

PUBLIC UTILITY COMMISSION OF OREGON
STAFF REPORT
PUBLIC MEETING DATE: August 6, 2013

REGULAR X CONSENT _____ EFFECTIVE DATE August 6, 2013

DATE: July 29, 2013

TO: Public Utility Commission

FROM: Ryan Bracken *RB*

THROUGH: Jason Eisdorfer *E*, Maury Galbraith *MG*, and Aster Adams *AA*

SUBJECT: OREGON PUBLIC UTILITY COMMISSION STAFF: (Docket No. UM 1631) Request for a waiver of the size limits for a photovoltaic solar system for a residential customer.

STAFF RECOMMENDATION:

Staff recommends the Commission grant the customer's request for a waiver of the size limit for a residential solar system for net metering (limits are detailed in OAR 860-039-0010(1)).

DISCUSSION:

On June 14, 2013, Dr. William Mooney (34567 SW Bald Peak Rd. Hillsboro, OR 97123) filed a request under OAR 860-039-0005(2) for the Commission to waive the size limit under OAR 860-039-0010(1) for his planned 55 kilowatt DC ground mount system. OAR 860-039-0010(1) lays out the net metering size limits and states:

Net Metering Kilowatt Limit

(1) For residential customer-generators 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-generators 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.

OAR 860-039-0005(2) allows for a waiver of the net metering rules for good cause.¹

Three potential concerns related to waiving the size limits are: (i) the appearance that statutes and rules are being unevenly applied; (ii) the modifications to the distribution system to accommodate the larger system are too costly; and (iii) rate concerns associated with a net metering customer generating electricity far in excess of personal use. Staff finds that while these concerns apply generally, the only one that may apply in this case is the first concern. Additionally, there are special circumstances in this case that provide good cause to grant the waiver, including events that led the customer to make a large investment in a system that may amount to a major loss if the waiver is not granted. Consequently, Staff recommends that the Commission find there is good cause in this case to grant the waiver. PGE does not object to this recommendation. A more detailed explanation of the circumstances that led to this conclusion is provided below.

Why the system is fully constructed already:

The following timeline helps explain why the customer and their installer have already constructed the system:

- **April 16, 2013:** PGE residential customer William Mooney's PV system installer submits a net metering application to PGE staff for a Level 2 interconnection for a 55.00 kW Photovoltaic system.²
- **May 1, 2013:** PGE approves the Level 2 Interconnection application.
- **May 31, 2013:** The customer decides to change solar module manufacturers and his installer submits a new Level 2 interconnection application to PGE for the new system design, which is a 55 kW system like the design that was already approved.
- **June 3, 2013:** Construction of the system begins.³

¹ The Legislative Assembly has authorized the Commission to adopt administrative rules regarding the net metering size limits. ORS 757.300(8) states "(t)his section applies only to net metering facilities that have a generating capacity of 25 kilowatts or less, except that the commission by rule may provide for a higher limit for customers of a public utility." OAR 860-039-0010(1) establishes the capacity limits and OAR 869-039-0005(2) allows for a waiver to these limits.

² Level 2 Interconnections are typically for non-residential customers and are for systems between 25 and 500kW.

- **June 12, 2013:** PGE emails the customer informing him that the second application cannot be approved due to the net metering size limits detailed in the administrative rule and advises the customer to seek a waiver to the rule so that the application may be approved.
- **June 14, 2013:** The customer files a petition for the waiver with OPUC.

The following is PGE's explanation to Staff for why the original application was approved *before* the customer was advised to obtain a waiver to the administrative rules:

The Level 2 interconnection request for William Mooney was initiated outside of the normal procedures for customers contacting PGE about net metered generation. Instead of contacting PGE's net metering representatives, Mr. Mooney's contractor contacted a PGE Service and Design Project Manager (SDPM) to review the proposed interconnection. The SDPM referred the request to a distribution engineer who found that no major modifications were necessary on PGE's system to accommodate the 55 kW of solar generation. This was solely an engineering analysis and did not consider the rules applicable to net metering. The request was then transferred to PGE's net metering representatives. Due to an oversight in processing PGE approved the interconnection in an email that was sent to Mr. Mooney on May 1, 2013.

Note that if Dr. Mooney had not decided to change module manufacturers and submit a second Level 2 application, he would have been in the position of having already obtained approval from PGE for interconnection and begun constructing the system without being advised that a waiver to OAR 860-039-0010(1) would be necessary.⁴

On the customer's end, Dr. Mooney and the contractor have the responsibility to understand all applicable laws and regulations as well as PGE's net metering tariff.⁵ Therefore, the customer -- and particularly the customer's installer -- should have been aware of the system size limitation in OAR 860-039-0010(1). Additionally, while it was

³ From the information on PGE's website it follows that a customer would begin construction of a system after obtaining an interconnection application approval.

⁴ Or the residential limit issue may have gone unnoticed and the net metering agreement could have commenced without a waiver in violation of the administrative rules.

⁵ This is particularly true when one considers that the relevant statutes and administrative rules are clearly referenced in PGE's interconnection application and net metering agreement paperwork that the customer filled out and filed with PGE.

reasonable for the customer and the contractor to assume that the new application would be approved by PGE given that the original system design was the same size, they should have waited until the second application was approved before commencing with construction.

As it is, the system installation is complete and the contracted price of the system was \$171,600. Staff is not of the opinion that either the customer or the installer knowingly sought to circumvent applicable rules by constructing a system that exceeded the size limit. However, Staff would like to point out that by constructing the system they have put themselves in a position where it is possible they may take a loss on a very large investment.

Why technical and rate concerns are not relevant in this case:

It is worth noting that the different size limits for net metering are partially in place due to technical considerations about the distribution system. The residential size limit was set at an amount that is consistent with typical residential demand. Order No. 07-319 at 5, Docket AR 515. Major modifications to the distribution system would typically be required so that a residential customer could install a PV system for net metering that is as large as that installed by Dr. Mooney.

However, the Mooneys are not typical residential customers as the property (34567 SW Bald Peak Rd. Hillsboro, OR 97123) is 38 acres and zoned for forestry and agriculture, as stated in Dr. Mooney's petition. Due to the high electric usage of the property, the service entering the residence is much larger than that of the typical residential customer. Therefore, as is noted in PGE's explanation quoted above, PGE's system can handle the Mooney's system without significant modifications. Specifically, the Mooney property has a dedicated 50 kVa transformer. For comparison, in the Milwaukie area in Portland, the number of customers per 50 kVA transformer ranges from 7 to 15.

Also, because the annual expected output of a 55 kW system in the Portland area is roughly 55,000 kWh per year, it is unlikely the customer would generate more power than he uses over the year.⁶ The customer used 61,500 kWh of electricity in 2012 (more than five times the usage of the average residential customer in Oregon) and their power usage is expected to grow substantially in the near future based on Dr. Mooney's petition, which states that he and his spouse will open a recently built horse arena and barn with stalls, as well as commence wine production from their recently planted vineyard.

⁶ This may not be the case in each month.

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Given the foregoing and that (i) PGE has no concerns about the distribution system in this case, (ii) the system will primarily be used to generate electricity used on the property, (iii) the customer is not a typical "residential" customer, and (iv) PGE had initially approved the interconnection before the customer began construction of the system, Staff recommends that the waiver be granted based on a finding of good cause.

PROPOSED COMMISSION MOTION:

Approve the customer's request under OAR 860-039-0005(2) to waive the residential customer net metering solar system size limit of 25 kW in OAR 860-039-0010(1).