BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

UM 1894

CORRECTED

Served electronically at Salem, Oregon, 8/31/17 to:

Respondent's Attorney and Representative Complainant's Attorneys & Representative

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Re: UM 1894, PORTLAND GENERAL ELECTIRC COMPANY, Complainant

vs. PACIFIC NORTHWEST SOLAR, LLC., Respondent

PORTLAND GENERAL ELECTIRC COMPANY has filed a complaint against PACIFIC NORTHWEST SOLAR, LLC. A copy of the complaint is attached and served on Respondent, under ORS 756.512(1). The Commission has assigned Docket No. UM 1894 to this complaint. Please use this number whenever you refer to this case.

The Public Utility Commission must receive an Answer from the Respondent or its attorney by September 20, 2017, under OAR 860-001-0400(4)(a). A copy must be served on the complainant.

After the filing of the answer, the PUC will contact the parties to provide information about further proceedings in this matter.

PUBLIC UTILITY COMMISSION OF OREGON

/s/Diane Davis for Cheryl Walker Administrative Specialist 2 Administrative Hearings Division (503) 378-2849

Attachments: Complaint

Notice of Contested Case Rights and Procedures

NOTICE OF CONTESTED CASE RIGHTS AND PROCEDURES

Oregon law requires state agencies to provide parties written notice of contested case rights and procedures. Under ORS 183.413, you are entitled to be informed of the following:

Hearing: The time and place of any hearing held in these proceedings will be noticed separately. The Commission will hold the hearing under its general authority set forth in ORS 756.040 and use procedures set forth in ORS 756.518 through 756.610 and OAR Chapter 860, Division 001. Copies of these statutes and rules may be accessed via the Commission's website at www.puc.state.or.us. The Commission will hear issues as identified by the parties.

Right to Attorney: As a party to these proceedings, you may be represented by counsel. Should you desire counsel but cannot afford one, legal aid may be able to assist you; parties are ordinarily represented by counsel. The Commission Staff, if participating as a party in the case, will be represented by the Department of Justice. Generally, once a hearing has begun, you will not be allowed to postpone the hearing to obtain counsel.

Administrative Law Judge: The Commission has delegated the authority to preside over hearings to Administrative Law Judges (ALJs). The scope of an ALJ's authority is defined in OAR 860-001-0090. The ALJs make evidentiary and other procedural rulings, analyze the contested issues, and present legal and policy recommendations to the Commission.

Hearing Rights: You have the right to respond to all issues identified and present evidence and witnesses on those issues. *See* OAR 860-001-0450 through OAR 860-001-0490. You may obtain discovery from other parties through depositions, subpoenas, and data requests. *See* ORS 756.538 and 756.543; OAR 860-001-0500 through 860-001-0540.

Evidence: Evidence is generally admissible if it is of a type relied upon by reasonable persons in the conduct of their serious affairs. See OAR 860-001-0450. Objections to the admissibility of evidence must be made at the time the evidence is offered. Objections are generally made on grounds that the evidence is unreliable, irrelevant, repetitious, or because its probative value is outweighed by the danger of unfair prejudice, confusion of the issues, or undue delay. The order of presenting evidence is determined by the ALJ. The burden of presenting evidence to support an allegation rests with the person raising the allegation. Generally, once a hearing is completed, the ALJ will not allow the introduction of additional evidence without good cause.

Record: The hearing will be recorded, either by a court reporter or by audio digital recording, to preserve the testimony and other evidence presented. Parties may contact the court reporter about ordering a transcript or request, if available, a copy of the audio recording from the Commission for a fee set forth in OAR 860-001-0060. The hearing record will be made part of the evidentiary record that serves as the basis for the Commission's decision and, if necessary, the record on any judicial appeal.

Final Order and Appeal: After the hearing, the ALJ will prepare a draft order resolving all issues and present it to the Commission. The draft order is not open to party comment. The Commission will make the final decision in the case and may adopt, modify, or reject the ALJ's recommendation. If you disagree with the Commission's decision, you may request reconsideration of the final order within 60 days from the date of service of the order. *See* ORS 756.561 and OAR 860-001-0720. You may also file a petition for review with the Court of Appeals within 60 days from the date of service of the order. *See* ORS 756.610.



ALISHA TILL Direct (503) 290-3628 alisha@mrg-law.com

August 31, 2017

VIA ELECTRONIC FILING

Attention: Filing Center Public Utility Commission of Oregon P.O. Box 1088 Salem, Oregon 97308-1088

Re: Docket UM ____: Portland General Electric Company's Complaint and Request for Dispute Resolution

Dear Filing Center:

Attached for filing in the above-captioned docket is a copy of PGE's Complaint and Request for Dispute Resolution against Pacific Northwest Solar, LLC.

Please contact this office with any questions.

Very truly yours,

Alisha Till

Administrative Assistant

Alwar Till

Attachment

1	BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON		
2	UM		
3			
4	Portland General Electric Company,		
5	Complainant	Complaint and Request for Dispute Resolution	
6	V.	Resolution	
7 8	Pacific Northwest Solar, LLC, Respondent.		
9	Pursuant to ORS 756.500, Portland C	General Electric Company (PGE) petitions the	
10	Public Utility Commission of Oregon (Com	mission) to resolve a dispute that has arisen	
11	between PGE and Pacific Northwest Solar, LLC (PNW Solar). PNW Solar executed several		
12	2 standard power purchase agreements (PPAs) with PGE to sell the output of its solar qualifying		
13	facilities (QFs). Now, PNW Solar seeks to substantially change the nameplate capacity rating		
14	of four of its QFs and to amend the executed PPAs accordingly. PGE requests that the		
15	Commission take jurisdiction to resolve this dispute and confirm that PURPA, the		
16	Commission's Orders, and PGE's standard contract do not permit PNW Solar to materially		
17	alter its facilities' nameplate capacities under its existing PPAs.		
18	I. FACTUAI	L BACKGROUND	
19	In the first half of 2016, PNW Solar ex	ecuted PPAs with PGE for six solar QFs. 1 The	
20	avoided costs included in the PNW Solar PPAs were approved by the Commission on Augus		
21			
22			
23	¹ PNW Solar also executed a PPA for a seventh, 7-	MW solar QF—Bridgeport—but has not listed that	
	QF in its recent communications with PGE, and PC under development. See In the Matter of Portland	GE is unclear whether the Bridgeport QF remains General Electric Company Information Filing of	
25	Qualifying Facility Contracts or Summaries per O. Bridgeport PPA (filed Sept. 14, 2016).	AR 860-028-0020(1), Docket No. RE 143,	
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1 25, 2015,² and the initial delivery dates for these PPAs is November 1, 2017.³ On May 8,

2 2017, PNW Solar contacted PGE and stated that it would be increasing the nameplate capacity

3 rating of the Butler QF from 4 MW to 10 MW. Then, on June 23, 2017, PNW Solar sent PGE

4 a letter that requested nameplate capacity changes to four of its six QFs, 4 as reflected in the

5 table below.

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QF Project	Original PPA Size	Requested Size	Change
Butler	4 MWac	10 MWac	+6 MWac
Duus	10 MWac	10 MWac	none
Firwood	10 MWac	10 MWac	none
Starlight	4 MWac	2.2 MWac	-1.8 MWac
Stringtown	4 MWac	2.3 MWac	-1.7 MW ac
Amity	4 MWac	6 MWac	+2 MWac

In support of its request, PNW Solar argued that its proposal to re-size its projects is allowed under Section 4.3 of PGE's standard contract, which reads:

Upon completion of construction of the Facility, Seller shall provide PGE an As-built Supplement to specify the actual Facility as built. Seller shall not 14 increase the Nameplate Capacity Rating above that specified in Exhibit A or increase the ability of the Facility to deliver Net Output in quantities in excess 15 of the Net Dependable Capacity, or the Maximum Net Output as described in Section 3.1.11 above, through any means including, but not limited to, 16 replacement, modification, or addition of existing equipment, except with prior written notice to PGE. In the event Seller increases the Nameplate Capacity 17 Rating of the Facility to no more than 10,000 kW pursuant to this section, PGE shall pay the Contract Price for the additional delivered Net Output. In the 18 event Seller increases the Nameplate Capacity Rating to greater than 10,000 kW, then Seller shall be required to enter into a new power purchase agreement 19

²² Qualifying Facility Information, Docket No. UM 1728, Order No. 15-251 at 1, App'x A at 1 (Aug. 25, 2015).

³ See PPAs filed in Docket No. RE 143. PGE and PNW Solar have discussed extending the initial delivery date for the PPAs by one year.

A copy of PNW Solar's June 23, 2017 letter is attached as Exhibit A. Please note that PNW Solar has confirmed that the date on the letter is incorrect and does not reflect the date on which it actually was sent to PGE.

1	for all delivered Net Output proportionally related to the increase of Nameplate
2	Capacity above 10,000 kW. ⁵
3	PGE responded to PNW Solar's letter on July 21, 2017, and informed PNW Solar that
4	PGE disagrees that Section 4.3 permits a QF to materially change its nameplate capacity at
5	will while retaining its right to out-of-date avoided cost prices. ⁶ Importantly, PGE's avoided
6	cost prices were updated on June 7, 2016, and again on June 1, 2017—and currently are
7	substantially lower than the prices contained in PNW Solar's PPAs. ⁷ On August 28, 2017,
8	counsel for PNW Solar sent a demand letter stating that if PGE does not accept the proposed
9	nameplate capacity changes by September 1, 2017, PNW Solar will file a complaint in the
0	circuit court seeking more than \$3.75 million in damages, costs, and attorney fees. ⁸
1	The parties have reached an impasse regarding disputed issues within the
2	Commission's primary jurisdiction and area of specialized expertise. Therefore, PGE is filing
3	this Complaint and Request for Dispute Resolution.
4	II. ARGUMENT
5	Section 4.3 is a provision of a PURPA PPA that was adopted at the Commission's

Section 4.3 is a provision of a PURPA PPA that was adopted at the Commission's direction to implement a Commission order, and therefore must be interpreted by the Commission, in a manner that is consistent with the underlying order. The purpose of Section 4.3 is set forth in Order No. 06-538 and the accompanying testimony, which make clear that Section 4.3 was intended to address the proper treatment of upgrades that alter the nameplate capacity of operational QFs that have standard contracts. PNW Solar's request to materially

 ⁵ PGE's Standard Power Purchase Agreement Section 4.3. A copy of the standard PPA for the Butler QF is attached as Exhibit B. Section 4.3 is part of PGE's standard contract and therefore is identical in the PPAs for all of PNW Solar's QFs.

⁶ A copy of PGE's July 21, 2017 letter to PNW Solar is attached as Exhibit C.

⁷ Docket No. UM 1728(2), Order No. 17-177, App'x A at 2-3 (May 19, 2017) (adopting PGE's updated, lower avoided cost prices, effective June 1, 2017); Order No. 16-220, App'x A at 1-3 (adopting PGE's updated, lower avoided cost prices, effective June 7, 2016).

^{26 8} A copy of PNW Solar's August 28, 2017 demand letter is attached as Exhibit D.

2	August 2015 vintage avoided cost prices is inconsistent with the Commission's order and		
3	therefore is impermissible under Section 4.3 of the executed PPAs.		
4	A. Order No. 06-538 permits a QF with an executed standard contract to change its nameplate capacity only as a result of upgrades to an already		
5	operational facility.		
6	In UM 1129, the Commission and the parties first worked to develop a policy to address		
7	increases in QF output occasioned by a facility upgrade or improvement. The Commission		
8	framed the question under consideration, which it listed as "Issue 8," as follows:		
9	If a OF under a standard contract in manager manner output has to a facility		
10	If a QF, under a standard contract, increases power output due to a facility change, such as efficiency improvements or operation at a higher power		
11	factor, Issue Number 8 asks whether the QF should be compensated for power delivered above the facility's originally designated nameplate capacity at		
12	avoided cost rates, and if so, whether the compensation should be at avoided cost rates that were effective when the underlying contract was executed, or at		
13	avoided cost rates that are effective at the time the QF is <i>improved</i> . Issue Number 8 also queries whether a QF that is operating under a standard contract		
14	can permanently change its nameplate rating under the contract, in the event that the facility equipment is upgraded. ⁹		
15	In its testimony addressing Issue 8, Staff recommended that "[t]he Commission should		
16	direct the utilities to amend their standard contracts to spell out [Staff's proposed] treatment of		
17	additional generation resulting from efficiency improvements or necessary equipment		
18	replacement."10 Staff explained:		
19	The QF cannot control necessary equipment replacement, and available turbine and generator sizes change over time. Also, the QF should not be		
20	penalized for efficiency improvements, whether through operational changes		
21	or upgraded equipment. That would run counter to the Commission's objective to encourage utilities and customers to meet energy needs at the lowest possible		
22	cost and risk. ¹¹		
23			
24	9 In the Matter of the Public Utility Commission of Oregon Staff's Investigation Relating to Electric		
25	Utility Purchases from Qualifying Facilities, Docket No. UM 1129, Order No. 06-538 at 37-38 (Sept. 20, 2006) (emphasis added).		
	¹⁰ Docket No. UM 1129, Staff/1000, Schwartz/64 (emphasis added).		

1 alter the nameplate capacities of four of its not-yet-operational QFs while maintaining the

26 ¹¹ Docket No. UM 1129, Staff/1000, Schwartz/64-65 (emphasis added).

1	The Commission resolved the issue, stating, "it was not our intent to discourage QF
2	operators from upgrading their facilities," and concluding:
3	We determine that a QF may <i>upgrade</i> operations and <i>continue to receive</i> its
4	existing contract price for all power delivered up to 10 MW, but if the QF project is upgraded to a capacity that is above 10 MW, a new contract must be
5	negotiated to price any power delivered over 10 MW at updated avoided cost rates. 12
6	The Commission directed the utilities to revise their standard contracts accordingly, 13
7	resulting in PGE's current Section 4.3.
8	The record in UM 1129 is unambiguous. The Commission clearly intended the policy
9	it set out in Order No. 06-538 to apply only to a change in nameplate capacity resulting from
10	an upgrade to an existing facility. 14 The Commission clearly contemplated that time would
11	pass between "when the underlying contract was executed" and "the time the QF is
12	improved."15 The Commission's intent is further demonstrated by its statement that "a QF
13	may <i>upgrade</i> operations and <i>continue</i> to receive its existing contract price." ¹⁶ Nothing in
14	Order No. 06-538 suggests that the Commission intended to allow a QF to simply change its
15	mind about project size after executing a PPA, as PNW Solar proposes to do here.
16	D. C. C. A. A. A. C. C. L. L. A. DOFFLOAD, L. L. L. A. A. A. A. A. A. A. A. C.
17	B. Section 4.3 was added to PGE's standard contract at the direction of the Commission in Order No. 06-538, and it must be interpreted to reflect the
18	Commission's intent in that order.
19	The Commission expects that the terms of a utility's standard contract will be
20	"consistent with, or in the spirit of, [the Commission's] general conclusions about
21	implementation of PURPA." ¹⁷ Section 4.3 was included in PGE's standard contract to comply
22	¹² Order No. 06-538 at 38-39 (emphasis added).
23	 Order No. 06-538 at 9. Order No. 06-538 at 37-38.
24	15 Order No. 06-538 at 37-38.
25	¹⁶ Order No. 06-538 at 39 (emphasis added).
	¹⁷ Order No. 06-538 at 8; see also Northwest and Intermountain Power Producers Coalition, Community Renewable Energy Association, and Renewable Energy Coalition v. Portland General
26	5, 2, 3, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4,

- 1 with Order No. 06-538's direction regarding treatment of upgrades to an already operational
- 2 QF and must be viewed in light of the reason for its existence. 18
- Furthermore, the Commission regularly has reviewed and approved PGE's standard
- 4 contract, including when it initially was filed in UM 1129 in compliance with Order No. 06-
- 5 538. 19 At that time, when the language that is now Section 4.3 was added to PGE's standard
- 6 contract, Staff found that the revised standard contract complied with Order No. 06-538, and
- 7 no party objected to Staff's finding.²⁰ More recently, in a dispute regarding a different
- 8 provision of PGE's standard contract, the Commission affirmed that PGE's standard contract
- 9 complies with Order No. 06-538, 21 and reiterated that the contract "was drafted by PGE at our
- 10 direction to comply with PURPA, related federal and state law, and our orders, and was subject
- 11 to the review and comment by our Staff and interested parties, as well as our consideration and
- 12 approval."22

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- In sum, the language in PGE's standard contract exists because of Order No. 06-538
- 14 and has been approved by the Commission as consistent with that order on multiple
- 15 occasions.²³ Therefore, Section 4.3 must be interpreted in a manner that reflects the intent of

¹⁷ _____

Electric Company, Docket No. UM 1805, Order No. 17-256 at 3 (Jul. 13, 2017) (quoting and reiterating the same).

¹⁸ Order No. 06-538 at 9, 39.

¹⁹ Docket No. UM 1129, Advice No. 06-26 Compliance Filing to Order No. 06-538 (Oct. 20, 2006)

^{20 (}adding to PGE's standard contract as Section 4.4 the language that currently comprises Section 4.3); Docket No. UM 1129, Order No. 07-065 at 1 (Feb. 27, 2007) (approving PGE's Advice No. 06-26).

²¹ Order No. 07-065 at 1 (noting that Staff determined that PGE's advice filing complies with Order No. 06-538 and that no parties objected to Staff's finding).

²² PaTu Wind Farm, LLC, v. Portland General Electric Company, Docket No. UM 1566, Order No. 12-316 at 5 (Aug. 21, 2012) (finding that PGE's standard contract, which had been approved by the

²³ Commission, complied with Order No. 06-538).

^{24 &}lt;sup>22</sup> Docket No. UM 1566, Order No. 14-287 at 13 (Aug. 13, 2014).

 ²³ See id.; Order No. 12-316 at 5 (upholding a challenged term in PGE's standard contract because the contract had been approved by the Commission and complied with Order No. 06-538); see also Order No. 17-256 at 3 (stating that a utility cannot be found in violation of the Commission's orders because of a term in a standard contract approved by the Commission).

2	operational.
3	C. The material changes in output PNW Solar requested after executing its PPAs are not permitted under Section 4.3.
5	PNW Solar is seeking to significantly change the output of four QFs for which it has
6	executed PPAs, prior to bringing the QFs online. PNW Solar's requested changes cannot be
7	classified as upgrades and therefore are not permitted under Section 4.3.
8	PNW Solar executed six PPAs with PGE in the first half of 2016, thereby locking in
9	the August 2015 vintage avoided cost prices for its output. However, approximately one year
10	later, PNW Solar seeks to significantly change the nameplate capacity of four of the six QFs
11	for which it had executed PPAs—including more than doubling the nameplate capacity of the
12	Butler QF.
13	PNW Solar's requested changes are not upgrades, but rather fundamental alterations of
14	the facilities that affect an essential term in the PPA—the nameplate capacity of the facility.
15	These are not the type of "upgrades" or "efficiency improvements" that the Commission and
16	parties to docket UM 1129 envisioned when considering whether to allow "a QF that is
17	operating under a standard contract" to change its output and how to compensate the QF for
18	an output change. ²⁴ PNW Solar's QFs are not operating, and its requested wholesale changes
19	in nameplate capacity, a key project characteristic, are not permitted under Section 4.3. ²⁵
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24	 Order No. 06-538 at 38-39 (emphasis added). PGE does understand that there can be minor changes to a planned project made during the
25	construction process, which must be included in the as-built supplement and can be accommodated under the PPA, but none of PNW Solar's requested changes can be classified as minor.
26	and in 1111, out none of 11111 botal b requested changes can be classified as limiot.

1 the order giving rise to it, and must apply only to upgrades that occur after a project is

1	D. Adopting PNW Solar's interpretation of Section 4.3 would allow QFs to
2	circumvent the standard contract process, contrary to PURPA, and to the detriment of PGE's customers.
3	
4	PGE's Schedule 201 contains specific information about the process and timelines for
5	QFs to enter standard contracts with PGE, in order to ensure a fair and orderly process through
6	which PGE can obtain the information required to prepare a standard contract. ²⁶ When PGE
7	completes the process and enters into a PPA with a QF, the Company commits itself to
8	performing pursuant to all applicable terms and conditions, over the life of the agreement.
9	Similarly, the Company expects that the QF will have engaged in sufficient due diligence, prior
10	to executing a PPA, to accurately represent the material characteristics of its project and its
11	ability to perform as promised.
12	Adherence to the Schedule 201 procedures and to the terms of executed PPAs is
13	important because it allows PGE to make reasonable estimates based on the amount of
14	contracted-for QF generation in the queue. It also helps discourage a particularly troubling
15	trend experienced by some utilities, where QFs request standard contracts prior to undertaking
16	careful planning and analysis, simply to lock in an option on attractive avoided cost pricing.
17	The result is an unreliable queue of executed QF contracts—many of which may never be built,
18	but which the utility must nevertheless plan for, while customers pick up the tab for the not-
19	inconsiderable administrative costs.
20	Therefore, PNW Solar should be required either to maintain its QFs' nameplate
21	capacities as specified in the executed PPAs or to terminate its existing PPAs and begin the
22	process of executing new PPAs—with updated nameplate capacities—for its QFs, at the
23	
	²⁶ See Docket No. UM 1129, PGE's Advice No. 06-26 and Cover Letter (stating that Schedule 201 was modified, pursuant to Order No. 06-538, "to incorporate additional information about the process
	and requirements for entering into a standard or negotiated power purchase agreement"); <i>and</i> Schedule 201, Sheets 201-2 and 201-3 (requiring a QF to provide all project information necessary to prepare a draft standard contract).

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1 avoided cost prices applicable when a new Legally Enforceable Obligation is established. Any

2 other outcome would incentivize QFs to request PPAs prior to responsible planning, knowing

3 that they later can engage in more thorough planning and alter the nameplate capacity of their

4 facilities accordingly.

E. This dispute presents matters within the Commission's primary jurisdiction and area of specialized expertise and cannot be resolved in the circuit court.

PNW Solar has threatened to bring its dispute with PGE regarding the interpretation of Section 4.3 to the circuit court.²⁷ However, the dispute is not simply a matter of general contract interpretation, but rather concerns an important issue of PURPA law and policy within the Commission's unique expertise and primary jurisdiction—application of the Commission's prior orders to interpret a provision of a PURPA PPA.

The Oregon Court of Appeals has recognized that a utility's PURPA obligation to purchase a QF's output "is created by statutes, regulations and administrative rules," and "is not governed by common law concepts of contract law." Additionally, the Commission previously has determined that the circuit court lacks jurisdiction to interpret a contract that affects utility rates, because setting and determining the reasonableness of rates is a matter within the Commission's exclusive jurisdiction. (While the prices paid by utilities for PURPA generation do not constitute rates, in and of themselves, they are recovered through the rates that utility customers pay.) And the Commission has resolved past disputes regarding terms in PGE's standard PPA by applying PURPA law and policy to interpret the contract, recognizing that the contract was drafted by PGE at the Commission's direction.

²⁸ Snow Mountain Pine Co. v. Maudlin, 84 Or App 590, 598 (Apr. 8, 1987).

^{24 &}lt;sup>29</sup> Wah Chang v. PacifiCorp, Docket No. UM 1002, Order No. 09-343 at 11-18 (Sept. 2, 2009).

Order No. 12-316 at 9 (resolving a dispute regarding a term in PGE's standard contract but
 declining jurisdiction over a FERC-jurisdictional, transmission-related dispute that was "not contractual in nature"); Order No. 14-287 at 13 ("To answer this question, we must interpret the

²⁶ contract.").

1	The PNW Solar PPAs are a product of PURPA and the Commission's implementing		
2	rules and orders, their prices and terms are approved by the Commission and reflected in		
3	Schedule 201, and they impact customer rates. For all of these reasons, this Commission—no		
4	the circuit court—is the proper forum for resolving the dispute between PGE and PNW Solar		
5	regarding a provision in PGE's standard PPA that was added at the Commission's direction.		
6	III. REQUEST FOR RELIEF		
7	For all of the above reasons, PGE requests that the Commission find that this		
8	Complaint presents issues within its primary jurisdiction and that PNW Solar's requested		
9	material changes to the nameplate capacity of its QFs are not permitted under Section 4.3 of		
10	the executed standard PPAs.		
11			
12	Dated August 31, 2017 McDowell Rackner Gibson PC		
13			
14	hisas lu		
15	Lisa F. Rackner Jordan R. Schoonover		
16	419 SW 11th Avenue, Suite 400 Portland, Oregon 97205		
17	Telephone: (503) 595-3925 Facsimile: (503) 595-3928		
18	lisa@mrg-law.com		
19			
20	PORTLAND GENERAL ELECTRIC COMPANY		
21	V. Denise Saunders Associate General Counsel		
22	121 SW Salmon Street, 1WTC1301 Portland, Oregon 97204		
23	Telephone: (541) 752-9060 Facsimile: (503) 464-2200		
24	denise.saunders@pgn.com		
25	Attorneys for Portland General Electric Company		
26			

BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON
UM
PORTLAND GENERAL ELECTRIC
Complaint and Request for Dispute Resolution
Exhibit A
August 31, 2017



May 8, 2017

Denise Saunders Associate General Counsel 121 SW Salmon Street, 1WTC 13 Portland, OR 97204

RE: Updating PPAs for PNW Solar Projects

Dear Denise -

Thank you again for the discussion yesterday regarding Pacific Northwest Solar, LLC's (PNW Solar) request to update certain of its Power Purchase Agreements (PPAs) with Portland General Electric (PGE). I have now had an opportunity to review (again) the PPA language along with the OPUC Order No. 06-538 you referred me to, and I think it is even more clear that PNW Solar has the option to increase the size of our projects to 10 MWac. It would seem that we are otherwise in agreement with the other modifications sought by PNW Solar (including dates for COD and assignment to the project company) – the only remaining issue concerns the sizing of the projects.

Let me walk you through that analysis in writing as well as confirm how the PPA language matches our earlier discussions with PGE staff concerning changing sizing downstream of execution. From there, I am hopeful you will agree to the draft Amendment to the PPA that I have proposed (or have some reasonable changes thereto to propose). If not, we are ready, willing and able to pursue our rights before the OPUC, though that would seem unnecessary given the very clear language of the PPAs along with the representations of PGE and the circumstances that have arisen therefrom.

A. Review of Actual and Unambiguous PPA Language

As a standard contract, I am treating the following analysis consistently across all PPAs currently held by PNW Solar with PGE. The PPA language on point is Section 4.3, which states (in full, emphasis added):

4.3. Upon completion of construction of the Facility, Seller shall provide PGE an As-built Supplement to specify the actual Facility as built. Seller shall not increase the Nameplate Capacity Rating above that specified in Exhibit A or increase the ability of the Facility to deliver Net Output in quantities in excess of the Net Dependable Capacity, or the Maximum Net Output as described in Section 3.1.11 above, through any means including, but not limited to, replacement, modification, or addition of existing equipment, except with prior written notice to PGE. In the event Seller increases the Nameplate Capacity Rating of the Facility to no more than 10,000 kW



pursuant to this section, PGE shall pay the Contract Price for the additional delivered Net Output. In the event Seller increases the Nameplate Capacity Rating to greater than 10,000 kW, then Seller shall be required to enter into a new power purchase agreement for all delivered Net Output proportionally related to the increase of Nameplate Capacity above 10,000 kW.

The above provision is unambiguous and provides very simply that the Seller (here, PNW Solar) can increase the size of the facility up to 10 MWac. This is easily read from the express terms of this contract. First, the Seller is required to provide an as-built supplement to "specify the actual Facility as built." This very provision contemplates that the actual facility could be different than that originally specified (otherwise the balance of the provision would be unnecessary). That Facility cannot be larger than that originally specified in the PPA, "except with prior written notice to PGE." Here, PNW Solar has given prior written notice to PGE of its larger facility, and thus the provision allows PNW Solar to increase the contracted nameplate capacity under the existing PPA. The next sentence then provides the limit to this change in sizing, indicating that Seller can only increase to 10 MWac. Where the Seller stays within this limit, the PPA clearly provides that "PGE shall pay the Contract Price for the additional delivered Net Output." In the event the Seller goes over the 10 MWac limit, the Seller has to enter into a new contract for that excess power. This latter issue is not at play here, inasmuch as PNW Solar has only sought to increase the Butler Project to the 10 MWac limit.

The clear take-away from the language of the PPA is that Seller is to provide a supplement to the PPA confirming the actual size of the project built. From there, assuming notice has been provided to PGE as it has been here, the question becomes one of the impact of the change in size. Where the change has been to a maximum of 10 MWac, PGE must continue to pay for all power generated as part of the original PPA. Where the change has been to increase over the limit, then a further contract is required for that excess power generated over 10 MWac. This provision would be rendered a nullity if it were to be read in any other context, and I can find no limitation on the change to the size other than then 10 MWac limit denoted herein.

B. Review of PPA Language in Light of OPUC Order No. 06-538

The language of OPUC Order No. 05-538 is both consistent with and supportive of the analysis of the PPA language called out above. The import of the Order was to address whether any increase in a facility's production would be contracted-for at the rates in the executed PPA or whether they would be contracted-for at the rates existing when the facility was upgraded: "whether the QF should be compensated for power delivered above the facility's originally designated nameplate capacity at avoided costs rates, and if so, whether the compensation should be at avoided costs rates that were effective when the underlying contract was executed, or at avoided costs rates that are effective at the time the QF is improved." In

¹ Notably, the PPA does not require any form of notice to PGE if the facility to be constructed is smaller (thus, PNW Solar could reduce the size of any of its projects and simply provide an as-built at the time of construction – PNW Solar has gone farther than that required by actually communicating its intent to PGE in writing advising as to those projects that will increase in size and those that will decrease in size).



answering that question, the Commission ruled: "We determine that a QF may upgrade operations and continue to receive its existing contract price for all power delivered up to 10 MW, but if the QF project is upgraded to a capacity that is above 10 MW, a new contract must be negotiated to price any power delivered over 10 MW at updated avoided cost rates." (Emphasis added).

In fact, the impetus of the OPUC order centers around how to calculate rates and whether there needs to be a new contract for projects exceeding certain limitations. The positions of the parties and Staff focused on measuring just how far over the 10 MWac limit one could push the limit before requiring a new and separate contract. The Commission held fast to the 10 MWac limit which is omnipresent in Oregon. However, the Commission was clear that "It was not our intent to discourage QF operators from upgrading their facilities, however." The Commission has evidenced its intent that any Seller can produce up to 10 MWac at their facility under the already-in-place PPA.

Thus, the take-away from the OPUC order and the language of the Commission is consistent with the language used in the PPA. To be sure, it reflects that a Seller can alter the size of a project, but that there is an upper limit to that size modification – 10 MWac. Anything done to increase nameplate capacity to that point remains under the original PPA terms. Anything done to increase beyond the limit requires a separate contract. The base premise of both situations is that project sizes can change.

Accordingly, the language in OPUC Order No. 06-538 supports the position that PNW Solar as the Seller can increase the nameplate capacity of its projects up to 10 MWac and stay within the contract rates of the already-executed PPA.

C. <u>Practical Considerations Also Support PGE Acknowledging PNW Solar's Right to Change</u> Project Sizing

As I have relayed on several instances, our firm's correspondence with PGE Staff confirms the understanding and import of the PPA as it concerns changes in size. PGE Staff have represented to PNW Solar staff and other developers that the projects can change in size. Given the unambiguous language in the PPA, PNW Solar reasonably believed that it could alter the size of the project by increasing up to 10 MWac. Indeed, had that not been the case, PNW Solar would have simply pursued a 10 MWac PPA for all of its projects. Instead, PNW Solar sought to work cooperatively with PGE to provide the most current information possible concerning size and alter where appropriate.

The representations by PGE Staff and the expectations of PNW Solar should not be surprising in that, amongst other items, the interconnection evaluation is frequently ongoing after the PPA is executed. Those evaluations often shape the final size of a project, either allowing for an increase in size or requiring a reduction. Thus, even under normal circumstances (and compliant timelines), there is a chance the project size changes, which makes it all that more reasonable for the PPA to allow for and capture that change in facility size (through an as-built supplement, with an upper bound limit of 10 MWac to remain within the PPA).

The issue has been compounded here unfortunately because PGE has violated the applicable tariffs concerning interconnection evaluations and reporting, resulting in at least a year of delays to PNW Solar projects (I have sent that separately, so it is not recited here again). To the extent PGE's argument concerns an ability to forecast power from facilities coming on line, such forecasting could have been made far more



accurate and timely had PGE followed the prescribed method and timing for interconnection studies and reports. Again, this correspondence was not meant to address that issue head on, but rather the interconnection delays are just another practical reason to take a second look at this situation and the PPA language before forcing this matter to the OPUC.

Finally, practically speaking, there is no real impact to PGE from these requested changes. I recognize that you echoed a concern for forecasting of power deliverables from projects, but that really cannot be a driving force in the world of PGE's power deliveries and supply in terms of long-range forecasts. Of course, the forecasting could have been even more accurate with a compliant PGE interconnection department (which has gotten better, but has still missed critical deadlines). Still, looking just to the projects PNW Solar is seeking to amend there is nearly no appreciable impact to PGE:

Project	Original PPA	Anticipated As-
	Sizing	Built PPA Sizing
Butler	4 MWac	10 MWac
Duus	10 MWac	10 MWac
Firwood	10 MWac	10 MWac
Starlight	4 MWac	2.2 MWac
Stringtown	4 MWac	2.3 MWac
Amity	4 MWac	6 MWac
Total	36 MWac	38.5 MWac

As you can see, the change requested reflects a net change of approximately 4.5 MWac, which is a nominal overall shift (at this time). This is not some horribly significant burden on PGE, and is very reasonable in light of the circumstances.

I do wonder if some of what is being imposed on PNW Solar in terms of push-back on these very simple and straightforward requests is tied to an overall issue PGE has with certain other QF Developers who are pushing the limits (and/or going beyond those limits). We have worked very hard to be a cooperative partner, to be reasonable, and to work within the confines of the rules – we think we have done a good job there and feel that we may be being looped in with others who have not, which is disappointing. I am hopeful that we can continue our open dialogue and look to both the legal framework that permits (and in my opinion encourages) these changes as well as the practical implications (in that PNW Solar has looked past a number of issues caused by PGE's interconnection group with an eye toward a long-term good relationship). In short, the practical circumstances here warrant a second look at the requests being made.

D. Conclusion

As you can see from the above analysis, the PPA language is clear that PNW Solar can change the size of the projects up to 10 MWac without impacting the pricing under the PPAs. We seek to confirm that by PGE's acknowledgment of the same, and to that end we look forward to confirming that the Amendment language proposed (or some reasonable derivative thereof) will work for you.



Please advise quickly inasmuch as we did not anticipate this to be an issue (again, we had a reasonable expectation under the circumstances of being able to do this even as part of the as-builts, and so this new push-back is troubling and time sensitive). We would prefer to avoid an OPUC docket on the issue (and the other issues we have thus far looked past), but please let us know if PGE is unwilling to allow PNW Solar to update its PPAs as requested.

Sincerely,

Ryan N. Meyer Senior Vice President Rmeyer@pnw-solar.com (458) 205-5870 direct



BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON
UM
PORTLAND GENERAL ELECTRIC
Complaint and Request for Dispute Resolution
Exhibit B
August 31, 2017

STANDARD RENEWABLE IN-SYSTEM VARIABLE POWER PURCHASE

AGREEMENT

THIS AGREEMENT, entered into this <u>26th</u> day, <u>January 2016,</u> XXXX, is between Butler Solar, LLC ("Seller") and Portland General Electric Company ("PGE") (hereinafter each a "Party" or collectively, "Parties").

RECITALS

Seller intends to construct, own, operate and maintain a solar energy generation facility for the generation of electric power located in Yamhill County, Oregon with a Nameplate Capacity Rating of 4,000 kilowatt ("kW"), as further described in Exhibit A ("Facility"); and

Seller intends to operate the Facility as a "Qualifying Facility," as such term is defined in Section 3.1.3, below.

Seller shall sell and PGE shall purchase the entire Net Output, as such term is defined in Section 1.21, below, from the Facility in accordance with the terms and conditions of this Agreement.

AGREEMENT

NOW, THEREFORE, the Parties mutually agree as follows:

SECTION 1: DEFINITIONS

When used in this Agreement, the following terms shall have the following meanings:

- 1.1. "As-built Supplement" means the supplement to Exhibit A provided by Seller in accordance with Section 4.3 following completion of construction of the Facility, describing the Facility as actually built.
- 1.2. "Base Hours" is defined as the total number of hours in each Contract Year (8,760 or 8,784 for leap year).
- 1.3. "Billing Period" means a period between PGE's readings of its power purchase billing meter at the Facility in the normal course of PGE's business. Such periods may vary and may not coincide with calendar months; however, PGE shall use best efforts to read the power purchase billing meter in 12 equally spaced periods per year.

- 1.4. "Cash Escrow" means an agreement by two parties to place money into the custody of a third party for delivery to a grantee only after the fulfillment of the conditions specified.
- 1.5. "Commercial Operation Date" means the date that the Facility is deemed by PGE to be fully operational and reliable. PGE may, at its discretion, require, among other things, that all of the following events have occurred:
- 1.5.1. (facilities with nameplate under 500 kW exempt from following requirement) PGE has received a certificate addressed to PGE from a Licensed Professional Engineer ("LPE") acceptable to PGE in its reasonable judgment stating that the Facility is able to generate electric power reliably in accordance with the terms and conditions of this Agreement (certifications required under this Section 1.5 can be provided by one or more LPEs);
- 1.5.2. Start-Up Testing of the Facility has been completed in accordance with Section 1.36;
- 1.5.3. (facilities with nameplate under 500 kW exempt from following requirement) After PGE has received notice of completion of Start-Up Testing, PGE has received a certificate addressed to PGE from an LPE stating that the Facility has operated for testing purposes under this Agreement and was continuously mechanically available for operation for a minimum of 120 hours. The Facility must provide ten (10) working days written notice to PGE prior to the start of the initial testing period. If the mechanical availability of the Facility is interrupted during this initial testing period or any subsequent testing period, the Facility shall promptly start a new Test Period and provide PGE forty-eight (48) hours written notice prior to the start of such testing period;
- 1.5.4. (facilities with nameplate under 500 kW exempt from following requirement) PGE has received a certificate addressed to PGE from an LPE stating that in accordance with the Generation Interconnection Agreement, all required interconnection facilities have been constructed all required interconnection tests have been completed; and the Facility is physically interconnected with PGE's electric system.
- 1.5.5. (facilities with nameplate under 500kW exempt from following requirement) PGE has received a certificate addressed to PGE from an LPE stating that Seller has obtained all Required Facility Documents and, if requested by PGE in writing, has provided copies of any or all such requested Required Facility Documents;
- 1.6. "Contract Price" means the applicable price, including on-peak and offpeak prices, as specified in the Schedule.
- 1.7. "Contract Year" means each twelve (12) month period commencing upon the Commercial Operation Date or its anniversary during the Term, except the final contract year will be the period from the last anniversary of the Commercial Operation Date during the Term until the end of the Term.

- 1.8. "Effective Date" has the meaning set forth in Section 2.1.
- 1.9. "Environmental Attributes" shall mean any and all claims, credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, resulting from the avoidance of the emission of any gas, chemical or other substance to the air, soil or water. Environmental Attributes include but are not limited to: (1) any avoided emissions of pollutants to the air, soil or water such as (subject to the foregoing) sulfur oxides (SOx), nitrogen oxides (NOx), carbon monoxide (CO), and other pollutants; and (2) any avoided emissions of carbon dioxide (CO2), methane (CH4), and other greenhouse gasses (GHGs) that have been determined by the United Nations Intergovernmental Panel on Climate Change to contribute to the actual or potential threat of altering the Earth's climate by trapping heat in the atmosphere.
 - 1.10. "Facility" has the meaning set forth in the Recitals.
- 1.11. "Generation Interconnection Agreement" means the generation interconnection agreement to be entered into separately between Seller and PGE, providing for the construction, operation, and maintenance of interconnection facilities required to accommodate deliveries of Seller's Net Output.
- 1.12. "Generation Unit" means each separate electrical generator that contributes towards Nameplate Capacity Rating included in Exhibit A. For solar facilities, a generating unit is a complete solar electrical generation system within the Facility that is able to generate and deliver energy to the Point of Delivery independent of other Generation Units within the same Facility.
- 1.13. "Letter of Credit" means an engagement by a bank or other person made at the request of a customer that the issuer will honor drafts or other demands for payment upon compliance with the conditions specified in the letter of credit.
- 1.14. "Licensed Professional Engineer" or "LPE" means a person who is licensed to practice engineering in the state where the Facility is located, who has no economic relationship, association, or nexus with the Seller, and who is not a representative of a consulting engineer, contractor, designer or other individual involved in the development of the Facility, or of a manufacturer or supplier of any equipment installed in the Facility. Such Licensed Professional Engineer shall be licensed in an appropriate engineering discipline for the required certification being made and be acceptable to PGE in its reasonable judgment.
- 1.15. "Lost Energy" means ((the Guarantee of Mechanical Availability as set forth in 3.1.10 / MAP) X Net Output for a Calendar Year) Net Output for the Calendar Year. Lost Energy shall be zero unless the result of the calculation in this subsection results in a positive number.
- 1.16. "Lost Energy Value" means Lost Energy X the excess of the annual timeweighted average Mid-C Index Price for On-Peak and Off-Peak Hours over the timeweighted average Contract Price for On-Peak and Off-Peak Hours for the

corresponding time period (provided that such excess shall not exceed the Contract Price and further provided that Lost Energy is deemed to be zero prior to reaching the Commercial Operation Date) plus any reasonable costs incurred by PGE to purchase replacement power and/or transmission to deliver the replacement power to the Point of Delivery. (For Start-Up Lost Energy Value see Section 1.35).

1.17. "Mechanical Availability Percentage" or "MAP" shall mean that percentage for any Contract Year for the Facility calculated in accordance with the following formula:

MAP = 100 X (Operational Hours) /(Base Hours X Number of Units)

- 1.18. "Mid-C Index Price" means the Day Ahead Intercontinental Exchange ("ICE") index price for the bilateral OTC market for energy at the Mid-C Physical for Average On Peak Power and Average Off Peak Power found on the following website: https://www.theice.com/products/OTC/Physical-Energy/Electricity. In the event ICE no longer publishes this index, PGE and the Seller agree to select an alternative successor index representative of the Mid-C trading hub.
- 1.19. "Nameplate Capacity Rating" means the maximum capacity of the Facility as stated by the manufacturer, expressed in kW, which shall not exceed 10,000 kW.
- 1.20. "Net Dependable Capacity" means the maximum capacity the Facility can sustain over a specified period modified for seasonal limitations, if any, and reduced by the capacity required for station service or auxiliaries.
- 1.21. "Net Output" means all energy expressed in kWhs produced by the Facility, less station and other onsite use and less transformation and transmission losses. Net Output does not include any environmental attributes.
- 1.22. "Number of Units" means the number of Generating Units in the Facility described in Exhibit A.
 - 1.23. "Off-Peak Hours" has the meaning provided in the Schedule.
 - 1.24. "On-Peak Hours" has the meaning provided in the Schedule.
- 1.25. "Operational Hours" for the Facility means the total across all Generating Units of the number of hours each of the Facility's Generating Units are potentially capable of producing power at its Nameplate Capacity Rating regardless of actual weather, season and time of day or night, without any mechanical operating constraint or restriction, and potentially capable of delivering such power to the Point of Delivery in a Contract Year. During up to, but not more than, 200 hours of Planned Maintenance during a Contract Year for each Generation Unit and hours during which an event of Force Majeure exists, a Generation Unit shall be considered potentially capable of delivering such power to the Point of Delivery. For example, in the absence of any Planned Maintenance beyond 200 hours on any Generation Unit of Event of Force

Majeure, the Operational Hours for a wind farm with five separate two MW turbines would be 43,800 for a Contract Year.

- 1.26. "Planned Maintenance" means outages scheduled 90 days in advance, with PGE's prior written consent, which shall not be unreasonably withheld.
- 1.27. "Point of Delivery" means the high side of the generation step up transformer(s) located at the point of interconnection between the Facility and PGE's distribution or transmission system, as specified in the Generation Interconnection Agreement.
- 1.28. "Pre-Commercial Operation Date Minimum Net Output" shall mean, unless such MWh is specifically set forth by Seller in Exhibit A, an amount in MWh equal to seventy-five percent (75%) of the Nameplate Capacity Rating X thirty percent (30%) for a wind or other renewable QF or fifty percent (50%) for a solar QF X (whole months since the date selected in Section 2.2.1 / 12) X (8760 hours 200 hours (assumed Planned Maintenance)) for each month. If Seller has provided specific expected monthly Net Output amounts for the Facility in Exhibit A, "Pre-Commercial Operation Date Minimum Net Output" shall mean seventy-five (75%) X expected Net Output set forth in Exhibit A for each month.
- 1.29. "Prime Rate" means the publicly announced prime rate or reference rate for commercial loans to large businesses with the highest credit rating in the United States in effect from time to time quoted by Citibank, N.A. If a Citibank, N.A. prime rate is not available, the applicable Prime Rate shall be the announced prime rate or reference rate for commercial loans in effect from time to time quoted by a bank with \$10 billion or more in assets in New York City, N.Y., selected by the Party to whom interest based on the prime rate is being paid.
- 1.30. "Prudent Electrical Practices" means those practices, methods, standards and acts engaged in or approved by a significant portion of the electric power industry in the Western Electricity Coordinating Council that at the relevant time period, in the exercise of reasonable judgment in light of the facts known or that should reasonably have been known at the time a decision was made, would have been expected to accomplish the desired result in a manner consistent with good business practices, reliability, economy, safety and expedition, and which practices, methods, standards and acts reflect due regard for operation and maintenance standards recommended by applicable equipment suppliers and manufacturers, operational limits, and all applicable laws and regulations. Prudent Electrical Practices are not intended to be limited to the optimum practice, method, standard or act to the exclusion of all others, but rather to those practices, methods and acts generally acceptable or approved by a significant portion of the electric power generation industry in the relevant region, during the relevant period, as described in the immediate preceding sentence.
- 1.31. "Required Facility Documents" means all licenses, permits, authorizations, and agreements necessary for construction, operation, interconnection, and maintenance of the Facility including without limitation those set forth in Exhibit B.

- 1.32. "RPS Attributes" means all attributes related to the Net Output generated by the Facility that are required in order to provide PGE with "qualifying electricity," as that term is defined in Oregon's Renewable Portfolio Standard Act, Ore. Rev. Stat. 469A.010, in effect at the time of execution of this Agreement. RPS Attributes do not include Environmental Attributes that are greenhouse gas offsets from methane capture not associated with the generation of electricity and not needed to ensure that there are zero net emissions associated with the generation of electricity.
- 1.33. Schedule" shall mean PGE Schedule 201 filed with the Oregon Public Utilities Commission ("Commission") in effect on the Effective Date of this Agreement and attached hereto as Exhibit D, the terms of which are hereby incorporated by reference.
- 1.34. Senior Lien" means a prior lien which has precedence as to the property under the lien over another lien or encumbrance.
- 1.35. "Start-Up Lost Energy Value" means for the period after the date specified in Section 2.2.2 but prior to achievement of the Commercial Operation Date: zero, unless the Net Output is less than the pro-rated Pre-Commercial Operation Date Minimum Net Output for the applicable delay period, and the time-weighted average of the delay period's Mid-C Index Price for On-Peak Hours and Off-Peak Hours is greater than the time-weighted average of the delay period's Contract Price for On-Peak Hours and Off-Peak Hours, in which case Startup Lost Energy Value equals: (pro-rated Pre-Commercial Operation Date Minimum Net Output for the applicable period Net Output for the applicable period) X (the lower of: the time-weighted average of the Contract Price for On-Peak hours and Off-Peak Hours during the applicable period; or (the time-weighted average of the Mid-C Index Price for On-Peak Hours and Off-Peak Hours during the applicable period)). The time-weighted average in this section will reflect the relative proportions of On-Peak Hours and Off-Peak Hours and Off-Peak Hours in each day.
- 1.36. "Start-Up Testing" means the completion of applicable required factory and start-up tests as set forth in Exhibit C.
- 1.37. "Step-in Rights" means the right of one party to assume an intervening position to satisfy all terms of an agreement in the event the other party fails to perform its obligations under the agreement.
- 1.38. "Term" shall mean the period beginning on the Effective Date and ending on the Termination Date.
- 1.39. "Test Period" shall mean a period of sixty (60) days or a commercially reasonable period determined by the Seller.

References to Recitals, Sections, and Exhibits are to be the recitals, sections and exhibits of this Agreement.

SECTION 2: TERM; COMMERCIAL OPERATION DATE

- 2.1. This Agreement shall become effective upon execution by both Parties ("Effective Date").
- 2.2. Time is of the essence of this Agreement, and Seller's ability to meet certain requirements prior to the Commercial Operation Date and to complete all requirements to establish the Commercial Operation Date is critically important. Therefore,
- 2.2.1 By November 1, 2017 Seller shall begin initial deliveries of Net Output; and
- 2.2.2 By December 31, 2017 Seller shall have completed all requirements under Section 1.5 and shall have established the Commercial Operation Date.
- 2.2.3 Unless the Parties agree in writing that a later Commercial Operation Date is reasonable and necessary, the Commercial Operation Date shall be no more than three (3) years from the Effective Date. PGE will not unreasonably withhold agreement to a Commercial Operation Date that is more than three (3) years from the Effective date if the Seller has demonstrated that a later Commercial Operation Date is reasonable and necessary.
- 2.3. This Agreement shall terminate the twentieth anniversary of the Effective Date, or the date the Agreement is terminated in accordance with Section 9 or 11, whichever is earlier ("Termination Date").

SECTION 3: REPRESENTATIONS AND WARRANTIES

- 3.1. Seller and PGE represent, covenant, and warrant as follows:
- 3.1.1. Seller warrants it is a LLC duly organized under the laws of Oregon.
- 3.1.2. Seller warrants that the execution and delivery of this Agreement does not contravene any provision of, or constitute a default under, any indenture, mortgage, or other material agreement binding on Seller or any valid order of any court, or any regulatory agency or other body having authority to which Seller is subject.
- 3.1.3. Seller warrants that the Facility is and shall for the Term of this Agreement continue to be a "Qualifying Facility" ("QF") as that term is defined in the version of 18 C.F.R. Part 292 in effect on the Effective Date. Seller has provided the appropriate QF certification, which may include a Federal Energy Regulatory Commission ("FERC") self-certification to PGE prior to PGE's execution of this Agreement. At any time during the Term of this Agreement, PGE may require Seller to provide PGE with evidence satisfactory to PGE in its reasonable discretion that the Facility continues to qualify as a QF under all applicable requirements.

- 3.1.4. Seller warrants that it has not within the past two (2) years been the debtor in any bankruptcy proceeding, and Seller is and will continue to be for the Term of this Agreement current on all of its financial obligations.
- 3.1.5. Seller warrants that during the Term of this Agreement, all of Seller's right, title and interest in and to the Facility shall be free and clear of all liens and encumbrances other than liens and encumbrances arising from third-party financing of the Facility other than workers', mechanics', suppliers' or similar liens, or tax liens, in each case arising in the ordinary course of business that are either not yet due and payable or that have been released by means of a performance bond acceptable to PGE posted within eight (8) calendar days of the commencement of any proceeding to foreclose the lien.
- 3.1.6. Seller warrants that it will design and operate the Facility consistent with Prudent Electrical Practices.
- 3.1.7. Seller warrants that the Facility has a Nameplate Capacity Rating not greater than 10,000 kW.
- 3.1.8. Seller warrants that Net Dependable Capacity of the Facility is 4,000 kW.
- 3.1.9. Seller estimates that the average annual Net Output to be delivered by the Facility to PGE is 8,180,000 kilowatt-hours ("kWh"), which amount PGE will include in its resource planning.
- 3.1.10. Seller represents and warrants that the Facility shall achieve the following Mechanical Availability Percentages ("Guarantee of Mechanical Availability"):
- 3.1.10.1 Ninety percent (90%) beginning in the first Contract Year and extending through the Term for the Facility, if the Facility was operational and sold electricity to PGE or another buyer prior to the Effective Date of this Agreement; or
- 3.1.10.2 Ninety percent (90%) beginning in Contract Year three and extending throughout the remainder of the Term.
- 3.1.10.3 Annually, within 90 days of the end of each Contract Year Seller shall send to PGE a detailed written report demonstrating and providing evidence of the actual MAP for the previous Contract Year.
- 3.1.10.4 Seller's failure to meet the Guarantee of Mechanical Availability in a Calendar Year shall result in damages payable to PGE by Seller equal to the Lost Energy Value. PGE shall bill Seller for such damages in accordance with Section 8.
- 3.1.11. Seller will deliver from the Facility to PGE at the Point of Delivery Net Output not to exceed a maximum of 9,800,000 kWh of Net Output during each Contract Year ("Maximum Net Output").

- 3.1.12. By the Commercial Operation Date, Seller has entered into a Generation Interconnection Agreement for a term not less than the term of this Agreement.
- 3.1.13. PGE warrants that it has not within the past two (2) years been the debtor in any bankruptcy proceeding, and PGE is and will continue to be for the Term of this Agreement current on all of its financial obligations.
- 3.1.14. Seller warrants that (i) the Facility satisfies the eligibility requirements specified in the Definition of a Small Cogeneration Facility or Small Power Production Facility Eligible to Receive the Standard Renewable Rates and Standard Renewable PPA in PGE's Schedule and (ii) Seller will not make any changes in its ownership, control or management during the term of this Agreement that would cause it to not be in compliance with the Definition of a Small Cogeneration Facility or Small Power Production Facility Eligible to Receive the Standard Renewable Rates and Standard Renewable PPA in PGE's Schedule. Seller will provide, upon request by PGE not more frequently than every 36 months, such documentation and information as may be reasonably required to establish Seller's continued compliance with such Definition. PGE agrees to take reasonable steps to maintain the confidentiality of any portion of the above described documentation and information that the Seller identifies as confidential except PGE will provide all such confidential information to the Public Utility Commission of Oregon upon the Commission's request.
- 3.1.15. Seller warrants that it will comply with all requirements necessary for all Transferred RECs (as defined in Section 4.5) associated with Net Output to be issued, monitored, accounted for, and transferred by and through the Western Renewable Energy Generation System consistent with the provisions of OAR 330-160-0005 through OAR 330-160-0050. PGE warrants that it will reasonably cooperate in Seller's efforts to meet such requirements, including, for example serving as the qualified reporting entity for the Facility if the Facility is located in PGE's balancing authority.

SECTION 4: DELIVERY OF POWER, PRICE AND ENVIRONMENTAL ATTRIBUTES

- 4.1. Commencing on the Effective Date and continuing through the Term of this Agreement, Seller shall sell to PGE the entire Net Output delivered from the Facility at the Point of Delivery.
 - 4.2. PGE shall pay Seller the Contract Price for all delivered Net Output.
- 4.3. Upon completion of construction of the Facility, Seller shall provide PGE an As-built Supplement to specify the actual Facility as built. Seller shall not increase the Nameplate Capacity Rating above that specified in Exhibit A or increase the ability of the Facility to deliver Net Output in quantities in excess of the Net Dependable Capacity, or the Maximum Net Output as described in Section 3.1.11 above, through any means including, but not limited to, replacement, modification, or addition of existing equipment, except with prior written notice to PGE. In the event Seller increases the Nameplate Capacity Rating of the Facility to no more than 10,000 kW

pursuant to this section, PGE shall pay the Contract Price for the additional delivered Net Output. In the event Seller increases the Nameplate Capacity Rating to greater than 10,000 kW, then Seller shall be required to enter into a new power purchase agreement for all delivered Net Output proportionally related to the increase of Nameplate Capacity above 10,000 kW.

- 4.4. To the extent not otherwise provided in the Generation Interconnection Agreement, all costs associated with the modifications to PGE's interconnection facilities or electric system occasioned by or related to the interconnection of the Facility with PGE's system, or any increase in generating capability of the Facility, or any increase of delivery of Net Dependable Capacity from the Facility, shall be borne by Seller.
- During the Renewable Resource Deficiency Period, Seller shall provide and PGE shall acquire the RPS Attributes for the Contract Years as specified in the Schedule and Seller shall retain ownership of all other Environmental Attributes (if any). During the Renewable Resource Sufficiency Period, and any period within the Term of this Agreement after completion of the first fifteen (15) years after the Commercial Operation Date, Seller shall retain all Environmental Attributes in accordance with the Schedule. The Contract Price includes full payment for the Net Output and any RPS Attributes transferred to PGE under this Agreement. With respect to Environmental not transferred to PGE under this Agreement ("Seller-Retained Attributes Environmental Attributes") Seller may report under §1605(b) of the Energy Policy Act of 1992 or under any applicable program as belonging to Seller any of the Seller-Retained Environmental Attributes, and PGE shall not report under such program that such Seller-Retained Environmental Attributes belong to it. With respect to RPS Attributes transferred to PGE under this Agreement ("Transferred RECs"), PGE may report under §1605(b) of the Energy Policy Act of 1992 or under any applicable program as belonging to it any of the Transferred RECs, and Seller shall not report under such program that such Transferred RECs belong to it.

SECTION 5: OPERATION AND CONTROL

5.1. Seller shall operate and maintain the Facility in a safe manner in accordance with the Generation Interconnection Agreement, and Prudent Electrical Practices. PGE shall have no obligation to purchase Net Output from the Facility to the extent the interconnection of the Facility to PGE's electric system is disconnected, suspended or interrupted, in whole or in part, pursuant to the Generation Interconnection Agreement, or to the extent generation curtailment is required as a result of Seller's noncompliance with the Generation Interconnection Agreement. Seller is solely responsible for the operation and maintenance of the Facility. PGE shall not, by reason of its decision to inspect or not to inspect the Facility, or by any action or inaction taken with respect to any such inspection, assume or be held responsible for any liability or occurrence arising from the operation and maintenance by Seller of the Facility.

- 5.2. Seller agrees to provide sixty (60) days advance written notice of any scheduled maintenance that would require shut down of the Facility for any period of time.
- 5.3. If the Facility ceases operation for unscheduled maintenance, Seller immediately shall notify PGE of the necessity of such unscheduled maintenance, the time when such maintenance has occurred or will occur, and the anticipated duration of such maintenance. Seller shall take all reasonable measures and exercise its best efforts to avoid unscheduled maintenance, to limit the duration of such unscheduled maintenance, and to perform unscheduled maintenance during Off-Peak hours.

SECTION 6: CREDITWORTHINESS

In the event Seller: a) is unable to represent or warrant as required by Section 3 that it has not been a debtor in any bankruptcy proceeding within the past two (2) years; b) becomes such a debtor during the Term; or c) is not or will not be current on all its financial obligations, Seller shall immediately notify PGE and shall promptly (and in no less than 10 days after notifying PGE) provide default security in an amount reasonably acceptable to PGE in one of the following forms: Senior Lien, Step-in Rights, a Cash Escrow or Letter of Credit. The amount of such default security that shall be acceptable to PGE shall be equal to: (annual On Peak Hours) X (On Peak Price – Off Peak Price) X (Net Dependable Capacity). Notwithstanding the foregoing, in the event Seller is not current on construction related financial obligations, Seller shall notify PGE of such delinquency and PGE may, in its discretion, grant an exception to the requirements to provide default security if the QF has negotiated financial arrangements with the construction loan lender that mitigate Seller's financial risk to PGE.

SECTION 7: METERING

- 7.1. PGE shall design, furnish, install, own, inspect, test, maintain and replace all metering equipment at Seller's cost and as required pursuant to the Generation Interconnection Agreement.
- 7.2. Metering shall be performed at the location and in a manner consistent with this Agreement and as specified in the Generation Interconnection Agreement. All Net Output purchased hereunder shall be adjusted to account for electrical losses, if any, between the point of metering and the Point of Delivery, so that the purchased amount reflects the net amount of power flowing into PGE's system at the Point of Delivery.
- 7.3. PGE shall periodically inspect, test, repair and replace the metering equipment as provided in the Generation Interconnection Agreement. If any of the inspections or tests discloses an error exceeding two (2%) percent of the actual energy delivery, either fast or slow, proper correction, based upon the inaccuracy found, shall be made of previous readings for the actual period during which the metering equipment rendered inaccurate measurements if that period can be ascertained. If the

actual period cannot be ascertained, the proper correction shall be made to the measurements taken during the time the metering equipment was in service since last tested, but not exceeding three (3) months, in the amount the metering equipment shall have been shown to be in error by such test. Any correction in billings or payments resulting from a correction in the meter records shall be made in the next monthly billing or payment rendered. Such correction, when made, shall constitute full adjustment of any claim between Seller and PGE arising out of such inaccuracy of metering equipment.

7.4. To the extent not otherwise provided in the Generation Interconnection Agreement, all of PGE's costs relating to all metering equipment installed to accommodate Seller's Facility shall be borne by Seller.

SECTION 8: BILLINGS, COMPUTATIONS AND PAYMENTS

- 8.1. On or before the thirtieth (30th) day following the end of each Billing Period, PGE shall send to Seller payment for Seller's deliveries of Net Output to PGE, together with computations supporting such payment. PGE may offset any such payment to reflect amounts owing from Seller to PGE pursuant to this Agreement, the Generation Interconnection Agreement, and any other agreement related to the Facility between the Parties or otherwise. On or before the thirtieth (30th) day following the end of each Contract Year, PGE shall bill for any Lost Energy Value accrued pursuant to this Agreement.
- 8.2. Any amounts owing after the due date thereof shall bear interest at the Prime Rate plus two percent (2%) from the date due until paid; provided, however, that the interest rate shall at no time exceed the maximum rate allowed by applicable law.

SECTION 9: DEFAULT, REMEDIES AND TERMINATION

- 9.1. In addition to any other event that may constitute a default under this Agreement, the following events shall constitute defaults under this Agreement:
- 9.1.1. Breach by Seller or PGE of a representation or warranty, except for Section 3.1.4, set forth in this Agreement.
- 9.1.2. Seller's failure to provide default security, if required by Section 6, prior to delivery of any Net Output to PGE or within 10 days of notice.
- 9.1.3. Seller's failure to meet the Guarantee of Mechanical Availability established in Section 3.1.10 for two consecutive Contract Years or Seller's failure to provide any written report required by that section.
 - 9.1.4. If Seller is no longer a Qualifying Facility.
 - 9.1.5. Failure of PGE to make any required payment pursuant to Section 8.1.
 - 9.1.6. Seller's failure to meet the Commercial Operation Date.

- 9.2. In the event of a default under Section 9.1.6, PGE may provide Seller with written notice of default. Seller shall have one year in which to cure the default during which time the Seller shall pay PGE damages equal to the Lost Energy Value. If Seller is unable to cure the default, PGE may immediately terminate this Agreement as provided in Section 9.3. PGE's resource sufficiency/deficiency position shall have no bearing on PGE's right to terminate the Agreement under this Section 9.2.
- 9.3. In the event of a default under this Agreement, except as otherwise provided in this Agreement, the non-defaulting party may immediately terminate this Agreement at its sole discretion by delivering written notice to the other Party. In addition, the non-defaulting party may pursue any and all legal or equitable remedies provided by law or pursuant to this Agreement including damages related to the need to procure replacement power. A termination hereunder shall be effective upon the date of delivery of notice, as provided in Section 20. The rights provided in this Section 9 are cumulative such that the exercise of one or more rights shall not constitute a waiver of any other rights.
- 9.4. If this Agreement is terminated as provided in this Section 9 PGE shall make all payments, within thirty (30) days, that, pursuant to the terms of this Agreement, are owed to Seller as of the time of receipt of notice of default. PGE shall not be required to pay Seller for any Net Output delivered by Seller after such notice of default.
- 9.5. In the event PGE terminates this Agreement pursuant to this Section 9, and Seller wishes to again sell Net Output to PGE following such termination, PGE in its sole discretion may require that Seller shall do so subject to the terms of this Agreement, including but not limited to the Contract Price until the Term of this Agreement (as set forth in Section 2.3) would have run in due course had the Agreement remained in effect. At such time Seller and PGE agree to execute a written document ratifying the terms of this Agreement.
- 9.6. Sections 9.1, 9.4, 9.5, 10, and 19.2 shall survive termination of this Agreement.

SECTION 10: INDEMNIFICATION AND LIABILITY

10.1. Seller agrees to defend, indemnify and hold harmless PGE, its directors, officers, agents, and representatives against and from any and all loss, claims, actions or suits, including costs and attorney's fees, both at trial and on appeal, resulting from, or arising out of or in any way connected with Seller's delivery of electric power to PGE or with the facilities at or prior to the Point of Delivery, or otherwise arising out of this Agreement, including without limitation any loss, claim, action or suit, for or on account of injury, bodily or otherwise, to, or death of, persons, or for damage to, or destruction or economic loss of property belonging to PGE, Seller or others, excepting to the extent such loss, claim, action or suit may be caused by the negligence of PGE, its directors, officers, employees, agents or representatives.

- 10.2. PGE agrees to defend, indemnify and hold harmless Seller, its directors, officers, agents, and representatives against and from any and all loss, claims, actions or suits, including costs and attorney's fees, both at trial and on appeal, resulting from, or arising out of or in any way connected with PGE's receipt of electric power from Seller or with the facilities at or after the Point of Delivery, or otherwise arising out of this Agreement, including without limitation any loss, claim, action or suit, for or on account of injury, bodily or otherwise, to, or death of, persons, or for damage to, or destruction or economic loss of property belonging to PGE, Seller or others, excepting to the extent such loss, claim, action or suit may be caused by the negligence of Seller, its directors, officers, employees, agents or representatives.
- 10.3. Nothing in this Agreement shall be construed to create any duty to, any standard of care with reference to, or any liability to any person not a Party to this Agreement. No undertaking by one Party to the other under any provision of this Agreement shall constitute the dedication of that Party's system or any portion thereof to the other Party or to the public, nor affect the status of PGE as an independent public utility corporation or Seller as an independent individual or entity.
- 10.4. NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR SPECIAL, PUNITIVE, INDIRECT OR CONSEQUENTIAL DAMAGES, WHETHER ARISING FROM CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY OR OTHERWISE.

SECTION 11: INSURANCE

- 11.1. Prior to the connection of the Facility to PGE's electric system, provided such Facility has a design capacity of 200 kW or more, Seller shall secure and continuously carry for the Term hereof, with an insurance company or companies rated not lower than "B+" by the A. M. Best Company, insurance policies for bodily injury and property damage liability. Such insurance shall include provisions or endorsements naming PGE, it directors, officers and employees as additional insureds; provisions that such insurance is primary insurance with respect to the interest of PGE and that any insurance or self-insurance maintained by PGE is excess and not contributory insurance with the insurance required hereunder; a cross-liability or severability of insurance interest clause; and provisions that such policies shall not be canceled or their limits of liability reduced without thirty (30) days' prior written notice to PGE. Initial limits of liability for all requirements under this section shall be \$1,000,000 million single limit, which limits may be required to be increased or decreased by PGE as PGE determines in its reasonable judgment economic conditions or claims experience may warrant.
- 11.2. Prior to the connection of the Facility to PGE's electric system, provided such facility has a design capacity of 200 kW or more, Seller shall secure and continuously carry for the Term hereof, in an insurance company or companies rated not lower than "B+" by the A. M. Best Company, insurance acceptable to PGE against property damage or destruction in an amount not less than the cost of replacement of the Facility. Seller promptly shall notify PGE of any loss or damage to the Facility.

Unless the Parties agree otherwise, Seller shall repair or replace the damaged or destroyed Facility, or if the facility is destroyed or substantially destroyed, it may terminate this Agreement. Such termination shall be effective upon receipt by PGE of written notice from Seller. Seller shall waive its insurers' rights of subrogation against PGE regarding Facility property losses.

11.3. Prior to the connection of the Facility to PGE's electric system and at all other times such insurance policies are renewed or changed, Seller shall provide PGE with a copy of each insurance policy required under this Section, certified as a true copy by an authorized representative of the issuing insurance company or, at the discretion of PGE, in lieu thereof, a certificate in a form satisfactory to PGE certifying the issuance of such insurance. If Seller fails to provide PGE with copies of such currently effective insurance policies or certificates of insurance, PGE at its sole discretion and without limitation of other remedies, may upon ten (10) days advance written notice by certified or registered mail to Seller either withhold payments due Seller until PGE has received such documents, or purchase the satisfactory insurance and offset the cost of obtaining such insurance from subsequent power purchase payments under this Agreement.

SECTION 12: FORCE MAJEURE

- 12.1. As used in this Agreement, "Force Majeure" or "an event of Force Majeure" means any cause beyond the reasonable control of the Seller or of PGE which, despite the exercise of due diligence, such Party is unable to prevent or overcome. By way of example, Force Majeure may include but is not limited to acts of God, fire, flood, storms, wars, hostilities, civil strife, strikes, and other labor disturbances, earthquakes, fires, lightning, epidemics, sabotage, restraint by court order or other delay or failure in the performance as a result of any action or inaction on behalf of a public authority which by the exercise of reasonable foresight such Party could not reasonably have been expected to avoid and by the exercise of due diligence, it shall be unable to overcome, subject, in each case, to the requirements of the first sentence of this paragraph. Force Majeure, however, specifically excludes the cost or availability of resources to operate the Facility, changes in market conditions that affect the price of energy or transmission, wind or water droughts, and obligations for the payment of money when due.
- 12.2. If either Party is rendered wholly or in part unable to perform its obligation under this Agreement because of an event of Force Majeure, that Party shall be excused from whatever performance is affected by the event of Force Majeure to the extent and for the duration of the Force Majeure, after which such Party shall recommence performance of such obligation, provided that:
- 12.2.1. the non-performing Party shall, promptly, but in any case within one (1) week after the occurrence of the Force Majeure, give the other Party written notice describing the particulars of the occurrence; and
- 12.2.2. the suspension of performance shall be of no greater scope and of no longer duration than is required by the Force Majeure; and

- 12.2.3. the non-performing Party uses its best efforts to remedy its inability to perform its obligations under this Agreement.
- 12.3. No obligations of either Party which arose before the Force Majeure causing the suspension of performance shall be excused as a result of the Force Majeure.
- 12.4. Neither Party shall be required to settle any strike, walkout, lockout or other labor dispute on terms which, in the sole judgment of the Party involved in the dispute, are contrary to the Party's best interests.

SECTION 13: SEVERAL OBLIGATIONS

Nothing contained in this Agreement shall ever be construed to create an association, trust, partnership or joint venture or to impose a trust or partnership duty, obligation or liability between the Parties. If Seller includes two or more parties, each such party shall be jointly and severally liable for Seller's obligations under this Agreement.

SECTION 14: CHOICE OF LAW

This Agreement shall be interpreted and enforced in accordance with the laws of the state of Oregon, excluding any choice of law rules which may direct the application of the laws of another jurisdiction.

SECTION 15: PARTIAL INVALIDITY AND PURPA REPEAL

It is not the intention of the Parties to violate any laws governing the subject matter of this Agreement. If any of the terms of the Agreement are finally held or determined to be invalid, illegal or void as being contrary to any applicable law or public policy, all other terms of the Agreement shall remain in effect. If any terms are finally held or determined to be invalid, illegal or void, the Parties shall enter into negotiations concerning the terms affected by such decision for the purpose of achieving conformity with requirements of any applicable law and the intent of the Parties to this Agreement.

In the event the Public Utility Regulatory Policies Act (PURPA) is repealed, this Agreement shall not terminate prior to the Termination Date, unless such termination is mandated by state or federal law.

SECTION 16: WAIVER

Any waiver at any time by either Party of its rights with respect to a default under this Agreement or with respect to any other matters arising in connection with this Agreement must be in writing, and such waiver shall not be deemed a waiver with respect to any subsequent default or other matter.

SECTION 17: GOVERNMENTAL JURISDICTION AND AUTHORIZATIONS

This Agreement is subject to the jurisdiction of those governmental agencies having control over either Party or this Agreement. Seller shall at all times maintain in effect all local, state and federal licenses, permits and other approvals as then may be required by law for the construction, operation and maintenance of the Facility, and shall provide upon request copies of the same to PGE.

SECTION 18: SUCCESSORS AND ASSIGNS

This Agreement and all of the terms hereof shall be binding upon and inure to the benefit of the respective successors and assigns of the Parties. No assignment hereof by either Party shall become effective without the written consent of the other Party being first obtained and such consent shall not be unreasonably withheld. Notwithstanding the foregoing, either Party may assign this Agreement without the other Party's consent as part of (a) a sale of all or substantially all of the assigning Party's assets, or (b) a merger, consolidation or other reorganization of the assigning Party.

SECTION 19: ENTIRE AGREEMENT

- 19.1. This Agreement supersedes all prior agreements, proposals, representations, negotiations, discussions or letters, whether oral or in writing, regarding PGE's purchase of Net Output from the Facility. No modification of this Agreement shall be effective unless it is in writing and signed by both Parties.
- 19.2. By executing this Agreement, Seller releases PGE from any third party claims related to the Facility, known or unknown, which may have arisen prior to the Effective Date.

SECTION 20: NOTICES

20.1. All notices except as otherwise provided in this Agreement shall be in writing, shall be directed as follows and shall be considered delivered if delivered in person or when deposited in the U.S. Mail, postage prepaid by certified or registered mail and return receipt requested:

Schedule 201

Standard Renewable In-System Variable Power Purchase Agreement Form Effective September 23, 2015

To PGE:

Contracts Manager

QF Contracts, 3WTC0306 PGE - 121 SW Salmon St. Portland, Oregon 97204

20.2 The Parties may change the person to whom such notices are addressed, or their addresses, by providing written notices thereof in accordance with this Section 20.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed in their respective names as of the Effective Date.

PGE

By: Maria M. Pope

Title: SRVP Power Supply & Operations & Resource Strategy

Date: 1/25/2016

Butler Solar, LLc

(Name Seller)

Date: 1-26-16

Name: Ryan N. Meyer

Title:Senior Vice President

Approved By:
Business Terms
Credit
Legal
Risk Mgt.

EXHIBIT A DESCRIPTION OF SELLER'S FACILITY

Butler Solar: The power plant is solar photo-voltaic generation facility, to be located on a 45 acre parcel, at Tax Parcel(s) 466828 (Section 27, Township 5 South, Range 6 West). The center of the parcel is at approximately 45°06'21.78"N, 123°25'14.64"W.

The facility uses photo-voltaic panels to produce electricity to be transmitted to the Portland General Electric grid for public consumption. The facility will include approximately 16,900 PV panels capable of producing a total of approximately 5.3 MW-DC. The panels will be mounted on a single axis tracking structure that follows the path of the sun from East to West during the day. The panels will be organized into groups that will each be connected to 4 inverters capable of producing a maximum of 1 MW-AC each (with a combined maximum output of 4 MW-AC). Each inverter is mounted on a concrete or steel foundation and coupled with a step up transformer. The step-up transformer converts the voltage from the inverter output to the interconnecting grid voltage. For this project a total of 4 inverter stations will be connected to the Point of Common Coupling through the main switchgear. The switchgear contains the protection relays, disconnects, weather station, communication, and metering equipment.

EXHIBIT B REQUIRED FACILITY DOCUMENTS

- (1) Generation Interconnection Agreement with PGE
- (2) Power Purchase Agreement
- (3) Conditional Use Permit
- (4) Construction Building Permit Construction
- (5) Grading Permit 1200C Permit
- (6) FERC Form 556

EXHIBIT C START-UP TESTING

EXHIBIT C START-UP TESTING

[Seller identify appropriate tests]

Required factory testing includes such checks and tests necessary to determine that the equipment systems and subsystems have been properly manufactured and installed, function properly, and are in a condition to permit safe and efficient start-up of the Facility, which may include but are not limited to (as applicable):

- Calibration of all pressure, level, flow, temperature and monitoring instruments:
- Operating tests of all valves, operators, motor starters and motor;

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İ	4.	Alarms,	signals, and	fail-safe or sy:	stem shutdown control tests;	

- Insulation resistance and point-to-point continuity tests;
- 6. Bench tests of all protective devices;
- Tests required by manufacturer of equipment; and
- 8. Complete pre-parallel checks with PGE.

Required start-up test are those checks and tests necessary to determine that all features and equipment, systems, and subsystems have been properly designed, manufactured, installed and adjusted, function properly, and are capable of operating simultaneously in such condition that the Facility is capable of continuous delivery into PGE's electrical system, which may include but are not limited to (as applicable):

- Turbine/generator mechanical runs including shaft, vibration, and bearing temperature measurements;
- Running tests to establish tolerances and inspections for final adjustment of bearings, shaft run-outs;
- Brake tests;
- Energization of transformers;
- Synchronizing tests (manual and auto);
- Stator windings dielectric test;
- Armature and field windings resistance tests;
- Load rejection tests in incremental stages from 5, 25, 50, 75 and 100 percent load;
- 9. Heat runs;
- Tests required by manufacturer of equipment;
- Excitation and voltage regulation operation tests;
- Open circuit and short circuit; saturation tests:
- 13. Governor system steady state stability test:
- 14. Phase angle and magnitude of all PT and CT secondary voltages and currents to protective relays, indicating instruments and metering:
- 15. Aulo stop/start sequence;
- Level control system tests; and
- 17. Completion of all state and federal environmental testing requirements

> EXHIBIT D SCHEDULE

SCHEDULE 201 (Continued)

PRICING OPTIONS FOR STANDARD PPA (Continued) Renewable Fixed Price Option (Continued)

TABLE 6a												
Renewable Avoided Costs Renewable Fixed Price Option for Solar QF												
										On-Peak Forecast (\$/MWH)		
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2015	31.13	25.13	26.13	21.88	22.88	25.13	33.13	34.73	29.63	27.38	28.88	33.13
2016	31.58	30.16	27.08	25.66	24.96	23.21	32.05	36.41	32.37	31.12	32.12	34.58
2017	34.27	32.71	29.35	28.28	27.50	25.55	34.66	39.41	35.01	33.98	35.07	37.78
2018	36.61	34.95	31.34	29.68	28.86	26,82	37.16	42.26	37.53	36.07	37.24	40,12
2019	38.30	36.56	32.79	31.05	30.19	28.05	38.88	44.22	39.27	37.74	38.96	41.97
2020	93.84	93.82	92.92	93.46	97.24	96.18	95.81	95.67	94.15	93.00	93.99	92.79
2021	95.96	96.23	94.46	95.73	99.08	98.19	97.51	98.11	96.33	95.14	96.67	95,11
2022	98.12	97.97	95.73	97.78	101.29	100.08	99.54	99.50	98.20	97.02	98.70	96.99
2023	100.40	99.89	97.56	100.00	102.89	102.03	101.62	101.18	100.19	98.82	100.84	99.54
2024	101.72	101.90	99.59	101.97	105.18	103.98	103.85	103.54	103.32	100.50	101.68	101.84
2025	104.07	104.45	101.87	104.64	108.71	107.32	106.19	106.35	105.38	102.73	104.11	103.69
2026	106.92	106.53	104.81	107.39	112.65	108.54	108.54	109.02	108.68	105.07	107.23	106.12
2027	109.03	108.51	106.56	109.06	116.12	110.69	110.25	111.96	110.59	107.25	108.78	108.22
2028	111.02	109.79	107.40	111.36	117.90	112.17	113.01	113.02	111.99	109.62	110.89	109,97
2029	113.43	113.15	110.01	114.00	125.82	115.72	115.81	115.81	115.86	111.90	112.86	112.73
2030	115.86	115.51	112.82	116.23	129.42	120.01	117.47	117.33	118.96	114.09	114.75	114.81
2031	117.94	117.36	115.44	119.39	131.87	123.82	119.62	120.73	120.98	116.47	117.78	117.26
2032	119.89	119.29	117.34	121.36	134.05	125.87	121.59	122.72	122.98	118.39	119.72	119.20
2033	122.54	121.93	119.93	124.04	137.01	128.65	124.28	125.44	125.70	121.01	122.37	121.83
2034	124.90	124.28	122.25	126.44	139.66	131.13	126.68	127.86	128.12	123.35	124.73	124.18
2035	127.32	126,68	124.61	128.88	142.35	133.66	129.12	130.32	130.59	125.73	127.14	126.58
2036	129.42	128.77	126.67	131.00	144.70	135.87	131,26	132.48	132.75	127.80	129.24	128,67
2037	132.28	131.62	129.46	133.90	147.90	138.87	134.16	135.40	135.68	130.63	132.09	131.51
2038	134.83	134.16	131.96	136.48	150.75	141.55	136.74	138.02	138.30	133.15	134.64	134.05
2039	137.43	136.75	134.51	139.12	153.66	144.28	139.38	140.68	140.97	135.72	137.24	136.64
2040	139.70	139.01	136.73	141.41	156.20	146.67	141.69	143.00	143.30	137.96	139.51	138.89

SCHEDULE 201 (Continued)

PRICING OPTIONS FOR STANDARD PPA (Continued) Renewable Fixed Price Option (Continued)

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					Renewabl							
				Renewab				olar QF				
	Off-Peak Forecast (\$/MWH)											
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2015	26.88	20.38	20.88	15.88	17.88	19.13	23.88	26.13	25.63	23.13	25.38	28,38
2016	27.21	26.14	23.47	18.69	16.80	13.58	23.28	27.89	25.66	27.45	28.12	30.26
2017	30.42	29.21	26.19	21.62	19.38	15.58	25.52	30.64	28,17	30.08	30.82	33.18
2018	32.75	31.44	28.18	22.35	20.04	16.11	27.95	33.58	30.86	33.04	33.86	36.47
2019	34.58	33.20	29.75	23.58	21.14	16.98	29.51	35.46	32.58	34.89	35.76	38.52
2020	74.05	74.35	76.18	74.70	70.70	70.98	71.32	72.70	73.76	75.21	74.98	75.50
2021	76.61	75.69	77.70	76.08	72.65	72.71	73.48	73.88	75,25	77.66	74.78	76.80
2022	77.70	77.31	79.96	77.27	73.68	74.12	75.90	74.74	76.69	79.10	76.00	78.21
2023	78.70	78.76	81.53	79.38	74.14	75,53	77.17	76.51	78.04	80.71	77.14	79.80
2024	79.35	79.42	83.14	79.16	74.55	77.78	76.40	76.83	78.61	81.03	79.55	80.29
2025	80,96	80.94	84.88	80.33	74.54	78.20	78.02	79.19	79.32	82.81	82.21	81.48
2026	81.35	82.42	85.28	80.89	75.34	79.31	79.11	79.94	79.12	83.91	82.41	82.47
2027	84,14	84.11	86.28	82.99	75.15	80.77	81.16	80.43	80.90	86.39	83.38	83.99
2028	85.29	86.01	88.97	85.07	74.43	82.57	82.76	81.19	82.83	87.06	84.33	86.62
2029	85.87	86.84	90.61	86.72	68.73	82.93	84.21	82.59	84.39	88.00	86.85	88.12
2030	87.21	88.28	92.46	86.89	68.43	83.64	84.98	85,17	84.95	89.66	88.91	89.94
2031	89.10	90.50	93.69	87.32	69.81	83.38	86.78	86.97	85.14	91.14	90.93	90.04
2032	90.57	92.00	95.23	88.76	70.97	84.75	88.21	88.41	86.54	92.64	92.44	91.53
2033	92.57	94.03	97.34	90.72	72.53	86.63	90.16	90.36	88.46	94.69	94.48	93.55
2034	94.36	95.84	99.22	92.47	73.93	88.30	91.90	92.10	90.16	96.52	96.30	95.36
2035	96.18	97.69	101.13	94.25	75.36	90.00	93.68	93.88	91.90	98.38	98.16	97.20
2036	97.77	99.31	102.80	95.81	76.61	91.49	95.22	95.43	93.42	100.00	99.78	98.80
2037	99.93	101.50	105.07	97.93	78.30	93.51	97.33	97.54	95.49	102.21	101.99	100.99
2038	101.86	103.46	107.10	99.82	79.81	95.31	99.20	99.42	97.33	104.19	103.95	102.93
2039	103.82	105.46	109.17	101.74	81.35	97.15	101.12	101.34	99.21	106.20	105.96	104.92
2040	105.54	107.20	110.97	103.42	82.69	98.76	102.79	103.02	100.85	107.95	107.71	106.65

BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON UM
PORTLAND GENERAL ELECTRIC
Complaint and Request for Dispute Resolution
Exhibit C
August 31, 2017



LISA RACKNER Direct (503) 595-3925 lisa@mrg-law.com

VIA EMAIL AND 1ST CLASS MAIL

July 21, 2017

Ryan N. Meyer Senior Vice President PNW Solar 9450 SW Gemini Drive, #33304 Beaverton, OR 97008

Dear Mr. Meyer,

Portland General Electric Company (PGE) has retained my firm to represent its interests with respect to PNW Solar, LLC's (PNW Solar) request to update certain of its Power Purchase Agreements (PPA) to materially revise the agreed-to capacity. Specifically, we understand that PNW Solar is requesting to amend fully executed PPAs between PGE and six of its projects, to alter the capacity of each as follows:

Project	Original PPA Sizing	Anticipated As- Built PPA Sizing
Butler	4 MWac	10 MWac
Duus	10 MWac	10 MWac
Firwood	10 MWac	10 MWac
Starlight	4 MWac	2.2 MWac
Stringtown	4 MWac	2.3 MWac
Amity	4 MWac	6 MWac
Total	36 MWac	38.5 MWac

PGE has fully considered PNW Solar's request and the arguments presented in your letter received on June 23, 2017, and cannot agree to PNW Solar's request.

PGE's Policy Regarding Requested Changes to Executed PPAs

When PGE enters into a PPA with a qualifying facility (QF), the Company commits itself to performing pursuant to all applicable terms and conditions, over the life of the agreement. Similarly, the Company expects that, prior to executing a PPA, the QF will have engaged in sufficient due diligence to accurately represent the material characteristics of its project, and its ability to perform as promised. Consistent with this approach, after a PPA has been executed, the Company regards a decision by a QF to make a material change to project capacity as a new

Ryan N. Meyer July 21, 2017 Page 2

request; as a new request, the output of that facility is entitled to the avoided cost prices in effect at the time the new legally enforceable obligation (LEO) is established. If PGE were to act otherwise, a QF could request a PPA prior to responsible planning, simply to establish an LEO to attractive avoided cost prices, with the confidence it could engage in more thorough planning once its right to those prices is secured.

As discussed below, PGE does understand that there can be minor changes to a planned project made during the construction process, which will be accommodated under the PPA. In addition, the Company understands that over the life of a project, the capacity of a QF may increase to a modest degree, as a result of routine maintenance or upgrades. However, once a QF has executed a PPA, it cannot simply make material changes to capacity at will and retain its right to out-of-date avoided cost prices.

PGE's Interpretation of Section 4.3 of the PPA

PGE disagrees that Section 4.3 of the PPA allows Butler to increase its capacity upon notice. On the contrary, that provision was included to address the two situations mentioned above: (1) minor changes to the project description made during construction; and (2) project upgrades made after the project has been operating for some period of time. That intent is made clear by the first sentence (beginning with the words "Upon completion of construction of the facility"), which indicates that the changes covered are those arising after construction.

PGE's understanding of Section 4.3—in particular, the part of that provision specifically addressing upgrades and modifications to facilities—is consistent with Order No. 06-538, and the underlying record, which demonstrate that the Public Utility Commission of Oregon (Commission) intended Section 4.3 to apply only to increases in nameplate capacity due to upgrades occurring after a facility is operational. In Order No. 06-538, the Commission framed the issue under consideration as follows:

If a QF, under a standard contract, *increases power output due to a facility change, such as efficiency improvements or operation at a higher power factor*, Issue Number 8 asks whether the QF should be compensated for power delivered above the facility's originally designated nameplate capacity at avoided cost rates, and if so, whether the compensation should be at avoided cost rates that were effective when the underlying contract was executed, or at avoided cost rates that are effective at the time the QF is improved. Issue Number 8 also queries whether a QF that is operating under a standard contract can permanently change its nameplate rating under the contract, in the event that the facility equipment is upgraded.¹

In its testimony, Staff recommended that, in the event upgrades increase a QF's capacity, increased generation should receive the avoided cost price in effect as of the date of the

¹ In the Matter of the Public Utility Commission of Oregon Staff's Investigation Relating to Electric Utility Purchases from Qualifying Facilities, Docket No. UM 1129, Order No. 06-538 at 37-38 (Sept. 20, 2006).

Ryan N. Meyer July 21, 2017 Page 3

improvement—so long as the QF's capacity does not exceed 10 MW.² In support of this recommendation, Staff explained:

The Commission should direct the utilities to amend their standard contracts to spell out this treatment of additional generation resulting from efficiency improvements or necessary equipment replacement. . . . The QF cannot control necessary equipment replacement, and available turbine and generator sizes change over time. Also, the QF should not be penalized for efficiency improvements, whether through operational changes or upgraded equipment. That would run counter to the Commission's objective to encourage utilities and customers to meet energy needs at the lowest possible cost and risk.³

The Commission resolved the issue, stating as follows:

In Order No. 05-584, we determined that QFs with a nameplate capacity of 10 MW, or below, should be eligible for standard contracts. Pursuant to this decision, we intended that a QF with a nameplate capacity *over* 10 MW, regardless of how much over the 10 MW limit, would need to negotiate a non-standard contract. It was not our intent to discourage QF operators from upgrading their facilities, however.

We determine that a QF may upgrade operations and continue to receive its existing contract price for all power delivered up to 10 MW, but if the QF project is upgraded to a capacity that is above 10 MW, a new contract must be negotiated to price any power delivered over 10 MW at updated avoided cost rates.⁴

The Commission clearly intended the policy it set out to apply only to a change in nameplate capacity resulting from "a facility change such as efficiency improvements." Moreover, the Commission clearly contemplated that time would pass between "when the underlying contract was executed" and "the time the QF is improved." This intent is further supported by the Commission's statement that "a QF may upgrade operations and continue to receive its existing contract price." Conversely, there is no indication that the Commission intended to allow a QF to simply change its mind about project size, after executing a PPA, as PNW Solar proposes to do.

Delay in Interconnection Process

In your letter you state that PGE violated applicable tariffs concerning interconnection evaluations and reporting, resulting in at least one year of delays to PNW Solar's Projects. PGE disagrees. While PGE's review has confirmed that there have been a few delays in the process, the total impact on PNW Solar's projects would be measured in days, not years.

PNW Solar's Options

² Docket No. UM 1129, Staff/1000, Schwartz/64.

³ Docket No. UM 1129, Staff/1000, Schwartz/64-65.

⁴ Order No. 06-538 at 38-39 (emphasis original).

⁵ Order No. 06-538 at 37-38 (emphasis added).

⁶ Order No. 06-538 at 38.

⁷ Order No. 06-538 at 39.

Ryan N. Meyer July 21, 2017 Page 4

Based on the above analysis, PNW Solar has two options. It can abide by the terms of its executed PPAs. Or, alternatively, it can seek to terminate its existing PPAs, and request new PPAs, which will be provided under PGE's normal process. If PNW Solar wishes to terminate existing PPAs, and request new PPAs, it will be entitled to the avoided cost rates in effect at the time it establishes an LEO under Commission policies.

Please contact me directly if you have any questions.

Your very truly

Lisa Rackner

BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON
UM
PORTLAND GENERAL ELECTRIC
Complaint and Request for Dispute Resolution
Exhibit D
August 31, 2017

Sanger Law PC

1117 SE 53rd Ave. Portland, OR 97215

tel (503) 756-7533 fax (503) 334-2235 irion@sanger-law.com

August 28, 2017

Via Email

Lisa Rackner McDowell Rackner and Gibson 419 SW 11th Ave, Suite 400 Portland, OR 97205

Denise Saunders Associate General Counsel Portland General Electric Company 1 World Trade Center, Ste 1300 121 SW Salmon Street Portland, OR 97204

RE: PNW Solar Power Purchase Agreements

Dear Ms. Rackner and Ms. Saunders:

Pacific Northwest Solar, LLC ("PNW Solar") is sending this demand letter requesting that Portland General Electric Company ("PGE") agree in writing that PNW Solar can increase the Nameplate Facility Rating of the Amity Solar Facility to 6 megawatts ("MW") and Butler Solar Facility to 10 MW, and decrease the Nameplate Capacity Rating of the Starlight Solar Facility 2.3 MW and of the Stringtown Solar Facility to 2.2 MW.

PNW Solar is not requesting to amend the Amity Solar, Butler Solar, Starlight Solar or Stringtown Solar power purchase agreements ("PPA") because these sizing changes are allowed under their clear and unambiguous terms and conditions. However, PGE's refusal to accept notice of the increases in the Nameplate Capacity Rating of the Amity Solar and Butler Solar Facilities, and statements that it may terminate the Amity Solar, Butler Solar, Starlight Solar and Stringtown Solar PPAs if the Nameplate Capacity Ratings are changed is causing and will cause PNW Solar significant damages.

Letter re PNW Solar August 28, 2017 Page 2 of 2

Therefore, PNW Solar requests that PGE provide its agreement to the Nameplate Capacity Rating changes by close of business on September 1, 2017, or else PNW Solar will file a complaint in Oregon Circuit Court seeking north of \$3.75 million in damages, costs, and attorneys fees.

Sincerely,

Irion A. Sanger

cc: PNW Solar (Ryan N. Meyer, General Counsel)