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June 30, 2017

Via Electronic Filing

Public Utility Commission of Oregon
Filing Center
201 High St SE, Suite 100
PO Box 1088
Salem OR 97308-1088

Re: **UM ____ – PORTLAND GENERAL ELECTRIC COMPANY's Application to Lower the Standard Price and Standard Contract Eligibility Cap for Solar Qualifying Facilities**

Attention Filing Center:

Enclosed for filing is an electronic copy of Portland General Electric Company's (PGE) Application to Lower the Standard Price and Standard Contract Eligibility Cap for Solar Qualifying Facilities (QFs). Concurrent with this filing, we are making the following related filings:

1. Testimony of Brett Sims and Robert Macfarlane and Exhibits in support of application and PGE's motion for interim relief; and

2. Motion for Interim Relief.

Thank you in advance for your assistance.

Sincerely,

V. Denise Saunders
Associate General Counsel

VDS:bop

Enclosures

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

UM ____

In the Matter of PORTLAND GENERAL ELECTRIC COMPANY Application to Lower the Standard Price and Standard Contract Eligibility Cap for Solar Qualifying Facilities.	**APPLICATION TO LOWER THE STANDARD PRICE AND STANDARD CONTRACT ELIGIBILITY CAP FOR SOLAR QUALIFYING FACILITIES**

I. INTRODUCTION

Pursuant to OAR 860-001-0400(2) and ORS 758.535(2), Portland General Electric Company ("PGE") respectfully requests that the Public Utility Commission of Oregon ("Commission") issue an order modifying the terms and conditions under which PGE enters into power purchase agreements with qualifying facilities ("QFs") pursuant to the Public Utility Regulatory Policies Act of 1978 ("PURPA"). Specifically, PGE requests that the Commission:

1. Lower from 10 megawatts ("MW") to 3 MW the eligibility cap for a solar QF project to obtain standard avoided cost prices ("standard prices") from PGE;

2. Declare that a solar QF project with capacity above 100 kilowatts ("kW") is not eligible for a standard contract or standard prices from PGE if any owner of the solar QF project has requested or obtained standard prices from PGE for more than 10 MW of solar QF capacity;

3. Alternatively, lower to 2 MW the eligibility cap for a solar QF project to obtain standard prices from PGE.

PGE has contemporaneously filed a motion for interim relief asking the Commission to immediately and temporarily approve the forms of relief requested in this application to protect PGE's customers from substantial and irreparable harm while the Commission considers this application and decides whether to grant permanent relief.

A. Lower Eligibility Cap from 10 MW to 3 MW

PGE's first request is for the same relief the Commission gave to Idaho Power Company ("Idaho Power") and PacifiCorp in March 2016. In Order No. 16-129 and Order No. 16-130 the Commission lowered from 10 MW to 3 MW the eligibility cap for solar QF projects to obtain standard prices from Idaho Power and PacifiCorp.[1] The Commission did so because Idaho Power and PacifiCorp were facing "unprecedented growth" in solar QF activity.[2] PGE is now facing an even greater increase in solar QF activity.

In the last three years, the amount of QF capacity under contract to PGE has grown seven-fold—from 68 MW to 467.5 MW.[3] More importantly, PGE now faces requests for new contracts from 41 solar QF projects with combined output of 417.2 MW.[4] This is 70% *more* solar QF activity than Idaho Power experienced when it filed for and obtained relief in UM 1725 and *at least equal* to the level of solar QF activity experienced by PacifiCorp when it filed for and obtained relief in UM 1734.[5] To address this remarkable level of solar QF activity, it is essential that the Commission authorize PGE to enter into contracts with avoided cost prices that are as accurate as possible.

Allowing PGE to negotiate project-specific avoided cost prices across a wider portion of its PURPA contract base protects PGE customers from paying avoided costs prices well in excess of market. At the very least, the Commission should grant PGE the relief it granted Idaho Power and PacifiCorp when they were experiencing significant growth in solar QF activity and reduce to 3 MW the eligibility cap on standard prices for solar QF projects.

[1] Docket No. UM 1725, Order No. 11-129 at 6 (Mar. 29, 2016); Docket No. UM 1734, Order No. 16-130 at 5 (Mar. 29, 2016).
[2] Docket No. UM 1725, Order No. 11-129 at 4 (Mar. 29, 2016); Docket No. UM 1734, Order No. 16-130 at 4 (Mar. 29, 2016).
[3] Sims – Macfarlane/2.
[4] PGE/102, Sims – Macfarlane/9.
[5] Sims – Macfarlane/9.

B. Eligibility Threshold for Aggregated Contracts

While a reduction in the eligibility cap to 3 MW is necessary, it is not sufficient to adequately address the circumstances faced by PGE. From PGE's own experience, and from the experience of Idaho Power after the Commission granted interim relief in UM 1725, it is clear that sophisticated developers are organizing extensive portfolios of solar QF generation—with tens or hundreds of megawatts of aggregate capacity—into multiple projects that are small enough to qualify for standard prices.[6]

For example, PGE has a single developer who has requested or obtained standard contracts for 14 solar QF projects sized at approximately 2.2 MW each for a combined output of 30.1 MW.[7] PGE currently has six developers who are seeking or have obtained standard contracts for multiple solar QF projects sized at or below 3 MW with combined output of 92.8 MW.[8] This demonstrates that PGE is confronted with sophisticated developers who propose dozens of megawatts of solar QF output in increments of 3 MW or less that would qualify for standard prices even if the eligibility cap for standard prices is reduced to 3 MW.

In effect, experienced developers with the expertise and resources to negotiate project-specific prices are taking advantage of standard prices. As a result, PGE's customers are forced to incur more than actual avoided costs when the developer is perfectly capable of negotiating more accurate avoided cost prices. From PGE's perspective, there are about a dozen sophisticated developers who are gaming the system and exposing PGE's customers to millions of dollars of inappropriate cost by obtaining standard contracts and standard prices on hundreds of megawatts of aggregate solar QF generation. PGE asks the Commission to put an end to this behavior by imposing an additional eligibility criterion for standard prices. Specifically, a requirement that a solar QF project larger than 100 kW must negotiate a contract, including a project-specific

[6] *See* Docket No. UM 1725, Order No. 15-230 at 2 (noting that developers with pending requests for contract sought to reduce the capacity of nine proposed projects from 5 MW or 10 MW to 3 MW in order to qualify for Idaho Power's newly established interim eligibility cap of 3 MW); *see also*, Sims – Macfarlane/10-11.
[7] PGE/104 (Developer R).
[8] PGE/104, Sims – Macfarlane/8.

avoided cost price, if any owner of the project has requested or obtained standard prices from PGE for more than 10 MW of aggregate solar QF capacity.

C. Alternative Eligibility Cap Reduction from 10 MW to 2 MW

In the alternative, if the Commission decides not to grant both a 3 MW individual project eligibility cap and a 10 MW aggregate eligibility cap, then PGE requests the Commission lower to 2 MW the standard price eligibility cap for all solar QF projects. This relief would be less effective than a 3 MW individual project cap and a 10 MW aggregate cap because a developer could propose six or more 2 MW projects and obtain standard prices and contracts for more than 10 MW worth of aggregate solar QF output. But at least a 2 MW eligibility cap would address the current problem faced by PGE where single sophisticated developers are entitled to standard contracts and standard prices on dozens of megawatts of solar QF output that is organized into multiple 2.2 MW or 2.4 MW projects.[9]

PGE estimates that under a standard solar QF contract with current standard prices fixed for 15 years, PGE is required to pay approximately $30/MWh more than market for solar QF output.[10] PGE is facing requests for standard PURPA contracts from 41 solar QF projects with combined output of 417.2 MW or approximately 13.2 million MWh over 15 years.[11] Unless the Commission grants the relief requested in this application and authorizes PGE to negotiate project-specific prices with these projects, PGE's customers are at risk of paying approximately $545 million more than market prices over 15 years[12] for the 417.2 MW of solar QF output currently seeking contracts from PGE.[13]

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[9] As of June 5, 2017, PGE had pending requests for contracts from four developers who were each seeking more than 10 MW worth of standard contracts for 16 proposed solar QF projects at approximately 2.2 MW each. When combined with the already contracted solar QF projects of that size, this represents total proposed output of 92.8 MW from six developers which would qualify for standard prices under a 3 MW individual project cap but which would be required to negotiate a contract and prices under PGE's proposed 10 MW aggregate cap for solar QF projects. *See* Sims – Macfarlane/8.

[10] PGE/107, Sims – Macfarlane/13.

[11] Sims – Macfarlane/13.

[12] PGE has used a 15-year period for this analysis because Order No. 05-584 provides that the maximum term of a standard contract is 20 years with fixed prices limited to the first 15 years of the 20-year term. Docket No. UM 1129, Order No. 05-584 at 20 (May 13, 2005). The actual period during which a QF receives fixed prices may be shorter than 15 years if the QF needs to use the first months or years of a standard contract term to construct the project and achieve

D. Supporting Testimony and Exhibits

Accompanying this application is the testimony of PGE witnesses Robert Macfarlane and Brett Sims, which summarizes PGE's request, discusses the purpose of PURPA, describes the development of PURPA QF generation on PGE's system and the current status of contract requests, and describes how customers are harmed by the current 10 MW standard price cap. The testimony of Mr. Macfarlane and Mr. Sims is submitted in support of this application and PGE's motion for interim relief; the testimony presents several Exhibits containing supporting information.

II. NOTICE

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III. LEGAL CONTEXT

A. PURPA

Under PURPA, an electric utility is required to purchase all electric energy made available by QFs at rates that do not exceed "the incremental cost to the electric utility of alternative electric energy."[14] The incremental cost to the utility means the amount it would cost

commercial operation. Alternatively, if the complainants in UM 1805 obtain the relief they have requested, PGE will be required to offer fixed standard prices for a period that could be as long as 19 years after a contract is executed, which would lead to even higher cost impacts on PGE's customers.

[13] PGE/107, Sims – Macfarlane/13.

[14] 16 U.S.C. § 824a-3(b)(2).

the utility to generate or purchase the electric energy but for the purchase from the QF.[15] The incremental cost standard is intended to leave a purchasing utility's customers economically indifferent to the source of a utility's energy supply by ensuring that the cost to the utility of purchasing power from a QF does not exceed the cost the utility would incur without the QF purchase.[16]

In 1980, the Federal Energy Regulatory Commission ("FERC") promulgated rules implementing PURPA and defining the "the incremental cost of alternative electric energy" as the utility's "avoided costs."[17] PURPA delegates to state commissions the responsibility to set or approve avoided costs and to establish the terms and conditions of PURPA contracts.[18] The Oregon Legislature has charged the Commission with approving avoided cost rates and establishing the terms and conditions for a utility's purchase of energy from a QF.[19] The Commission has issued orders setting the eligibility threshold for standard contracts at 10 MW[20] and establishing the maximum term of a standard and negotiated PURPA contract at 20 years.[21]

In establishing PURPA policy and setting avoided cost prices, the Commission has repeatedly acknowledged the importance of ensuring that the costs of QF development do not adversely impact utility customers who ultimately pay those costs.[22] With the addition of an

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[15] 16 U.S.C. § 824a-3(d) ("For purposes of this section, the term 'incremental cost of alternative electric energy' means, with respect to electric energy purchased from a qualifying cogenerator or qualifying small power producer, the cost to the electric utility of the electric energy which, but for the purchase from such cogenerator or small power producer, such utility would generate or purchase from another source.").

[16] *Indep. Energy Producers Ass'n v. Cal. Pub. Utilities Comm'n*, 36 F.3d 848, 858 (9th Cir. 1994) ("If purchase rates are set at the utility's avoided cost, consumers are not forced to subsidize QFs because they are paying the same amount they would have paid if the utility had generated energy itself or purchased energy elsewhere.").

[17] 18 C.F.R. § 292.101(b)(6) (defining "avoided costs" as "the incremental costs to an electric utility of electric energy or capacity or both which, but for the purchase from the qualifying facility or qualifying facilities, such utility would generate itself or purchase form another source.").

[18] 16 U.S.C. § 824a-3(f)(1).

[19] ORS 758.525(1); ORS 758.535(2).

[20] Docket No. UM 1129, Order No. 05-584 at 16-7 and 40 (May 13, 2005) (setting eligibility cap for standard contracts at 10 MW); Docket No. 1610, Order No. 14-058 at 7-8 (Feb. 24, 2014) (affirming 10 MW eligibility cap for standard contracts and noting with regard to the eligibility cap for standard contracts: "… we find it reasonable for all three utilities to be subject to the same standard contract methodology.").

[21] Docket No. UM 1129, Order No. 05-584 at 20 (May 13, 2005) (setting maximum term of standard PURPA contract at 20 years with the availability of fixed prices limited to the first 15 years of the 20-year term); Docket No. UM 1129, Order No. 07-360 at 11 (Aug. 20, 2007) (authorizing QF to select a negotiated PURPA contract term of up to 20 years).

[22] *See e.g.*, Docket No. R-58, Order No. 81-319 at 3 (May 6, 1981) (The Commission explained that the primary goal of its PURPA policy was "to provide maximum economic incentives for development of qualifying facilities while insuring that the costs of such development do not adversely impact utility ratepayers who ultimately pay those

unprecedented volume of solar QF generation to PGE's system, it is critical that the Commission modify the eligibility criteria for standard prices to ensure the accuracy of avoided cost prices so that PGE's customers are not adversely impacted by the increasing volume of QF generation under contract to PGE.

B. The Commission Has the Authority to Decide Whether Qualifying Facilities Larger Than 100 kW Should Receive Standard Prices

FERC's regulations require that a utility offer standard avoided cost prices to QFs with design capacity of 100 kW or less.[23] The purpose of this requirement is to protect very small QF projects from the "transaction cost" associated with negotiating project-specific avoided cost prices.[24] FERC has recognized that standard prices are less accurate than negotiated project-specific prices and can cause a utility's customers to pay more than actual avoided cost.[25]

FERC has authorized state commissions to make standard prices available to QF projects with design capacity greater than 100 kW.[26] If the combined capacity of projects with standard prices remains a small fraction of the total QF capacity under contract with a utility, then the cost impact on customers remains small. But if a state Commission sets the eligibility cap for standard prices too high, and a large fraction of QFs under contract have standard prices, then customers can suffer substantial and irrevocable harm.

The Oregon Commission has recognized that establishing a threshold or eligibility cap for standard prices requires the Commission to balance two competing interests: (1) an interest in

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costs."); Docket No. UM 1129, Order No. 05-584 at 11 (May 13, 2005) ("We seek to provide maximum incentives for the development of QFs of *all* sizes, while ensuring that ratepayers remain indifferent to QF power by having utilities pay no more than their avoided costs."); Docket No. UM 1610, Order No. 14-058 at 12 (Feb. 24, 2014) ("We first return to the goal of this docket: to ensure that our PURPA policies continue to promote QF development while ensuring that utilities pay no more than avoided costs.").

[23] 16 C.F.R. § 292.304(c)(1).

[24] FERC Docket No. RM79-55, FERC Order No. 69, *Small Power Production and Cogeneration Facilities; Regulations Implementing Section 210 of PURPA*, 45 Fed. Reg. 12214 at 12223 (Feb. 25, 1980).

[25] *Id.* ("The Commission is aware that the supply characteristics of a particular facility may vary in value from the average rate set forth in the utility's standard rate required by this paragraph. If the Commission were to require individualized rates, however, the transaction costs associated with administration of the program would likely render the program uneconomic for this size [100 kW and less] of qualifying facility. As a result, the Commission will require that standardized tariffs be implemented for facilities of 100 kw or less.").

[26] *Id.* ("the Commission has added subparagraph (2) [to Section 292.304(c)] which permits, but does not require, State regulatory authorities … to put into effect a standard rate for purchases from qualifying facilities with a design capacity greater than 100 kilowatts. These rates must equal avoided cost ….").

promoting QF development by allowing smaller projects to avoid the transaction costs associated with negotiating avoided cost prices and other PURPA contract terms; and (2) an interest in ensuring accurate avoided cost prices so that a utility's customers remain indifferent to PURPA contracts.[27]

The eligibility cap for standard prices is not static. In 1981, the Commission initially set the cap at 100 kW consistent with FERC regulations.[28] In 1991, the Commission increased the threshold to 1 MW.[29] In 2005, the Commission established a 10 MW threshold for standard prices and standard contract terms and provisions.[30] And in 2016, in reaction to a dramatic increase in solar QF activity on Idaho Power's and PacifiCorp's systems, the Commission lowered to 3 MW the eligibility cap for solar QFs to obtain standard prices from Idaho Power and PacifiCorp.[31]

In reducing the eligibility cap for solar QFs to obtain standard prices, the Commission found that "there is evidence that single solar developers can enter into negotiated contracts for QF projects sized in the 4 to 10 MW range."[32] In granting PacifiCorp interim relief by lowering the eligibility cap for solar QF contracts to 3 MW, the Commission also recognized that a failure to do so when the eligibility cap had already been lowered to 3 MW for Idaho Power could result in "geographic arbitrage" with developers seeking standard prices from PacifiCorp for 4-10 MW projects because they could not obtain standard prices for such large projects from Idaho Power.[33]

[27] *See e.g.*, Docket No. UM 1129, Order No. 05-584 at 16 (May 13, 2005) ("We continue to adhere to the policy … that standard contract rates, terms and conditions are intended to be used as a means to remove transaction costs associated with QF contract negotiation, when such costs act as a market barrier to QF development. … At the same time, however, we recognize need to balance out interest in reducing these market barriers with our goal of ensuring that a utility pays a QF no more than its avoided costs for the purchase of energy. With standard contracts, project characteristics that cause a utility's cost savings to differ from its actual avoided costs are ignored.").
[28] Docket No. R-58, Order No. 81-319 at 4 (May 6, 1981) ("Standard rates should be available only to facilities of 100 kW or less.").
[29] Docket No. AR 246, Order No. 91-1605 at 1 (Nov. 26, 1991).
[30] Docket No. UM 1129, Order No. 05-584 at 16-17 (Mar. 13, 2005).
[31] Docket No. UM 1725, Order No. 16-129 at 4-6 (Mar. 29, 2016); Docket No. UM 1734, Order No. 16-130 at 4-5 (Mar. 29, 2016).
[32] Docket No. UM 1725, Order No. 16-129 at 6 (Mar. 29, 2016).
[33] Docket No. UM 1734, Order No. 15-241 at 3 (Aug. 14, 2015) ("… having granted Idaho Power's request for interim relief … a failure to provide a similar 3 MW cap on solar QF project eligibility to PacifiCorp might well encourage developers to engage in geographic arbitrage.").

Indeed, in discussing the eligibility cap for standard contracts in Order No. 14-058, the Commission stated that the same eligibility caps should apply to all three utilities.[34]

IV. ARGUMENT

PGE is facing extraordinary growth in QF activity: 124 QF projects have obtained or requested a PURPA contract from PGE with combined output of 954.9 MW.[35] More than 86% of this activity is from solar QF projects (104 solar projects with combined output of 824.5 MW).[36] Of the contracted and proposed solar QFs, 84% comes from outside PGE's system (51 projects with combined output of 692.5 MW) and a full 90% of the *proposed* solar capacity comes from outside PGE's system.[37] Roughly half of PGE's total QF activity takes the form of previously executed contracts, the other half takes the form of pending requests for PURPA contracts.[38] On June 5, 2017, PGE had pending requests for contracts from 41 solar projects with combined output of 417.2 MW and from 6 other QF projects with combined output of 70.2 MW.[39]

Thirteen developers are seeking or have obtained standard contracts for multiple solar QF projects sized between 2.2 MW and 10 MW (with one exception at 1.5 MW).[40] These requests represent 91 solar QF projects with combined output of 541.3 MW.[41] This is more than 95% of all the solar QF activity facing PGE.[42] In other words, 13 sophisticated developers are taking advantage of standard contracts and standard prices intended to support small-scale development and using such contracts to propose the large-scale development of hundreds of megawatts of aggregate QF output.[43] These developers treat their multiple projects as a single, unified proposal. They typically propose four to ten projects at the same time with identical project configurations

[34] Docket No. UM 1610, Order No. 14-058 at 5 and 8 (Feb. 23, 2014) (Discussing the "Eligibility Cap for Standard Contracts" the Commission stated: "…we find it reasonable for all three utilities to be subject to the same standard contract methodology. We see no off-setting gain in administrative efficiencies to adopt different standards for different Oregon utilities.").
[35] PGE/102, Sims – Macfarlane/2.
[36] *Id.*
[37] PGE/103, Sims – Macfarlane/8.
[38] PGE/102, Sims – Macfarlane/2.
[39] PGE/102, Sims – Macfarlane/9.
[40] PGE/104, Sims – Macfarlane/8.
[41] *Id.*
[42] Sims – Macfarlane/8.
[43] Sims – Macfarlane/11.

and nameplate capacities.[44] If the developer proposes a project change or seeks a change in a contract detail, the developer frequently seeks the same change for all of its project proposals.[45] It is clear these multiple projects are essentially the same project proposal broken into parts to qualify for standard contracts and standard prices.[46]

Given these dynamics and the tremendous magnitude of QF output being proposed by a handful of sophisticated developers, PGE is requesting that the Commission revise its existing orders implementing PURPA to allow PGE to negotiate prices and contracts with a larger portion of solar QF projects.

A. PGE's Request to Lower the Standard Price Eligibility Cap for Solar QFs to 3 MW

On March 29, 2016, the Commission issued two orders—Order No. 16-129 and Order No. 16-130—in which it lowered from 10 MW to 3 MW the eligibility cap for solar QFs to obtain standard prices from Idaho Power and PacifiCorp.[47] The Commission lowered this eligibility cap because Idaho Power and PacifiCorp were experiencing unprecedented increases in solar QF activity.[48] The dramatic increase in requests for solar QF contracts made it critical to ensure that the avoided cost prices being paid by the utilities were accurate in order to ensure that customers are not harmed by such an increase in PURPA generation. One way to increase the accuracy of avoided cost prices was to require project-specific negotiated prices across a wider cross section of PURPA projects.

The Commission found there was evidence that single solar QF developers had developed multiple projects to avoid the 10 MW threshold for negotiated contracts and prices.[49] The Commission also found that there was evidence that single solar developers can enter into

[44] Sims – Macfarlane/11.
[45] Sims – Macfarlane/10
[46] Sims – Macfarlane/11.
[47] Docket No. UM 1725, Order No. 16-129 at 4-6 (March 29, 2016); Docket No. UM 1734, Order No. 16-130 at 4-5 (Mar. 29, 2016).
[48] *Id.*
[49] *Id.* at 5 ("Based on the evidence presented, we agree that single solar QF developers have developed multiple projects to avoid the 10 MW threshold.").

negotiated contracts for QF projects sized in the 4 to 10 MW range.[50] And the Commission found that reducing the eligibility cap for one utility and not the other might lead to undesirable "geographic arbitrage."[51] As a result, the Commission allowed both Idaho Power and PacifiCorp to negotiate avoided cost prices for solar QF projects larger than 3 MW.[52]

1. PGE is Faced with Significant Solar QF Activity Similar to What Idaho Power and PacifiCorp Faced When They Filed for Relief in UM 1725 and UM 1734

PGE is facing solar QF activity that is *significantly greater* than the level of activity faced by Idaho Power when it filed for relief in UM 1725 and *at least equal* to the level of activity faced by PacifiCorp when it filed for relief in UM 1734.[53]

When Idaho Power filed for relief in UM 1725, it had 0.46 MW of solar QF generation online in Oregon, 60 MW of new solar QF generation under contract but not yet online in Oregon, and 245 MW of new solar QF generation proposed but not yet under contract in Oregon.[54] As of June 5, 2017, PGE had 3.2 MW of solar QF generation online, 404.1 MW of new solar QF generation under contract, but not yet online, and 417.2 MW of new solar QF generation proposed but not yet under contract.[55] In other words, PGE has roughly seven times the operational solar, seven times the contracted solar, and 70% more proposed solar that Idaho Power faced when it applied for and was granted interim and then permanent relief in UM 1725.[56]

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[50] Docket No. UM 1725, Order No. 16-129 at 5-6 (March 29, 2016) ("… there is evidence that single solar developers can enter into negotiated contracts for QF projects sized in the 4 to 10 MW range."); Docket No. UM 1734, Order No. 16-130 at 4-5 (Mar. 29, 2016) ("Although the vast majority of the projects were for 5 MW and above, and most were 10 MW, there were three that were 3 MW or less. This indicates that QF projects located in PacifiCorp's service area as small as 3 MW can be viable.").

[51] Docket No. UM 1734, Order No. 15-241 (Aug. 14, 2015) ("… having granted Idaho Power's request [to lower the eligibility cap] … a failure to provide a similar 3 MW cap … to PacifiCorp might well encourage developers to engage in geographic arbitrage.").

[52] Docket No. UM 1725, Order No. 16-129 at 6 (March 29, 2016) (("… we find that the eligibility threshold for solar projects should be 3 MWs … Standard contracts with negotiated avoided cost prices should be available to solar QFs with nameplate capacities above 3 MW up to 10 MW."); Docket No. UM 1734, Order No. 16-130 at 5 (Mar. 29, 2016) ("… we find that the eligibility threshold should be 3 MW for solar projects … [w]e restrict our decision ... to only the avoided cost prices contained in the standard contracts.").

[53] Sims – Macfarlane/9.

[54] Docket No. UM 1725, Idaho Power's Application to Lower Standard Contract Eligibility Cap and to Reduce the Standard Contract Term at 2 (Apr. 24, 2015).

[55] PGE/103, Sims – Macfarlane/2.

[56] Sims – Macfarlane/9.

When PacifiCorp filed for relief in UM 1734, it indicated that it had 338 MW of QF generation of all types under contract in Oregon, and 480.1 MW of new solar QF generation proposed but not yet under contract in Oregon.[57] As of the date of this application, PGE has 467.5 MW of QF generation of all types under contract, and 417.2 MW of new solar QF generation proposed but not yet under contract.[58] In other words, PGE has roughly one and a half times as much PURPA power under contract and about the same amount of proposed solar as PacifiCorp faced when it applied for and was granted interim and then permanent relief in UM 1734.[59]

As of June 5, 2017, PGE had 14 online QF projects with 21.2 MW of nameplate capacity (5 solar projects with 3.2 MW capacity), 63 QF projects under contract but not yet online with 446.3 MW of nameplate capacity (58 solar projects with 404.1 MW of capacity), and 47 requests for contracts representing 487.4 MW of capacity (41 solar projects with 417.2 MW of capacity).[60] Altogether, PGE had 124 QF projects online, under contract, or requesting contracts with a total nameplate capacity of 954.9 MW (104 solar projects with 824.5 MW of capacity).[61] Of the 824.5 MW of solar QF capacity online, under contract, or proposed—84% (692.5 MW) comes from outside PGE's service territory and will wheel power to PGE's system.[62]

If all 954.9 MW of this QF generation is contracted and built, PGE customers will be required to spend approximately $3 billion over the next 15 years.[63] PGE estimates this will cost approximately $2 billion more than an equivalent amount of power bought at projected market prices over the same period.[64] Even if the Commission limits its consideration to pending requests for contracts from solar QF projects, the economic impact on PGE's customers is tremendous. As of June 5, 2017, PGE had 41 solar QF projects seeking standard contracts for combined output of

[57] Docket No. UM 1734, PacifiCorp's Application at 1 (May 21, 2015) and PAC/101, Griswald/2-3.
[58] PGE/103.
[59] Sims – Macfarlane/9.
[60] PGE/102.
[61] *Id.*
[62] PGE/103, Sims – Macfarlane/8.
[63] PGE/105, Sims – Macfarlane/12.
[64] PGE/105, Sims – Macfarlane/13.

417.2 MW.[65] If these projects obtain standard price contracts and are built, the cost to PGE's customers over the next 15 years will be approximately $940 million, which PGE estimates is approximately $545 million above expected market prices over the same period.[66]

Clearly, the extraordinary increase in solar QF activity confronting PGE has the potential to create tremendous financial consequences for PGE and its customers. Given the amount of cost and the magnitude of customer impact at stake, it is imperative that the Commission allow PGE to negotiate accurate, project-specific prices.

2. There is Evidence that Single Solar QF Developers Are Developing Multiple Projects to Avoid the 10 MW Threshold for Negotiated Contracts and Prices

PGE's experience, coupled with that of Idaho Power and PacifiCorp, clearly demonstrates that single solar QF developers have developed multiple projects to avoid the 10 MW threshold for negotiated contracts and prices. The following table summarizes information from PGE's testimony filed in support of this application and indicates that there are 13 developers who have each proposed or obtained multiple solar QF contracts for projects sized 10 MW or less and thereby obtained, or applied for, standard prices from PGE on dozens of megawatts of total QF capacity:

Developer	Number of Projects with a Solar QF Contract	Number of Projects Seeking a Solar QF Contract	Total Number of Projects	Average Nameplate Capacity	Total Nameplate Capacity
A	0	6	6	2.2	13.3
B	2	0	2	2.2	4.4
D	0	5	5	10.0	50.0
F	1	5	6	10.0	60.0
G	10	0	10	10.0	100.0
H	2	0	2	10.0	20.0
I	7	3	10	8.6	85.5
J	7	0	7	6.1	43.0
K	9	3	12	2.2	26.4
L	5	4	9	10.0	90.0
N	0	3	3	2.2	6.6
O	0	5	5	2.4	12.0
R	12	2	14	2.2	30.1
Total	55	36	91		541.3

[65] PGE/103, Sims – Macfarlane/9.
[66] PGE/107, Sims – Macfarlane/13.

As this table indicates, PGE currently has 13 developers who seek or have obtained standard contracts with standard prices for aggregate volumes of solar QF generation ranging from 4.4 to 100 MW.[67] Clearly, PGE's experience demonstrates that single solar QF developers have developed multiple projects to avoid the 10 MW threshold on negotiated contracts and prices.

3. The Commission Should Lower the Eligibility Cap for Solar QFs to Obtain Standard Prices from PGE

PGE is facing solar QF development that is as intense as that faced by PacifiCorp in UM 1734 and more intense than that faced by Idaho Power in UM 1725.[68] In addition, PGE's experience demonstrates that single solar QF developers are developing multiple solar QF projects to avoid PGE's current 10 MW threshold on negotiated contracts and prices.[69] In UM 1725 the Commission determined that "single solar developers can enter into negotiated contracts for QF projects sized in the 4 to 10 MW range."[70] All of these facts support the Commission issuing an order that lowers to 3 MW the eligibility cap for solar QFs to obtain standard prices from PGE.

In addition, given that Idaho Power and PacifiCorp have a 3 MW eligibility cap on standard prices for solar QFs and PGE has a 10 MW eligibility cap, there is a real possibility that PGE is experiencing "geographic arbitrage" where developers who might otherwise seek solar QF contracts from Idaho Power or PacifiCorp are instead wheeling output to PGE to take advantage of PGE's higher threshold for standard prices. Indeed, 84% of PGE's current solar QF activity and 90% of PGE's proposed solar QF activity comes from off-system, suggesting that PGE is suffering the effects of such geographic arbitrage.[71] In its order granting interim relief to

[67] PGE/104, Sims – Macfarlane/8.
[68] *See* page 11 *supra.*
[69] PGE/104, Sims – Macfarlane/8.
[70] Docket No. UM 1725, Order No. 16-129 at 5-6 (Mar. 29 2016).
[71] PGE/103, Sims – Macfarlane/8.

PacifiCorp in UM 1734, the Commission recognized that geographic arbitrage of this sort is undesirable and was among the legitimate reasons for lowering PacifiCorp's eligibility cap.[72]

As of June 5, 2017, PGE was facing 417.2 MW worth of requests for solar QF contracts.[73] PGE estimates that entering into standard price contracts with this much additional solar QF generation could cost its customers $545 million more than projected market prices for the same amount of power over the next 15 years.[74] PGE continues to receive requests for solar QF contracts at a steady pace.[75] Given the potential for PGE to enter into long-term commitments to purchase so much new solar QF output on behalf of customers, it is imperative that PGE be allowed to negotiate project-specific prices. The Commission has already found that single solar developers can negotiate prices for QF projects sized in the 4 to 10 MW range. And a reduced eligibility cap is necessary to put a stop to geographic arbitrage, which may be motivating significant quantities of solar QF generation to seek standard price contracts from PGE.

For all of these reasons, the Commission should, at the very least, grant PGE the same relief it granted Idaho Power and PacifiCorp and lower to 3 MW the eligibility cap for solar QFs to obtain standard prices from PGE. Lowering the eligibility cap for solar QFs to obtain standard prices will help to protect PGE's customers from inaccurate PURPA prices because in negotiating prices under its Schedule 202 process, PGE can apply the seven project-specific factors articulated by FERC in 18 CFR § 292.304(e) and incorporated into the negotiated price process under PGE's schedule 202.[76] It is PGE's belief that these factors should allow PGE to negotiate more accurate, project-specific prices.

[72] Docket No. UM 1734, Order No. 15-241 at 3 (Aug. 14, 2015) (Order granting interim relief the PGE in the form of a 3 MW eligibility cap on standard contracts for solar projects and noting: "… having granted Idaho Power's request for interim relief in Order No. 15-129, a failure to provide a similar 3 MW cap on solar QF project eligibility to PacifiCorp might well encourage developers to engage in geographic arbitrage.").
[73] PGE/103, Sims – Macfarlane/9.
[74] PGE/107, Sims – Macfarlane/13.
[75] Sims – Macfarlane/9.
[76] PGE Advice No. 07-27, Schedule 201 Qualifying Facility Power Purchase Information Update, Schedule 202, Sheet 202-3 (Nov. 1, 2007).

B. PGE's Request to Require a Negotiated Contract for A Solar QF Project with an Owner Who has Requested or Obtained Standard Prices for More than 10 MW of QF Solar Capacity

Allowing PGE to negotiate prices for solar QF contracts above 3 MW is necessary, but not sufficient to fully address the magnitude and character of the challenge confronting the utility. PGE's current experience demonstrates that sophisticated developers are capable of organizing large portfolios of solar QF generation into 3 MW or smaller projects and thereby evade the requirement to negotiate prices on dozens of megawatts of solar QF output. In aggregate, these tactics threaten to expose PGE's customers to hundreds of megawatts of solar QF output using inaccurate standard prices when the developer counter-parties involved are perfectly capable of negotiating more accurate, project-specific prices for this significant volume of PURPA generation.

As the table on page 13 demonstrates, PGE is presently facing requests for solar QF contracts from 13 developers who each proposed to build between 4.4 and 100 MW of solar QF generation and have demonstrated an ability to break that development into 10 MW or smaller pieces in order to obtain standard prices.[77] Presently, PGE has six developers who are proposing or already have contracts for an aggregate of 92.8 MW of solar QF development at or near the 2.2 MW size.[78] Moreover, when the Commission granted interim relief in UM 1725, at least nine solar projects sized at 5 or 10 MW with contract requests pending before Idaho Power sought to organize themselves into 3 MW or smaller projects in an attempt to obtain standard prices.[79]

Under the Commission's current orders, a developer who proposes a 10.5 MW solar QF project must negotiate a project-specific contract, including project-specific avoided cost prices. But another developer who proposes 10 solar QF projects of 10 MW each, for combined new solar QF capacity of 100 MW, is allowed to obtain less accurate standard prices under standard

[77] PGE/104, Sims – Macfarlane/8.
[78] *Id.*
[79] Docket No. UM 1725, Order No. 15-230 at 2 (Aug. 6, 2015).

contracts for all 100 MW of its proposed development.[80] There is no principled basis upon which to assume that the first developer is more experienced or sophisticated than the second developer. Both developers are proposing, contracting for, and developing large-scale solar portfolios. And both developers are likely to have the expertise and capacity to negotiate project-specific avoided cost prices.

Allowing sophisticated developers to break their proposed portfolios of tens or hundreds of megawatts of QF generation into small pieces, for the sole reason of avoiding more accurate negotiated prices and other contract terms, exposes PGE's customers to unacceptable levels of risk for no good reason. The purpose behind standard prices and standard contracts is to allow small project developers who do not have the institutional capacity, resources, or expertise to negotiate project specific prices or terms to have access to "one-size-fits-all" standard prices and terms. FERC has concluded that standard prices are necessary to facilitate QF development by very small projects 100 kW or less.[81] And the Commission has allowed for standard prices for projects 10 MW or less (3 MW or less or solar projects contracting with Idaho Power or PacifiCorp).[82]

The Commission has noted that the purpose behind standard prices and standard contract terms and conditions is "to remove transaction costs associated with QF contract negotiation, when such costs act as a market barrier to QF development."[83] Further, "standard contracts are designed to eliminate negotiations and to thereby remove transaction costs."[84] The Commission has also noted that there are market barriers, such as "asymmetric information and an unlevel playing field that obstruct the negotiation of non-standard contracts."[85] The Commission has set

[80] This is not a hypothetical example. PGE has a developer like this in its queue. *See* PGE/104 and Developer G in the table on p. 13 *supra*.
[81] *See*, footnote 25 *supra.*
[82] *See*, footnotes 30 and 31 *supra.*
[83] Docket No. UM 1129, Order No. 05-584 at 16 (May 13, 2005).
[84] *Id.*
[85] *Id.*

the general threshold for standard contracts at a relatively high 10 MW "in order to overcome economic impediments created by these market barriers."[86]

But the Commission has also recognized "a need to balance our interest in reducing these market barriers with our goal of ensuring that a utility pay a QF no more than its avoided costs for the purchase of energy."[87] And the Commission has noted: "the risk customers face because avoided costs in the future may be different from the prices paid under a standard contract … is greater for a large QF than a small one."[88] Where a developer proposes a total of 2.2 MW of solar QF development, the risk caused by standard prices that prove to be higher than the project's specific avoided cost value is relatively minimal because relatively little generation volume is at stake. But where a developer proposes a total of 30.1 MW or 100 MW of solar QF development, in 2.2 MW pieces or 10 MW pieces (as developer R and G in the table above have) then the risk caused by standard prices that may prove to be higher than the projects' actual avoided costs, or by other standard contract terms that fail to take into account other project-specific consideration, is relatively great because it will impact so much generation volume.

To address this concern, and improve the accuracy of the avoided cost prices to be paid by PGE on potentially hundreds of megawatts of new solar QF generation, PGE respectfully requests that the Commission adopt an additional eligibility criterion for standard prices and standard contracts. Specifically, PGE proposes that a solar QF project larger than 100 kW should not be eligible for standard contracts or standard prices if any owner of the project has already requested or obtained standard prices from PGE for more than 10 MW of aggregate solar QF output. To apply this criterion, PGE would consider the aggregate capacity of all QF solar projects that seek or have obtained standard prices and which are owned or controlled by the same person(s) or affiliated person(s). PGE intends that the question of common ownership or control would be decided using the definition of "same person(s) or affiliated person(s)" found in

[86] Docket No. UM 1129, Order No. 05-584 at 16 (May 13, 2005).
[87] *Id.*
[88] *Id.*

the partial stipulation approved by the Commission in Order No. 06-538 as modified by Order No. 14-058.[89]

It is important that developers proposing more than 10 MW of aggregate solar QF output be required to negotiate not just prices but also the other terms of a PURPA contract. This will allow PGE and the QF developer to address project specific concerns and avoid a situation were significant new aggregate output in excess of 10 MW causes an impact on PGE's system that is not addressed under a standard contract form.[90] For example, under a negotiated Schedule 202 contract, PGE can propose curtailment of the QF project under circumstances that would affect system reliability.[91] It is important to allow PGE to negotiate similar project-specific contract provisions with smaller solar QF projects when a developer is proposing multiple projects that would have an aggregate impact on PGE's system that is equivalent to a larger project of over 10 MW. If a single developer is allowed to continue to propose dozens of megawatts of new solar QF output under standard contracts, then PGE's system will continue to be exposed to dozens, even hundreds of megawatts of generation output that PGE is not contractually allowed to curtail as necessary for system reliability.[92]

There are several benefits of adopting a criterion that requires negotiated contracts when a developer's aggregate request for standard prices exceeds 10 MW. First, in the absence of this criterion, many developers will simply propose to develop their tens or hundreds of megawatts of solar QF generation in 3 MW or smaller pieces and thereby evade negotiated prices.[93] Second, this criterion will encourage more efficient solar QF development by eliminating the motivation

[89] *See*, Docket No. UM 1129, Order No. 06-538 at 11 (Sep. 20, 2006) (approving partial stipulation regarding the 10 MW eligibility cap for standard contracts; among other things, the partial stipulation defined when multiple QF projects are properly considered to be owned or controlled by the "same person(s) or affiliated person(s)"); Docket No. UM 1129, Order No. 06-586 (Oct. 19, 2006) (errata order providing the partial stipulation which the Commission intended to attach to Order No 06-538; page 11 of Appendix B provides the relevant definition of "same person(s)" and "affiliated person(s)"); Docket No. UM 1610, Order No. 14-058 at 27 (Feb. 24, 2014) (limiting passive investor exemption to independent family owned or community-based projects).
[90] Sims – Macfarlane/13.
[91] *Id.*
[92] *Id.*
[93] *See* Docket No. UM 1725, Order No. 15-230 at 2 (noting that developers with pending requests for contract sought to reduce the capacity of nine proposed projects from 5 MW or 10 MW to 3 MW in order to qualify for Idaho Power's newly established interim eligibility cap of 3 MW).

to divide solar projects into such small parts. Third, this criterion will address an existing imbalance whereby sophisticated developers, frequently from out-of-state, are allowed to burden PGE's customers with the risks associated with standard prices when such developers are more than capable of negotiating more accurate, project-specific prices for their large portfolios of solar QF generation. Fourth, the proposed new criterion should be relatively easy to implement. However, in order to implement the criterion it will be important to authorize PGE to "look past the corporate veil" to determine whether a particular set of smaller solar QF projects share a common owner.[94] Fifth, negotiating contracts for developers with more than 10 MW of aggregate solar QF capacity will allow PGE to negotiate appropriate terms to address the significant system reliability impacts of so much new generation. Sixth, by requiring negotiated contracts and prices for these projects, developers of more than 10 MW of aggregate solar QF capacity are put on an equal footing with developers proposing individual projects greater than 10 MW in capacity.

C. PGE's Alternative Request to Lower the Standard Price Eligibility Cap for Solar QFs to 2 MW

PGE believes that the most appropriate and effective relief the Commission can provide in response to the circumstances PGE currently faces would be to: (1) lower to 3 MW the standard price eligibility cap for single solar QF projects; and (2) declare that a solar QF project larger than 100 kW is not eligible for standard prices or a standard contract if any owner of the project has requested or obtained from PGE standard prices on more than 10 MW of solar QF output. This relief would allow developers of small projects or small portfolios of projects to obtain standard prices and standard contract terms, but it would offer PGE's customers protection from inaccurate standard prices and insufficient standard contract terms when a developer proposes a larger single solar QF project (greater than 3 MW nameplate capacity) or when a sophisticated developer proposes a larger portfolio (greater than 10 MW in aggregate) of smaller

[94] PGE proposes to use the same common owner or control standard applied under the partial stipulation adopted by Order No. 06-538 and clarified by Order No. 14-058; *see* footnote 89 *supra.*

QF projects. In the alternative, if the Commission is not willing to provide these more effective forms of relief, then PGE respectfully requests that the Commission grant alternative relief in the form of a 2 MW standard price cap on all solar QF projects.

This alternative relief will not be as effective at protecting PGE's customers as the primary relief requested by PGE. Under the alternative relief—a 2 MW standard price eligibility cap on solar QF projects—it would be possible for single developers to obtain standard prices and standard contracts on dozens or hundreds of megawatts of solar QF output by proposing projects with nameplate capacity of 2 MW or less. However, a 2 MW threshold on standard prices would address the current problem being experienced by PGE where six developers have proposed multiple solar QF projects sized below 3 MW in order to qualify for standard prices when such developers have the sophistication and capacity to negotiate more accurate, project-specific prices.[95]

V. CONCLUSION

PGE is experiencing explosive growth in QF activity. Since the Commission issued its Phase I order in UM 1610 in early 2014, the amount of QF generation under contract to PGE has grown seven-fold (from 68 MW to 467.5 MW).[96] PGE is now confronted with pending requests for more than 487 MW in additional PURPA contracts—which would more than double the substantial amount of PURPA generation already under contract to PGE.[97] Under the Commission's current orders implementing PURPA, PGE is required to pay standard prices for all output from QF projects with nameplate capacity of 10 MW or less, and PGE is required to pay avoided cost prices that are fixed for 15 years from contract execution (perhaps longer if developers prevail in the pending complaint proceeding against PGE in Docket No. UM 1805).

If these requirements are allowed to remain in place, it is virtually guaranteed that PGE's customers will pay more than the true avoided cost on more than 417.2 MW of new solar QF

[95] PGE/104, Sims – Macfarlane/9.
[96] PGE/102, Sims – Macfarlane/2.
[97] *Id.*

output. This could result in substantial harm to PGE's customers over the next 15 years as the payments are an estimated $545 million more than if priced at expected market prices.[98] It may be acceptable to require PGE's customers to pay inaccurate standard prices for output from a few relatively small projects, but it violates the public interest and the principle of ratepayer indifference to require PGE to enter into PURPA contracts for another 417.2 MW or more of solar QF output at inaccurate standard prices for 15 years.

The Commission should address this situation while it can, *before* PGE executes another 417.2 MW worth of new solar PURPA contracts. The Commission can ensure that PGE's customers are not required to pay too much for QF output by adopting the following two changes. First, declare that a solar QF must negotiate a project-specific avoided cost price if the project is larger than 3 MW. Second, declare that a solar QF must negotiate a project-specific price and contract under Schedule 202 if the project is larger than 100 kW and any owner of the project has already obtained or applied for standard prices for more than 10 MW worth of solar QF output. In the alternative, PGE requests that the Commission declare that a solar QF must negotiate a project-specific avoided cost price if the project is larger than 2 MW.

PGE respectfully submits that these forms of relief are critical to adequately address the unprecedented volume of solar QF activity confronting PGE and which threatens to harm PGE's customers by committing PGE to a 15 year commitment to pay standard prices that are higher than PGE's actual avoided costs. At minimum, PGE requests that the Commission grant the same relief the Commission provided to Idaho Power and PacifiCorp in UM 1725 and UM 1734—namely to reduce the standard price eligibility cap for solar QFs to 3 MW.

PGE's need for relief is urgent. Unless the Commission provides interim relief, PGE will

[98] PGE/107, Sims – Macfarlane/13.

be required to complete the process of entering into at least 417.2 megawatts worth of new solar PURPA contracts within the next few days, weeks or months.

Dated this 30th day of June 2017.

Respectfully submitted,

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