4.0% system peak demand for systems with a NEM generator size over 10 kW. MECO does not propose to modify the project size allocations of NEM program capacity approved by the Commission. However, MECO would emphasize that the allocations for the smaller systems represent a reservation for these particular project sizes, in other words a floor rather than a ceiling to availability of the program capacity, consistent with the original intent of establishing the allocations to ensure reasonable project development opportunities for residential and small commercial NEM customers.



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MECO is submitting this notification filing for informational purposes only and is not requesting the Commission to take any action on this filing. The Consumer Advocate supports this notice to the Commission. HREA and HSEA support the increase to 4% and the treatment of the less than 10 kW allotment as a floor rather than a ceiling.

Sincerely,



Darcy L. Endo-Omoto
Vice President
Hawaiian Electric Company, Inc.
Hawaii Electric Light Company, Inc.
Maui Electric Company, Limited

cc: Division of Consumer Advocacy
Warren Bollmeier II
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