#### BEFORE THE PUBLIC UTILITY COMMISSION

### **OF OREGON**

AR 613

In the Matter of

Rulemaking to Repeal the Minimum Solar Energy Capacity Standard for Electric Companies. **ORDER** 

DISPOSITION: STAFF'S RECOMMENDATION ADOPTED

This order memorializes our decision, made and effective at our April 10, 2018 Regular Public Meeting, to adopt Staff's recommendation in this matter. The Staff Report with the recommendation is attached as Appendix A.

Dated this <u>//</u> day of April, 2018, at Salem, Oregon.

Lisa D. Hardie

Chair

Stephen M. Bloom

Commissioner

Megan W. Decker

Commissioner

A party may request rehearing or reconsideration of this order under ORS 756.561. A request for rehearing or reconsideration must be filed with the Commission within 60 days of the date of service of this order. The request must comply with the requirements in OAR 860-001-0720. A copy of the request must also be served on each party to the proceedings as provided in OAR 860-001-0180(2). A party may appeal this order by filing a petition for review with the Circuit Court for Marion County in compliance with ORS 183.484.



ITEM NO. RM3

# PUBLIC UTILITY COMMISSION OF OREGON AHD REPORT PUBLIC MEETING DATE: April 10, 2018

REGULAR	CONSENT X EFFECTIVE DATEN/A
DATE:	March 27, 2018
то:	Public Utility Commission
FROM:	Diane Davis 199
THROUGH:	Michael Grant M <sup>(q)</sup>
SUBJECT:	OREGON PUBLIC UTILITY COMMISSION ADMINISTRATIVE HEARINGS DIVISION: (Docket No. AR 613) Repeals Minimum Solar Energy Capacity Standard for Electric Companies in Division 084 Rules.

# AHD RECOMMENDATION:

Adopt the proposed permanent rule changes in the attached draft order.

# **DISCUSSION:**

This rulemaking repeals the minimum solar capacity energy standard for electric companies in the Division 084 administrative rules to comport with legislative changes in Chapter 28, Oregon Laws 2016 (SB 1547).

No comments were received from the public in response to the Notice of Proposed Rulemaking filed with the Secretary of State on January 31, 2018.

#### PROPOSED COMMISSION MOTION:

Adopt permanent Division 084 rule changes as set forth in Appendix A of the attached draft order.

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**ENTERED** 

# BEFORE THE PUBLIC UTILITY COMMISSION

# OF OREGON

AR 613

In the Matter of Rulemaking to Repeal the Minimum Solar Energy Capacity Standard for Electric Companies.

**ORDER** 

DISPOSITION: RULE CHANGES ADOPTED

#### I. INTRODUCTION

We opened this rulemaking to repeal the minimum solar energy capacity standard for electric companies in Division 084 of our administrative rules to comport with the repeal of the solar energy capacity standard in Oregon law accomplished in Chapter 28, Oregon Laws 2016 (SB 1547).

#### II. BACKGROUND

As a part of its renewable portfolio standards informal discussions with stakeholders, Staff received informal comment from stakeholders regarding the repeal of the administrative rules related to the minimum solar energy capacity standard. On January 31, 2018, we filed a Notice of Proposed Rulemaking and Statement of Need and Fiscal Impact for this rulemaking with the Secretary of State, and we provided notice to all interested persons on the service lists established under OAR 860-001-0030(1)(b) and to legislators specified in ORS 183.335(1)(d). Notice of the rulemaking was published in the February 2018 *Oregon Bulletin*, establishing a comment due date of March 21, 2018. No comments were received in response to the Notice.

These proposed rule changes reflect the repeal of the minimum solar energy capacity standard as set forth in the 2016 Oregon legislation, codified in Chapter 28, Oregon Laws 2016 (SB 1547). We adopt the rules additions and changes as proposed.

#### III. ORDER

# IT IS ORDERED that:

1. The Division 084 rule modifications are adopted as set forth in Appendix A to this order.

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2. The rule	s changes become effective u	upon filing with the Secretary of State.
Aade, entered, a	and effective	·
	<b>Lisa Hardie</b> Chair	Stephen M. Bloom Commissioner
		Megan W. Decker Commissioner

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

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#### 860-084-0000

# Scope and Applicability of Solar Photovoltaic Programs

- (1) OAR 860-084-00270 through 860-084-0080 ("the Solar Photovoltaic Capacity Standard") govern implementation of programs requiring electric company installation of governs credit towards compliance with renewable portfolio standard for electricity produced from solar photovoltaic eapacitenergy.
- (2) OAR 860-084-0100 through 860-084-0450 (the "Solar Photovoltaic Pilot Programs") govern implementation of pilot programs to demonstrate the use and effectiveness of volumetric incentive rates and payments for electricity delivered from solar photovoltaic energy systems.
- (3) Upon request or its own motion, the Commission may waive any of the Division 084 rules for good cause shown. A request for waiver must be made in writing, unless otherwise allowed by the Commission.

Stat Auth: ORS 757.360 - 757.380

Stats. Implemented: ORS 757.360 - 757.380

Hist: PUC 2-2010, f. & cert. ef. 06-01-10 (Order No. 10-200); PUC 6-2011, f. & cert. ef. 9-14-11

(Order No. 11-346)

#### 860-084-0010

# Definitions for Solar Photovoltaic Capacity Standard and Pilot Programs

- (1) "Contracted system" means an eligible system under contract in the solar photovoltaic pilot program associated with a single meter.
  - (2) "Electric company" has the meaning given that term in ORS 757.600.
- (3) "Eligible consumer" means a retail electricity consumer receiving service at the property where the solar photovoltaic system will be installed.
- (4) "Eligible energy" or "eligible generation" means the kilowatt-hours that may be paid at the volumetric incentive rate. For the net metering option of the pilot program, eligible energy is equal to the usage of the retail electricity consumer in the year that the energy is generated by the eligible system. In a given month, this eligible energy is equal to the actual usage of the retail electricity consumer for that month. For the bidding option of the pilot program, eligible energy equals actual generation, net of system requirements.
- (5) "Eligible participant" or "participant" means an eligible consumer who has signed a contract with the electric company and is participating in the pilot program. A regulated utility is not an eligible participant in pilot programs.
- (6) "Eligible system" means a qualifying system that meets the requirements of OAR 860-084-0120.
- (7) "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.
- (8) "Excess energy" or "excess generation" means the kilowatt-hours generated in excess of actual annual usage under the net metering option of the volumetric incentive rate pilot program. In a given month, excess energy means kilowatt-hours generated in excess of monthly usage.
- (9) "IEEE standards" means the standards published in the 2003 edition of the Institute of Electrical and Electronics Engineers (IEEE) Standard 1547, titled "Interconnecting Distributed Resources with Electric Power Systems," approved by the IEEE SA Standards Board on June 12,

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2003, and in the 2005 edition of the IEEE Standard 1547.1, titled "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.

(10) "Installed System" means an eligible system that is completely built, has passed final electrical inspection by the local authority with jurisdiction, and is pending completion of utility

work to connect it to the utility grid.

(11) "Nameplate capacity" means the maximum rated output of a solar photovoltaic system, measured at an irradiance level of 1000 W/ m², with reference air mass 1.5 solar spectral irradiance distribution and cell or module junction temperature of 25°C.

(12) "On-line" means that the solar photovoltaic system is installed and providing power to the electric company's electrical system or to serve the load of the retail electricity consumer.

(13) "Payable generation" is the eligible generation for each month plus accrued excess generation, up to the actual monthly usage. Excess generation accrues monthly.

(14) "Pilot capacity limit" means the maximum installed capacity that each electric company may contract during the pilot program.

(15) "Pilot year" means each twelve-month period of the solar photovoltaic pilot program

beginning on April 1 and ending on March 31.

- (16) "Qualifying assignee" or "assignee" means a person to whom a retail electricity consumer may assign volumetric incentive rate payments under the standard contract. An electric company or its affiliate or any other regulated utility is not a qualifying assignee. Qualifying assignees include, but are not limited to:
  - (a) A lender providing up-front financing to a retail electricity consumer;
- (b) A company or individual who enters into a financial agreement with a retail electricity consumer to own and operate a solar photovoltaic system on behalf of the retail electricity consumer in return for compensation;
- (c) A company or individual who contracts with the retail electricity consumer to locate a solar photovoltaic system on property owned by the retail electricity consumer; or

(d) Any party identified by the retail electricity consumer to receive payments that the electric company is obligated to pay to the retail electricity consumer.

(17) "Qualifying third party" or "third party" means a party who is the owner or operator of a solar photovoltaic system installed under the pilot program but who is not the retail electricity consumer at that location. An electric company is not a qualifying third party under the pilot programs.

(18) "Reservation start date" means the date the retail electricity consumer is notified of securing capacity through a capacity reservation process and of the start and expiration dates for that capacity reservation. The reservation start date initiates the time to interconnection

agreement.

- (19) "Retail electricity consumer" means a consumer who is a direct customer of the electric company and is the end user of electricity for specific purposes, such as heating, lighting, or operating equipment. Retail electricity consumers include direct access consumers.
- (20) "System requirements" means the input electricity required to operate the solar photovoltaic system, sometimes referred to as the parasitic load.
- (21) "Time to interconnection agreement" means the time between the reservation start date and the date an eligible participant signs an interconnection agreement.

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- (22) "Volumetric incentive payments" or "payments" mean the monthly amount that an electric company pays to an eligible participant or assignee in the solar photovoltaic pilot program for payable energy generated by a contracted system.
- (23) "Volumetric incentive rate" means the rate per kilowatt-hour paid by an electric company to a retail electricity consumer or assignee for payable generation.

Stat Auth: ORS 757.360 - 757.380

Stats. Implemented: ORS 757.360 - 757.380

Hist.: PUC 2-2010, f. & cert. ef. 6-1-10 (Order No. 10-200); PUC 7-2011, f. & cert. ef. 9-30-11 (Order

No. 11-381)

# Solar Photovoltaic Capacity Standard

#### 860-084-0020

# Solar Photovoltaic Capacity Standard

By January 1, 2020, each electric company must own or contract to purchase the capacity and output of qualifying solar photovoltaic systems to meet and maintain the following minimum solar photovoltaic capacity standards:

- (1) Portland General Electric: 10.9 megawatts
- (2) Pacific Power: 8.7 megawatts
- (3) Idaho Power Company: 0.5 megawatts.

Stat Auth: ORS 757.360 - 757.380

Stats. Implemented: ORS 757.360 - 757.380

Hist.: PUC 2-2010, f. & cert. ef. 6-1-10 (Order No. 10-200); PUC 7-2011, f. & cert. ef. 9-30-11 (Order No. 11-381)

#### 860-084-0030

#### Qualifying Systems under the Solar Photovoltaic Capacity Standard

Individual solar photovoltaic systems used to comply with the solar photovoltaic capacity standards in OAR 860 084 0020 must have a nameplate generating capacity greater than or equal to 500 kilowatts and less than or equal to 5 megawatts.

Stat Auth: ORS 757.360 757.380

Stats. Implemented: ORS 757.360 - 757.380

Hist.: PUC 2-2010, f. & cert. ef. 6-1-10 (Order No. 10-200); PUC 7-2011, f. & cert. ef. 9-30-11 (Order No. 11-381)

#### 860-084-0040

# Measurement of Capacity under the Solar Photovoltaic Capacity Standard

- (1) The capacity of solar photovoltaic systems used to satisfy the requirements of OAR 860-084-0020 must be measured on the alternating current side of the system's inverter.
- (2) Each electric company must convert nameplate capacity ratings reported by manufacturers in terms of direct current watts under standard test conditions to an alternating current rating in watts to account for inverter and other system component losses and to account for the effect of normal operating temperature on solar module output. This conversion will be calculated as 85 percent of the manufacturer's nameplate rating.

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Stat Auth: ORS 757.360 - 757.380 Stats. Implemented: ORS 757.360 - 757.380 Hist.: PUC 2 2010, f. & cert. ef. 6-1-10 (Order No. 10-200); PUC 7 2011, f. & cert. ef. 9-30-11 (Order No. 11-381)

#### 860-084-0050

Compliance Report

- (1) By February 1, 2020, each electric company must file a report with the Commission demonstrating compliance, or explaining in detail any failure to comply, with the solar photovoltaic capacity standards in OAR 860-084-0020.
- (2) The report required in section (1) of this rule must include the following information associated with each solar photovoltaic system:
  - (a) The name of the facility;
  - (b) The location of the facility;
  - (c) The in-service date of the facility;
  - (d) The manufacturer's nameplate capacity rating;
- (e) The electric company's capacity rating on the alternating current side of the system's inverter;
  - (f) The execution date of any associated power purchase agreement; and
- (g) The contracted capacity and output delivery period of any associated power purchase agreement.

Stat Auth: ORS 757.360 - 757.380 Stats. Implemented: ORS 757.360 - 757.380 Hist.: PUC 2-2010, f. & cert. ef. 6-1-10 (Order No. 10-200); PUC 7-2011, f. & cert. ef. 9-30-11 (Order No. 11-381)

#### 860-084-0060

#### Cost Recovery

An electric company may request recovery of its prudently incurred costs to comply with the solar photovoltaic capacity standard specified in OAR 860-084-0020 in an automatic adjustment clause proceeding filed at the Commission pursuant to ORS 469A.120.

Stat Auth: ORS 757.360 - 757.380 Stats. Implemented: ORS 757.360 - 757.380 Hist: PUC 2-2010, f. & cert. ef. 06-01-10 (Order No. 10-200)

#### 860-084-0070

# Renewable Energy Certificates and Compliance with the Renewable Portfolio Standards

- (1) Each renewable energy certificate associated with the electricity produced by solar photovoltaic systems used to meet the minimum solar photovoltaic capacity standards in OAR 860-084-0020 that is physically located in this state may be used to comply with the renewable portfolio standards established under ORS 469A.005 through ORS 469A.120.
- (2) Each renewable energy certificate associated with the electricity produced by solar photovoltaic systems may be counted twice to comply with the renewable portfolio standards established under ORS 469A.005 through ORS 469A.120, if the For each kilowatt-hour of electricity produced from a qualifying solar photovoltaic systems:

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- (a) Fenergy system that first becomes operational before January 1, 2016;
- (b) Are installed in Oregon; and
- (c) Meet the solar photovoltaic capacity standards in OAR 860 084 0020.
- (3) Renewable energy certificates used under sections (1) and (2) of this rule must and has a nameplate capacity between 500 kilowatts and five megawatts of alternating current, the electric company may be credited with two kilowatt-hours of qualifying electricity toward the electric company's complyiance with the standards in OAR 860-083-0050 renewable portfolio standard, up to a maximum of 20 megawatts of capacity.

Stat Auth: ORS 757.360 - 757.380

Stats. Implemented: ORS 757.360 - 757.380

Hist.: PUC 2-2010, f. & cert. ef. 6-1-10 (Order No. 10-200); PUC 7-2011, f. & cert. ef. 9-30-11 (Order

No. 11-381)

#### 860-084-0080

#### **Implementation Plans**

Each electric company must incorporate its plan to achieve, or exceed, and maintain the minimum solar photovoltaic capacity standards specified in OAR 860-084-0020 into its renewable portfolio standard implementation plans filed pursuant to OAR 860-083-0400.

Stat Auth: ORS 757.360 757.380

Stats. Implemented: ORS 757.360 757.380

Hist: PUC 2-2010, f. & cert. ef. 06-01-10 (Order No. 10-200)

#### 860-084-0120

#### Systems Eligible for Enrollment in Pilot Programs

- (1) Individual solar photovoltaic systems eligible for the Solar Photovoltaic Pilot Programs must have a nameplate generating capacity less than or equal to 500 kilowatts and must be:
- (a) In compliance with the siting, design, interconnection, installation, and electric output standards and codes required by the laws of Oregon;
- (b) Installed with meters or other devices to monitor and measure the quantity of energy generated;
- (c) Permanently installed in the State of Oregon by a retail electricity consumer of the electric company;
  - (d) Installed in the service territory of the electric company;
  - (e) First operational and on-line after the launch of the pilot programs;
- (f) Financed without expenditures under ORS 757.612 (3)(b)(B) or tax credits under ORS 469.160 or ORS 469.185 through 469.225;
- (g) Certified by the residential electric consumer as constructed from new components (modules, inverter, batteries, mounting hardware, etc.); and
- (h) Compliant with Commission quality and reliability requirements for solar photovoltaic systems and system installation.
- (2) Systems uninstalled before the end of the contract term are not eligible for subsequent volumetric incentive rates, other feed-in tariffs, or pilot programs during the remainder of the original contract term. These systems cannot be reinstalled for the purposes of entering a new

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contract under any solar photovoltaic pilot program, volumetric incentive or other feed-in tariff program in the service territory of any electric company in the State of Oregon during the original contract term of the system, except that a system may be uninstalled and reinstalled at another location under the same contract under the conditions in OAR 860-084-0280.

(3) Retail electricity consumers submitting applications for a 500 kilowatt project are not eligible to reserve capacity in the solar photovoltaic pilot program if the same project is also competing for a purchased power agreement under the solar capacity standard in OAR 860-084-0020.

Stat Auth: ORS 757.360 - 757.380

Stats. Implemented: ORS 757.360 - 757.380

Hist.: PUC 2-2010, f. & cert. ef. 6-1-10 (Order No. 10-200); PUC 7-2011, f. & cert. ef. 9-30-11 (Order

No. 11-381)