ORDER NO. 11 338

ENTERED AUG 30 2011

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

AR 548

In the Matter of Revising Net Metering Rules Regarding Aggregation of Meters on Different Rate Schedules.	ORDER

DISPOSITION: RULES AMENDED

I. INTRODUCTION

Currently, the rules governing Net Metering require that aggregated meters be on the same rate schedule. *See* OAR 860-039-0065. There is no language in statute, however, that requires this. *See* ORS 757.300. At the time that the Public Utility Commission of Oregon (Commission) adopted that requirement in Order No. 07-319, the Commission noted that the rules could be modified to permit additional forms of aggregation. After receiving numerous contacts regarding the requirement, the Commission Staff proposed changes to the Net Metering Rules to permit additional forms of aggregation.

II. PROCEDURAL HISTORY

On January 14, 2011, the Commission first filed a Notice of Proposed Rulemaking Hearing and Statement of Need and Fiscal Impact for this rulemaking with the Secretary of State. That notice established a rulemaking hearing date of March 9, 2011.

On March 2, 2011, the Commission granted Portland General Electric Company's (PGE) request that the March 9, 2011, rulemaking hearing be postponed to allow further discussion among the participants. Following an informal workshop conducted by Staff among the participants, the Commission filed, on April 14, 2011, a second Notice of Proposed Rulemaking Hearing and Statement of Need and Fiscal Impact with the Secretary of State. Notice was provided to certain legislators specified in ORS 183.335(1)(d) and to all interested persons on the service lists maintained pursuant to OAR 860-001-0030 on April 14, 2011, and interested persons were given until May 24, 2011, to file written comments. Notice of the May 16, 2011 hearing was published in the May 2011 *Oregon Bulletin*.

Written comments were filed by the City of Portland (the City), Interstate Renewable Energy Council (IREC), PGE, Commission Staff, PacifiCorp, dba Pacific Power (Pacific Power), LiteSolar Corp. (LiteSolar), Real Energy Solutions (Real Energy), and the

Oregon Department of Energy (ODOE). All persons who provided oral comment at the rulemaking hearing also provided written comments reiterating their statements.

III. DISCUSSION

A. Background

The proposed rules set forth with the Notice of Proposed Rulemaking are designed to allow customer-generators in a utility's net metering program to offset generated energy against energy measured by meters subject to different rate schedules. No rulemaking participant opposed the general proposal, but several raised issues about the definitions of "contiguous" and "customer-generator," the limits placed on the sizes of generating facilities, and the mechanics of meter aggregation bill calculations. We address each issue separately.

B. Issues

1. Definition of "Contiguous"

In its proposed rules, Staff proposed to define "contiguous" by reference—giving it the same meaning as that provided in rules governing direct access regulation set out in OAR 860-038-0005(60)(b)(C). That referenced rule defines "contiguous" as:

> (C) Land shall be considered to be contiguous even if there is an intervening public or railroad right of way, provided that rights of way land on which municipal infrastructure facilities exist (such as street lighting, sewerage transmission, and roadway controls) shall not be considered contiguous.

a. Positions of Participants

PGE, Pacific Power, and IREC support Staff's proposed definition of "contiguous." IREC recommends, however, that the definition be expressly set out in the rules, rather than by reference, because rules governing direct access rule are subject to change independent to revisions to the net metering rules.[1] Staff agrees with IREC's recommendation and supports its adoption.

The City opposes the use of property ownership as the qualifier for meter aggregation, claiming that such a restriction is counterproductive to the development of net metering facilities. Instead, the City proposes that meter aggregation be based on the nature of the connection of the net metering facility to the utility's feeder. Under the City's proposal, a

[1] IREC also initially recommended the Commission adopt a definition for "premises." IREC later agreed with Staff, however, that the definition was not required and withdrew its proposal. IREC Comments at 2 (May 24, 2011).

customer-generator would be allowed to aggregate all meters served by the same feeder, regardless of whether the meters were located on contiguous properties.

Staff opposes the City's proposal to base the definition of "contiguous" on a feeder line basis. Staff argues that it is beyond the scope of the proceedings, and that such a change should be made only after further investigation into the legality and costs to other customers of such a proposal.

b. Resolution

The Commission adopts the definition of "contiguous" as proposed by Staff, to be imported into the adopted rule from OAR 860-038-0005(60)(b)(C), as proposed by IREC. The definition is workable and readily applied.

The City's proposal to define "contiguous" in terms of a feeder line constitutes a significant change to the net metering program that we decline to adopt. Current participation in the program is high, and we do not see a need to expand its scope as contemplated by the City's proposal.

2. Definition of "Customer-Generator"

In its proposed rules, Staff proposed to specify that a "customer-generator" is a customer that has a net metering facility and is enrolled in a utility's net metering program. Staff's proposed definition is as follows:

> "Customer-generator" means the person who is the user of a net metering facility and who has applied for and been accepted to receive electricity service at a premises from the serving public utility.

a. Positions of Participants

IREC opposes Staff's proposed definition of "customer-generator." IREC proposes that the definition continue to mimic the statutory definition set forth in ORS 757.300(a), which provides: "Customer-generator" means a user of a net metering facility."

IREC apparently believes that the additional requirement that a customer-generator also be a customer of the utility would prevent the possible aggregation of meters where a multi-tenant building owner installs a renewable energy facility and allows tenants to aggregate their meters with the owner's meter. IREC refers to this situation as "virtual net metering," because tenants would receive net metering credits for excess energy produced by the renewable energy facility even though the facility would not be physically attached to the tenants' meters. LiteSolar supports IREC's proposal to allow meter aggregation or "virtual net-metering" at multiple dwelling unit residences.

Pacific Power opposes IREC's proposal to allow virtual net metering. Pacific Power contends that the proposal is beyond the scope of this proceeding, and would require substantial changes to the program that should be evaluated independently.

b. Resolution

We adopt Staff's proposed definition of "customer-generator." The requirement that a customer-generator also be a customer of the utility is consistent with the definition of net metering—the offset of electricity *supplied by the utility* with that generated by the customer-generator and fed back to the utility. *See* ORS 757.300(1)(c)(emphasis added).

We do not adopt IREC's recommendation. As IREC notes, our Staff previously raised the question whether a tenant in a building with a net metering facility could qualify as a customer-generator under the statutory standards in ORS 757.300. *See* Docket AR 515, Order No. 07-319 at 6. We decline to revisit that matter here, as we consider it to be a significant change to the successful net metering program.

3. Size of Generation Facilities

Currently our rules establish different capacity limits for residential and non-residential net metering facilities. If the Commission allows customers to aggregate meters served on different rate schedules, the rules must clarify what generation capacity limit is applicable to residential and non-residential customers. In its original revisions to OAR 860-039-0010, Staff proposed that, if a customer-generator aggregates meters subject to residential and non-residential rate schedules, the 2 megawatt (MW) capacity limit applicable to non-residential customers would apply instead of the 25 kilowatt (kW) limit currently applicable to residential customers.

Rulemaking participants raise two primary issues in response to Staff's proposal. Some participants request the Commission simply eliminate the cap; others oppose Staff's recommendation to apply the 2 MW cap. We address each issue separately.

a. Eliminate the Cap

i. Positions of Participants

IREC, LiteSolar, and Real Energy encourage the Commission to modify the capacity limit by basing it on customers' historical consumption, rather than the uniform ceilings established by current rule. LiteSolar contends the metering caps serve as an arbitrary barrier to installing larger systems. Real Energy adds that there are many utility customers that would consider larger installations if the current limits were increased – especially with the clarification of aggregate metering rules.

The City requests a rule revision to remove the 2 MW limit on installed generator size at non-residential meters, so long as the customer complies with a 2 MW limit on the

amount of electricity that is net metered into the utility's grid. The City requests this rule revision only for waste water treatment facilities/customers.

Staff opposes all proposals to eliminate the cap and contends they are beyond the scope of the proceeding. PGE also believes the City's proposal should not be addressed in this docket and is concerned that such arrangements could result in harm to the distribution system by allowing larger sized units to interconnect under the net metering rules rather than the standard interconnection rules.

ii. Resolution

We decline to adopt IREC's proposal to base the capacity limit on the customer's historical usage as it raises issues that are beyond the scope of a rulemaking proceeding. Moreover, as Staff notes, the current cap of 25 kW for residential customers is large relative to use—nearly double the use of an average customer assuming a 10 percent annual capacity factor.

For reasons identified by PGE, we also decline the City's proposal related to its waste water treatment facilities.

b. Size of the Cap

i. Positions of the Participants

PGE and Pacific Power oppose Staff's recommendation to use the 2 MW cap as the generation capacity limit if a customer-generator aggregates meters subject to residential and non-residential rate schedules. PGE contends that the rate applicable to the meter physically attached to the generating facility should be used to determine the appropriate capacity limit for the generating facility. Thus, if the designated meter is subject to a residential rate, the generating facility may have a capacity no greater than 25 kW. If the designated meter is subject to a non-residential rate, the applicable capacity limit is 2 MW. Pacific Power agrees, and explains that removing the cap on residential systems could lead to oversized systems being placed in residential neighborhoods.

Following a review of the comments, Staff supports PGE's recommendation to use the designated meter to determine the capacity limit for generating facilities owned by customer-generators aggregating meters subject to residential and non-residential rates. Staff agrees with PGE that, under the initial proposal, a customer-generator's facility could become grossly oversized if the customer's non-residential load decreased.

ii. Resolution

As noted by Staff, PGE's concerns regarding the initial proposed rule were well-founded, and we decline to adopt the 2 MW cap as the generation capacity limit if a customer-generator aggregates meters subject to residential and non-residential rate schedules. Where the designated meter is residential, the 25 kW capacity limit is reasonable and should remain the rule.

4. Mechanics of Meter Aggregation

The aggregation of meters on different rate schedules raises questions regarding the calculation of bills, in particular, when more than two meters are aggregated, and when the energy at one or more meters is billed by time-of-use. The proposed rule provides that the customer-generator may "rank" the meters within specified parameters. The mechanics of meter aggregation are set forth in OAR 860-039-0065.

a. Positions of the Participants

Following the filing of comments and revisions to Staff's original proposed rule amendments, only two disputes remain.[2]

IREC recommends that the Commission eliminate the requirement that a customer rank meters within certain parameters. IREC argues that allowing customers as much flexibility as possible in ranking their meters allows them to do so in the way that best fits their situations. Staff opposes IREC's recommendation and contends that the proposed ranking requirement helps minimize the rate impacts on other retail customers.

PGE opposes Staff's proposed language in OAR 860-039-0065(1)(b) that allows aggregation of energy used "primarily" for the customer-generator requirements. In response, Staff contends that the word "primarily" should remain in order for the rules to be consistent with ORS 757.300(1)(d)(D). According to Staff, that statute allows customer-generators to aggregate meters that measure energy used primarily for their requirements.

[2] In its original filing, Staff proposed to exclude from aggregation any electricity used to charge an electric vehicle that the customer-generator does not own or lease and to prohibit any customer-generator who received an Oregon Business Energy Tax Credit (BETC) for its generating facility from aggregating a residential meter beyond those included in the tax credit for the net metering facility. In response to comments filed by PGE and ODOE, Staff withdrew those proposals. Staff also revised its proposed rules to incorporate IREC's request to clarify that the requirement that meters must be on the same primary feeder is applied only at the time the customer applies for meter aggregation. Staff Comments (May 3, 2011).

b. Resolution

We decline to adopt IREC's recommendation that the customer-generator be allowed complete flexibility to "rank" the aggregated meters. We agree that the ranking parameters included in the proposed rule will minimize rate impacts on other customers.

We adopt PGE's proposal to eliminate the word "primarily" in OAR 860-039-0065(1)(b) to describe the type of energy offset under a net metering arrangement. Staff's proposed use of that word is inconsistent with the term's use in ORS 757.300(1)(d)(D), which uses "primarily" to describe the purpose of the facility to determine whether it is a qualifying net-metering facility. That statute defines a "Net Metering Facility" as "a facility for the production of electrical energy that * * * is intended primarily to offset part or all of the customer-generator's requirements for electricity." Contrary to Staff's suggestion, the term is not used in ORS 757.300(1)(d)(D) to describe the type of energy to be offset.

IV. CONCLUSION

The aggregation of meters on different rate schedules for net metering should be allowed, subject to the rules adopted herein.

V. ORDER

IT IS ORDERED that:

1. The modifications to Oregon Administrative Rules 860-039-0005, 860-039-0010, and 860-039-0065, as set forth in Appendix A, are adopted.

2. The rule modifications become effective upon filing with the Secretary of State.

Made, entered, and effective AUG 30 2011.

John Savage
Commissioner

Susan K. Ackerman
Commissioner

A person may petition the Commission for the amendment or repeal of a rule under ORS 183.390. A person may petition the Court of Appeals to determine the validity of a rule under ORS 183.400.

860-039-0005
Scope and Applicability of Net Metering Facility Rules

(1) OAR 860-039-0010 through 860-039-0080 (the "net metering rules") establish rules governing net metering facilities interconnecting to a public utility as required under ORS 757.300. Net metering is available to a customer-generator only as provided in these rules. These rules do not apply to a public utility that meets the requirements of ORS 757.300(9).

(2) For good cause shown, a person may request the Commission waive any of the net metering facility rules.

(a) A public utility and net metering applicant may mutually agree to reasonable extensions to the required times for notices and submissions of information set forth in these rules for the purpose of allowing efficient and complete review of a net metering application.

(b) If a public utility unilaterally seeks waiver of the timelines set forth in these rules, the Commission must consider the number of pending applications for interconnection review and the type of applications, including review level and facility size.

(3) As used in OAR 860-039-0010 through 860-039-0080:

(a) "ANSI C12.1 standards" means the standards prescribed by the 2001 edition of the American National Standards Institute, Committee C12.1 (ANSI C12.1), entitled "American National Standard for Electric Meters - Code for Electricity Metering," approved by the C12.1 Accredited Standard Committee on July 9, 2001.

(b) "Applicant" means a person who has filed an application to interconnect a net metering facility to an electric distribution system.

(c) "Area network" means a type of electric distribution system served by multiple transformers interconnected in an electrical network circuit in order to provide high reliability of service. This term has the same meaning as the term "secondary grid network" as defined in IEEE standard 1547 Section 4.1.4 (published July 2003).

(d) "Contiguous" means a single area of land that is considered to be contiguous even if there is an intervening public or railroad right of way, provided that rights of way land on which municipal infrastructure facilities exist (such as street lighting, sewerage transmission, and roadway controls) are not considered contiguous.

(**~~d~~e**) "Customer-generator" means **~~a customer-generator as defined in ORS 757.300(1)(a)~~the person who is the user of a net metering facility and who has applied for and been accepted to receive electricity service at a premises from the serving public utility**.

(**e**f) "Electric distribution system" means that portion of an electric system which delivers electricity from transformation points on the transmission system to points of connection at a customer's premises.

(**~~f~~g**) "Equipment package" means a group of components connecting an electric generator with an electric distribution system, and includes all interface equipment including switchgear, inverters, or other interface devices. An equipment package may include an integrated generator or electric production source.

(**g**h) "Fault current" means electrical current that flows through a circuit and is produced by an electrical fault, such as to ground, double-phase to ground, three-phase to ground, phase-to-phase, and three-phase.

(~~h~~i) "Generation capacity" means the nameplate capacity of the power generating device(s). Generation capacity does not include the effects caused by inefficiencies of power conversion or plant parasitic loads.

(~~i~~j) "Good utility practice" means a practice, method, policy, or action engaged in or accepted by a significant portion of the electric industry in a region, which a reasonable utility official would expect, in light of the facts reasonably discernable at the time, to accomplish the desired result reliably, safely and expeditiously.

(~~j~~k) "IEEE standards" means the standards published in the 2003 edition of the Institute of Electrical and Electronics Engineers (IEEE) Standard 1547, entitled "Interconnecting Distributed Resources with Electric Power Systems," approved by the IEEE SA Standards Board on June 12, 2003, and in the 2005 edition of the IEEE Standard 1547.1, entitled "IEEE Standard Conformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems," approved by the IEEE SA Standards Board on June 9, 2005.

(~~k~~L) "Impact study" means an engineering analysis of the probable impact of a net metering facility on the safety and reliability of the public utility's electric distribution system.

(~~l~~m) "Interconnection agreement" means an agreement between a customer-generator and a public utility, which governs the connection of the net metering facility to the electric distribution system, as well as the ongoing operation of the net metering facility after it is connected to the system. An interconnection agreement will follow the standard form agreement developed by the public utility and filed with the Commission.

(~~m~~n) "Interconnection facilities study" means a study conducted by a utility for the customer-generator that determines the additional or upgraded distribution system facilities, the cost of those facilities, and the time schedule required to interconnect the net metering facility to the utility's distribution system.

(~~n~~o) "Net metering facility" means a net metering facility as defined in ORS 757.300(1)(d).

(~~o~~p) "Non-residential customer" means a retail electricity consumer that is not a residential customer, except "non-residential customer" does not include a customer who would be a residential customer but for the residency provisions of subsection (r) of this rule.

(~~p~~q) "Point of common coupling" means the point beyond the customer-generator's meter where the customer-generator facility connects with the electric distribution system.

(~~q~~r) "Public utility" has the meaning set forth in ORS 757.005 and is limited to a public utility that provides electric service.

(~~r~~s) "Residential customer" means a retail electricity consumer that resides at a dwelling primarily used for residential purposes. "Residential customer" does not include retail electricity customers in a dwelling typically used for residency periods of less than 30 days, including hotels, motels, camps, lodges, and clubs. "Dwelling" includes, but is not limited to, single-family dwellings, separately-metered apartments, adult foster homes, manufactured dwellings, and floating homes.

(~~s~~t) "Spot network" means a type of electric distribution system that uses two or more inter-tied transformers protected by network protectors to supply an electrical network

circuit. A spot network may be used to supply power to a single customer or a small group of customers.

(~~t~~**u**) "Written notice" means a required notice sent by the utility via electronic mail if the customer-generator has provided an electronic mail address. If the customer-generator has not provided an electronic mail address, or has requested in writing to be notified by United States mail, or if the utility elects to provide notice by United States mail, then written notices from the utility shall be sent via First Class United States mail. The utility shall be deemed to have fulfilled its duty to respond under these rules on the day it sends the customer-generator notice via electronic mail or deposits such notice in First Class mail. The customer-generator shall be responsible for informing the utility of any changes to its notification address.

Stat. Auth.: ORS 183, 756 & 757
Stats. Implemented: ORS 756.040, 757.300

860-039-0010
Net Metering Kilowatt Limit

(1) For residential customer-**generator**s of a public utility, these rules apply to net metering facilities that have a generating capacity of 25 kilowatts or less.

(2) For non-residential customer-**generator**s of a public utility, these rules apply to net metering facilities that have a generating capacity of two megawatts or less.

(3) Nothing in these rules is intended to limit the number of net metering facilities per customer-generator so long as the net metering facilities in aggregate on the customer-generator's contiguous property do not exceed the applicable kilowatt**/ or** megawatt limit.

Stat. Auth.: ORS 183, 756 & 757
Stats. Implemented: ORS 756.040, 757.300

860-039-0065
Aggregation of Meters for Net Metering

(1) For the purpose of measuring electricity usage under the net metering program, a public utility must, upon request from a customer-generator, aggregate for billing purposes ~~a~~**the** meter ~~**to which the net metering facility**~~**that** is physically attached **to the net metering facility** ("designated meter") with one or more meters ("~~**additional**~~**aggregated** meter") in the manner set out in this ~~**section**~~**rule**. This rule is mandatory upon the public utility only when:

(a) The ~~additional~~ **aggregated** meter**s** ~~**is**~~**are** located on the customer-generator's ~~**contiguous**~~ **premises or** property **that is contiguous to such premises**;

(b) The ~~**additional meter is used to measure only electricity used**~~ **electricity recorded by the designated meter and any aggregated meters is** for the customer-generator's requirements**, and**;

(c) ~~**The designated meter and the additional meter are subject to the same rate schedule; and**~~

~~**(d)**~~ The designated meter and ~~**the additional**~~ **the aggregated** meter**s** are served by the same primary feeder **at the time of application**.

(2) When a customer-generator aggregates one or more meters that are subject to a different rate schedule than the designated meter, the facilities capacity limit in OAR 860-039-0010 is determined by the rate applicable to the designated meter.

(**3~~2~~**) A customer-generator must give at least 60 days notice to the utility to request that additional meters be included in meter aggregation. The specific meters must be identified at the time of such request. In the event that more than one additional meter is identified, the customer-generator must designate the rank order for the **~~additional~~aggregated** meters to which net metering credits are to be applied, **~~in accordance with section (4)~~ and must rank aggregated meters subject to the same rate schedule as the designated meter above any other meters. At least 60 days in advance of the beginning of the next annual billing period, a customer-generator may amend the rank order of the aggregated meters, subject to the requirements of this rule.**

(**3~~4~~**) The aggregation of meters will apply only to charges that use kilowatt-hours as the billing determinant. All other charges applicable to each meter account will be billed to the customer-generator.

(**4~~5~~**) **The utility will first apply the kWh credit to the charges for the designated meter and then to the charges for the aggregated meters in the rank order specified by the customer-generator.** If in a monthly billing period the net metering facility supplies more electricity to the public utility than the energy usage recorded by the customer-generator's designated **and aggregated** meter**s**, the utility will apply credits to the next monthly bill for the excess kilowatt-hours first to the designated meter, then to **~~additional~~aggregated** meters **in the rank order specified by the customer-generator.~~that have the same charges as the designated meter, and finally to other additional meters.~~ Public utilities subject to ORS 757.300(2) through (8) must specify in tariffs how the kWh credits will be applied when rate schedules have non-uniform kWh charges.**

~~(5) If an additional meter changes service to a rate schedule that is different than the designated meter, the additional meter is not eligible for net metering credits for the remainder of the billing year and until such time as the additional meter receives service on the same rate schedule as the designated meter.~~

~~(6) If the designated meter changes service to a different rate schedule, aggregation of net metering credits is not allowed for the remainder of the billing year and may not occur until such time as the additional meters receive service on the same rate schedule as the designated meter.~~

(**7~~6~~**) With the Commission's prior approval, a public utility may charge the customer-generator requesting to aggregate meters a reasonable fee to cover the administrative costs of this provision pursuant to a tariff approved by the Commission.

Stat. Auth.: ORS 183, 756 & 757
Stats. Implemented: ORS 756.040, 757.300