BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF HAWAII

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

PUBLIC UTILITIES COMMISSION

Instituting a Proceeding Under Hawaii's Net Energy Metering Law, Hawaii Revised Statutes §§ 269-101 - 269-111, to Investigate Increasing: (1) the Maximum Capacity of Eligible Customer-Generators to More Than Fifty Kilowatts; and (2) the Total Rated Generating Capacity Produced by Eligible Customer-Generators to an Amount Above 0.5 Percent of Peak Demand

DOCKET NO. 2006-0084

ORDER APPROVING, IN PART, AND DENYING, IN PART, STIPULATIONS FILED ON DECEMBER 3, 2008

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----In the Matter of---- PUBLIC UTILITIES COMMISSION Instituting a Proceeding Under Hawaii's Net Energy Metering Law, Hawaii Revised Statutes §§ 269-101 - 269-111, to Investigate Increasing: (1) the Maximum Capacity of Eligible Customer-Generators to More Than Fifty Kilowatts; and (2) the Total Rated Generating Capacity Produced by Eligible Customer-Generators to an Amount Above 0.5 Percent of Peak Demand	Docket No. 2006-0084

ORDER APPROVING, IN PART, AND DENYING, IN PART, STIPULATIONS FILED ON DECEMBER 3, 2008

By this Order, the commission approves in part and denies in part the stipulations filed by HAWAII ELECTRIC LIGHT COMPANY, INC. ("HELCO"), MAUI ELECTRIC COMPANY, LIMITED ("MECO") and the DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS, DIVISION OF CONSUMER ADVOCACY ("Consumer Advocate") on December 3, 2008. Specifically, the commission approves increases to the currently existing net energy metering ("NEM") system cap limits for HELCO and MECO.[1] The commission, however, denies the portion of the

[1] Two separate, but substantively similar, stipulations for HELCO and MECO were filed under one cover letter on December 3, 2008. For ease of reference herein, the stipulations will jointly be referred to as the "Stipulations;" when referring to one or the other stipulation, "HELCO's Stipulation" or "MECO's Stipulation" will be used.

Stipulations pertaining to the consideration of future increases to HELCO's and MECO's NEM limits in their respective IRP processes, given that the commission recently closed the HECO Companies' IRP dockets. Instead, the commission directs the Parties to develop a new review process, outside of the integrated resource planning ("IRP") process, for considering any future increases to the NEM limits for the HECO Companies.

I.

Background

A.

Net Energy Metering Law

Hawaii's Net Energy Metering Law, codified as Hawaii Revised Statutes ("HRS") §§ 269-101 to 269-111 ("Net Energy Metering Law"), which was enacted in 2001, allows residential and commercial customers of an electric utility (including a government entity) who own and operate eligible renewable energy generators to use "net energy metering" to measure electricity usage for billing purposes. As defined by HRS § 269-101, "net energy metering" 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

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The parties to this docket are HELCO, MECO, HAWAIIAN ELECTRIC COMPANY, INC. ("HECO") (collectively, "HECO Companies"), the Consumer Advocate, KAUAI ISLAND UTILITY COOPERATIVE ("KIUC"), HAWAII RENEWABLE ENERGY ALLIANCE, and HAWAII SOLAR ENERGY ASSOCIATION (collectively, "Parties"). The commission also allowed ZERO EMISSIONS LEASING LLC to participate in this docket.

over a monthly billing period[.]" In essence, eligible customer-generators who use net energy metering are billed only on the net kilowatt-hours of electricity they use.

The Net Energy Metering Law specifies that a customer's generating facility must be solar, wind, biomass, hydroelectric, or a hybrid system consisting of two or more of the foregoing types of facilities.[2] The statute further specifies that the maximum generating capacity per customer must be no more than fifty (50) kW.[3] The law, however, expressly authorizes the commission to increase the maximum generating capacity for customers: "The eligible customer-generator shall have a capacity of not more than fifty kilowatts; provided that the public utilities commission may increase the maximum allowable capacity that eligible customer-generators may have to an amount greater than fifty kilowatts by rule or order."[4]

In addition, the Net Energy Metering Law provides a cap on the total power producing capacity of eligible customer-generators, which is currently set in the statute at 0.5 percent of an electric utility's peak demand.[5] As with the maximum generating capacity of individual customers established in HRS § 269-101.5, the Net Energy Metering Law

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[2]See HRS § 269-101.

[3]See HRS § 269-101.5.

[4]Act 99, 2004 Session Laws of Hawaii, which took effect on June 2, 2004, revised the Net Energy Metering Law by, among other things, increasing the size of facilities qualifying for NEM from 10 kW to 50 kW. See Act 99, 2004 Haw. Sess. Laws 392.

[5]See HRS §§ 269-102, 269-104.

authorizes the commission to "increase, by rule or order, the total rated generating capacity produced by eligible customer-generators to an amount above .5 per cent of the electric utility's system peak demand."[6]

B.

Initiation of this Docket

By Order No. 22380, filed on April 10, 2006, the commission initiated this investigation to determine whether, and to what extent, the commission should increase: (1) the maximum capacity of eligible customer-generators to more than 50 kW; and (2) the total rated generating capacity produced by eligible customer-generators to an amount above 0.5 percent of an electric utility's system peak demand, under Hawaii's Net Energy Metering Law.

C.

D&O No. 24089

In Decision and Order No. 24089, filed on March 13, 2008 ("D&O No. 24089"), the commission approved two stipulations to increase the NEM limits that were separately filed on September 17, 2007, by the HECO Companies and KIUC. In approving the stipulation affecting the HECO Companies, the commission approved, in sum, the following:

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[6]HRS § 269-102.

- An increase in the maximum size of eligible customer-generators from 50 kW to 100 kW;

- An increase in the system cap from 0.5% to 1.0% of system peak demand;

- For HECO, a reservation of 40% of the 1.0% system peak demand for small systems that have a NEM generator size of 10 kW or less, leaving 60% of the 1.0% system peak demand for systems with a NEM generator size of over 10 kW on HECO's grid;

- For the HELCO and MECO grids, a reservation of 50% of the 1.0% system peak demand for small systems that have a NEM generator size of 10 kW or less, leaving 50% of the 1.0% system peak demand for systems with a NEM generator size of over 10 kW; and

- A proposal to analyze any future potential increases to the NEM limits for the HECO Companies in each utility's IRP process.

For KIUC, the commission approved, in sum, the following:

- The maximum size of KIUC's eligible customer-generators shall remain at 50 kW;

- An increase in KIUC's total rated generating capacity limit from 0.5% to 1.0% of KIUC's peak demand;

- The 1.0% of KIUC's peak demand shall be allocated as follows: (a) 50% will be allocated to systems whose size is 10 kW or smaller; and (b) the remaining 50% will be allocated to systems whose size is greater than 10 kW, but not greater than 50 kW; and

- A mechanism by which KIUC's NEM limits will be regularly reviewed in its IRP process.

E.

Energy Agreement

On October 20, 2008, the Governor of the State of Hawaii, the State of Hawaii Department of Business, Economic Development and Tourism, the Consumer Advocate, and the HECO Companies entered into the Energy Agreement,[7] a comprehensive agreement designed to move the State away from its dependence on imported fossil fuels for electricity and ground transportation, and toward "indigenously produced renewable energy and an ethic of energy efficiency."[8] A product of the Hawaii Clean Energy Initiative,[9] the Energy Agreement is a commitment on the part of the State and the HECO Companies to accelerate the addition of new, clean resources on all islands; to transition the HECO Companies away from a model that encourages increased electricity usage; and to provide measures to assist consumers in reducing their electricity bills.

Regarding NEM, the Energy Agreement provides:

> The parties are in agreement that there should be no system-wide caps on net energy

[7]Energy Agreement Among the State of Hawaii, Division Of Consumer Advocacy of the Department of Commerce and Consumer Affairs, and the Hawaiian Electric Companies, signed on October 20, 2008 ("Energy Agreement").

[8]Energy Agreement at 1.

[9]On January 31, 2008, the State of Hawaii and the U.S. Department of Energy entered into a Memorandum of Understanding designed to establish a partnership, called the Hawaii Clean Energy Initiative. The partnership aims to have 70% of all of Hawaii's energy needs generated by renewable energy sources by 2030.

metering at any of the Hawaiian Electric utilities. Instead, the parties agree to the following:

- Distributed generation interconnection will be limited on a per-circuit basis, where generation (including PV, micro wind, internal combustion engines, and net metered generation) feeding into the circuit shall be limited to no more than 15% of peak circuit demand for all distribution-level circuits of 12kV or lower;

- New DG requests shall be processed and interconnected on a first-come, first-served basis unless the Commission specifies some other method;

- For those circuits where interconnection requests (particularly for PV) approach the 15% limit, the utility will perform and complete within 60-days after receipt of an interconnection request, a circuit-specific analysis to determine whether the limit can be increased. For non inverter-based DGs, the analysis to determine whether the limit can be increased will be performed on a case-by-case basis based on the specifics of the DG project(s) proposed;

- If the utility believes a specific DG installation poses a significant risk to circuit reliability and safety or grid stability, it will notify the applicant, the Consumer Advocate and the Commission, within 30 days from receipt of the completion of a circuit analysis and the identification of the need to defer the installation until further analysis can be conducted, and shall conduct that analysis within no more than three months from the date of the application request.

NEM currently provides an interim measure to encourage the installation of and pay for renewable energy generated from customer-sited systems, generally PV systems. The parties agree that NEM will be replaced with an appropriate feed-in tariff and new net metered installations shall be required to incorporate time-of-use metering equipment

> and, when time-of-use rates are implemented on a full scale basis in Hawaii or the applicable area, the net metered customer shall move to time of use net metering and sale of excess energy.
>
> As part of the Clean Energy Scenario Planning ("CESP") process, Locational Value Maps ("LVM") identified in the CESP process can trigger an engineering review by the Hawaiian Electric Utilities to determine whether circuit limits can be safely raised above the threshold for the specific circuits in the LVM and if distribution circuit modifications can be made to increase the level of DG/NEM within the LVM.
>
> Current provisions relating to interconnection requirements will remain in force.[10]

In addition, the parties to the Energy Agreement agreed to replace the current IRP process with a new Clean Energy Scenario Planning ("CESP") process. To this end, the Energy Agreement contemplated closure of HECO's IRP-4 docket, and suspension of HELCO's and MECO's IRP-4.

F.

Closing of the HECO Companies' IRP Dockets

Consistent with the Energy Agreement and pursuant to a request by the HECO Companies and the Consumer Advocate, the commission closed Docket No. 2007-0084 (HECO's IRP-4). In addition, the commission sua sponte closed Docket No. 04-0046 (HELCO's IRP-3) on November 26, 2008, and Docket No. 04-0077 (MECO's IRP-3) on December 8, 2008, to allow for resources to be diverted to development of a CESP framework.[11]

[10]Energy Agreement at 28, Section 19.

II.

Stipulations[12]

On December 3, 2008, HELCO, MECO, and the Consumer Advocate filed the Stipulations.[13] HELCO's Stipulation and MECO's Stipulation are substantively similar. Both state that changes to the NEM limits were discussed and approved in HELCO's and MECO's respective IRP processes. The Stipulations propose changes to the NEM limits in two steps:

Step 1:

- HELCO and MECO will increase the system cap from 1.0% to 3.0% of system peak demand. This increase should create sufficient NEM opportunities for all customers while removing the near-term need to revisit NEM cap limits in the IRP process.

- The maximum size of the eligible customer-generator that qualifies for a NEM arrangement remains unchanged at 100 kW.

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[11]KIUC, which was not a signatory to the Energy Agreement, has an open IRP docket before the commission, Docket No. 2006-0165 (KIUC's IRP-3).

[12]HELCO and the Consumer Advocate filed a stipulation requesting commission approval of proposed changes to HELCO's NEM system cap in HELCO's IRP-3 docket, Docket No. 04-0046. Likewise, MECO and the Consumer Advocate filed a stipulation requesting commission approval of proposed changes to MECO's NEM cap on September 30, 2008 in MECO's IRP-3 docket, Docket No. 04-0077.

[13]The stipulation approved by the commission in D&O No. 24089 for the HECO Companies stated that, if the utility and the advisory group members reach an agreement in the IRP process to change any of the existing NEM thresholds, a request in the form of a stipulation between the utility and the Consumer Advocate will be filed with the commission, subject to commission approval.

- HELCO and MECO will 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, which is the same as HECO's current NEM allocation.[14]

Step 2:

- HELCO and MECO will increase the system 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 qualifies for a NEM arrangement remains unchanged at 100 kW.

- HELCO and MECO will reserve 30% of the 4.0% system peak demand for small systems that have a NEM generator size of 10 kW of less, leaving 70% of the 4.0% system peak demand for systems with a NEM generator size over 10 kW.

- HELCO and MECO will notify the commission and make an announcement at IRP advisory group meetings when this increase in the system cap to 4.0% of system peak demand goes into effect. Providing for this automatic increase in the system cap accommodates the expected continuation of NEM growth in systems and kW at HELCO and MECO in the near term.[15]

[14]The Stipulations note that expected growth in the number of systems and kW impact of systems greater than 10 kW is expected to be higher than that of systems of 10 kW or less.

[15]HELCO's Stipulation at 2-3; MECO's Stipulation at 2-3.

In the third step of the Stipulations, HELCO, MECO, and the Consumer Advocate propose that potential increases to the NEM limits in the future be reviewed in each utility's IRP process:

> Step 3:
>
> 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, as provided for and approved in Decision and Order No. 24089, except that for any advisory group member to propose an increase in the NEM limits the approved NEM applications (versus NEM installations) must be at least 75% of the current peak demand limit for that utility.[16]

In a section titled "IRP Process Considerations," the Stipulations include additional provisions related to reviewing future NEM increases in each utility's IRP.

After a thorough review of the Stipulations and the entire record herein, the proposed increased NEM limits for HELCO and MECO described in Steps 1 and 2 of the Stipulations appear reasonable. The proposed increases appear particularly important given that HELCO and MECO are expected to exceed the 1.0% of system peak demand cap that was approved in D&O No. 24089, by the end of this year.[17] The proposed limits underwent a review in HELCO's and MECO's IRP processes and were met with no objections by advisory group members. Moreover, the Stipulations state that the Parties have reviewed

[16] HELCO's Stipulation at 4; MECO's Stipulation at 4.

[17] <u>See</u> HELCO's Stipulation, Attachment B; MECO's Stipulation, Attachment B.

the Stipulations and find them acceptable. For these reasons, the commission approves the increased NEM limits for HELCO and MECO, as proposed in the Stipulations.

HELCO and MECO shall amend their NEM tariffs consistent with the terms of this Order and file the amended tariffs within five days from the date of this Order. The increases to the NEM limits approved herein shall take immediate effect upon filing of the amended tariffs.

While the commission approves the NEM increases in the Stipulations, it is cognizant that the provisions in the Stipulations are not in accord with the agreements reached by the HECO Companies and the Consumer Advocate on NEM in Section 19 of the Energy Agreement, set forth above. Accordingly, the Parties shall submit a proposed plan, which should include a timeline, for the Parties to address the HECO Companies' and the Consumer Advocate's NEM agreement, as set forth in the Energy Agreement.

In addition, given that the HECO Companies' IRP dockets are now closed, the commission denies the sections of the Stipulations that propose that review of future increases to NEM limits be completed in each utility's IRP process. Instead, the commission directs the Parties to inform the commission of any new review process for considering any future increases to the NEM limits for the HECO Companies within forty-five days of the date of this Order.[18]

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[18]Because KIUC was not a signatory to the Energy Agreement and still has an open IRP docket, Docket No. 2006-0165, at this time, it is not necessary to consider an alternative review

III.

Orders

THE COMMISSION ORDERS:

1. The increased NEM limits for HELCO and MECO, as proposed in the Stipulations, are approved.

2. HELCO and MECO shall amend their NEM tariffs consistent with the terms of this Order and file the amended tariffs within five days from the date of this Order. The increases to the NEM limits approved herein shall take immediate effect upon filing of the amended tariffs.

3. Those portions of the Stipulations that propose consideration of future increases to HELCO's and MECO's NEM limits in their respective IRP processes, are denied.

4. Within forty-five days of the date of this Order, the Parties shall submit a stipulated proposed plan for the Parties to address the HECO Companies' and the Consumer Advocate's NEM agreement, as set forth in the Energy Agreement If the Parties are unable to stipulate, they shall file separate proposed plans by the same date.

5. Within forty-five days of the date of this Order the Parties shall inform the commission of any new review process for considering any future increases to the NEM limits for the HECO Companies.

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process for KIUC. KIUC may, however, to the extent it has an interest in an alternative NEM review process or NEM transition plan for the HECO Companies, participate in the development of those proposals.

DONE at Honolulu, Hawaii DEC 2 6 2008.

PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

By Carlito P. Caliboso

Carlito P. Caliboso, Chairman

By John E. Cole

John E. Cole, Commissioner

By

Leslie H. Kondo, Commissioner

APPROVED AS TO FORM:

Kaiulani Kidani Shinsato

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2006-0084.laa

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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