# BEFORE THE PUBLIC UTILITY COMMISSION

# OF OREGON

UM 1844

# Served electronically at Salem, Oregon, 6/13/17, to:

Respondent's Attorney
Denise Saunders
Portland General Electric Company
121 SW Salmon Street
Portland, Oregon 97204
denise.saunders@pgn.com

Complainant's Attorney
Kenneth Kaufmann
1785 Willamette Falls Drive, Suite 5
West Linn, Oregon 97068
ken@kaufmann.law

Re: UM 1844, EVERGREEN BIOPOWER, LLC, Complainant

vs. PORTLAND GENERAL ELECTIRC COMPANY, Respondent

Evergreen BioPower, LLC, has filed a First Amended Complaint against Portland General Electric in Docket No. UM 1844, and states that "Counsel for Respondent is aware of Evergreen's intent to file the First Amended Complaint and does not object." A copy of the complaint is attached and served on Respondent, under ORS 756.512(1).

Respondent may file a motion if it has an objection to the filing of the First Amended Complaint; otherwise, the Public Utility Commission must receive an Answer from the Respondent or their attorney by July 3, 2017, under OAR 860-001-0400(4)(a). A copy must be served on the complainant.

After the filing of the answer, the matter will be set for hearing and you will be notified of the time and place.

PUBLIC UTILITY COMMISSION OF OREGON

Cheryl Walker

Administrative Specialist 2

Administrative Hearings Division

(503) 378-2849

c: Barbara Parr, barbara.parr@pgn.com

Attachments: Amended Complaint

Notice of Contested Case Rights and Procedures

## KENNETH KAUFMANN, ATTORNEY AT LAW

1785 Willamette Falls Drive • Suite 5 West Linn, OR 97068 office (503) 230-7715 fax (503) 972-2921

Kenneth E. Kaufmann Ken@Kaufmann.Law (503) 595-1867

June 13, 2017

#### Via Electronic Mail

Filing Center
Public Utility Commission of Oregon
P.O. Box 1088
Salem, OR 97308-1088
puc.filingcenter@state.or.us

Re: In the Matter of Evergreen BioPower, LLC vs. Portland General Electric Company
OPUC Docket No. UM 1844

**Attention Filing Center:** 

Complainant, Evergreen BioPower, LLC, herein files with the Commission its *First Amended Complaint* in Docket No. UM 1844. The First Amended Complaint incorporates factual developments that occurred after Evergreen filed its initial Complaint on May 31 and makes other changes. Because Respondent PGE has not yet filed an Answer, Complainant has not asked the Commission's leave to file this First Amended Complaint. Counsel for Respondent is aware of Evergreen's intent to file the First Amended Complaint and does not object.

Thank you in advance for your assistance.

Sincerely,

Ken Kaufmann

Attorney for Evergreen BioPower, LLC

Attach.

Kenneth Kaufmann, Atty OSB 982672 1785 Willamette Falls Drive, Suite 5

West Linn, OR 97068

Telephone: (503) 230-7715

FAX: (503) 972-2921 ken@kaufmann.law

Attorney for Complainant Evergreen BioPower, LLC

#### BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

**Evergreen BioPower, LLC** 

CASE NO. UM-1844

Complainant,

FIRST AMENDED COMPLAINT

VS.

**Portland General Electric Company** 

Respondent.

COMES NOW, Evergreen BioPower, LLC (hereinafter "Complainant" or "Evergreen"), by and through its attorney, and complains against Respondent Portland General Electric Company ("Respondent" or "PGE") and alleges as follows:

I

#### **OVERVIEW**

Complainant Evergreen operates a 10,000 kW nameplate wood biomass cogeneration facility at the Freres Lumber Company mill in Lyons, Oregon ("Facility") and desires to sell its electricity to PGE when its current PPA expires on December 31, 2017.

On November 15, 2016, Evergreen applied to PGE for a Schedule 201 standard PPA and proactively provided detailed information PGE might request for due diligence, including its nameplate facility capacity rating and its FERC Form 556 (which included

detailed design data). Evergreen responded to three additional information requests before PGE deemed Evergreen's application complete, on or about February 14, 2017.

On May 11, 2017, PGE promised to "provide and promptly execute a final PPA" *if* Evergreen changed its planned Point of Delivery to PGE's preferred location. In reliance upon PGE's offer, Evergreen changed the Point of Delivery, paid for a new transmission service request, and asked PGE to prepare a final PPA.

On May 16, 2017, PGE sent Evergreen a final PPA and a cover letter instructing Evergreen to execute the final PPA and return it via electronic mail to obligate PGE to the terms and conditions in the final PPA. Evergreen returned the signed PPA to PGE via electronic mail that same day. PGE then went silent.

PGE eventually returned the fully executed May 16 PPA to Evergreen on May 31, 2017. However, it also threatened to terminate the PPA depending on further review of whether Evergreen's Facility exceeded the 10,000 kW eligibility size cap. PGE's threat to terminate the PPA adversely affects Evergreen's ability to operate its Facility, including whether to continue to make payments needed to complete its interconnection and transmission service agreements, and whether it can pre-sell Thermal RECs to be produced by the Facility after January 1, 2018.

PGE's basis for claiming that the Facility may not be eligible misconstrues the clear size eligibility standard established in Commission's Order No. 05-584. But even more importantly, PGE's threat to terminate the contract is a brazen breach of its commitment to Evergreen (see ¶12, bolded language, infra) and a clear violation of Commission rule and policy. In Docket No. UM 1610, the Commission determined that a legally enforceable obligation arises when a QF signs and delivers a final draft of an

executable contract. Order No. 16-174, 27. This rule (and PGE's word) is rendered meaningless if PGE can execute a PPA and then promptly disavow its effect with impunity.

The tardiness of PGE's objection to Evergreen's size eligibility is without justification. Evergreen promptly provided information each time it was requested. Despite taking 135 business days to offer Evergreen a standard contract, PGE never questioned Evergreen's size eligibility until *after* Evergreen accepted PGE's offer. PGE's unreasonable delay in performing due diligence is the primary cause of PGE's present predicament. Because PGE knew or should have known whether Evergreen met the standard PPA eligibility criteria before offering an executable contract, PGE's window to challenge Evergreen's eligibility has passed.

Finally, PGE required Evergreen to negotiate terms of the standard agreement a QF is not required to negotiate, including the duration of fixed prices. Evergreen requested 15-years of fixed prices from its date of Commercial Operation, however, PGE would not agree to a fixed price term beyond 15 years from the PPA execution date. Evergreen acquiesced to this demand only because failure to do so would jeopardize its chances of finalizing a PPA prior to the effective date of PGE's May 1 avoided cost rate change application.

PGE's actions unreasonably impinge on the rights of Evergreen to rely on its May 16 PPA as well as possible future standard power purchase agreements from PGE, in violation of state and federal law and Commission directives. Evergreen therefore asks the Commission to: (1) remove the cloud PGE has placed on its May 16 PPA; (2) order PGE to offer Evergreen fixed prices for 15 years from the first date of energy delivery

under the May 16 PPA; and (3) order PGE to henceforth determine a QF's eligibility for a standard contract in accordance with the timelines set forth in Order No. 06-538.

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#### PRELIMINARY MATTERS

Copies of all pleadings and other correspondence in this matter should be served upon counsel for Evergreen at the above noted address. In support of this Complaint, Complainant alleges as follows:

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# **IDENTITY OF PARTIES**

- 1. Evergreen BioPower, LLC is an Oregon limited liability company whose physical address is 141 14<sup>th</sup> St, Lyons, OR 97358 and is a self-certified QF. See FERC Docket No. QF06-222.
- 2. Portland General Electric Company is an Oregon corporation with its principal place of business at 121 Southwest Salmon Street, Portland Oregon 97204. Portland General Electric Company is an electric company and a public utility providing electric service in the State of Oregon within the meaning of ORS 757.005. It is a regulated public utility subject to the jurisdiction of the Public Utilities Commission of Oregon ("Commission") and the Federal Regulatory Energy Commission ("FERC").

IV

#### APPLICABLE LAWS AND REGULATIONS

3. The Oregon statutes expected to be involved in this case include: ORS 756.500 to 756.558; and ORS 758.505 to 758.555. The Oregon rules expected to be

involved in this case include those within Divisions 1 and 29 of Chapter 860 of Oregon Administrative Rules.

4. Additionally, federal law is implicated under the mandatory purchase provisions of PURPA, 16 USC§ 824a-3, and FERC's rules promulgated under PURPA, 18 CFR § 292.101 to § 292.602.

#### V

#### **JURISDICTION**

5. This is a formal complaint filed pursuant to OAR 860-001-0300 to -0540 of the Rules of Procedure of the Public Utility Commission of Oregon ("Commission"), and in accordance with Commission Order No. 16-174, at 27 ("A QF should alert us of a dispute [over legally enforceable obligation] by filing a complaint.").

#### VI

#### **COMPLAINT**

- 6. Evergreen BioPower, LLC owns and operates a 10,000 kW wood-fired cogeneration facility in the 1,200-person town of Lyons, Oregon, located about 20 miles east on Highway 22 from Salem ("Facility"). It is an integral part of the Freres Lumber operations, Lyons' largest employer.
- 7. Evergreen built the Facility in 2007 with PacifiCorp's knowledge and assent, and presently sells Net Output to PacifiCorp under a PacifiCorp Schedule 37 standard contract for Qualifying Facilities 10,000 kW and under. Evergreen's contract with PacifiCorp expires at the end of 2017 and Evergreen desires to sell Net Output to PGE under a PGE Schedule 201 standard power purchase agreement ("PPA") commencing on January 1, 2018.

- 8. The Facility has a nameplated capacity of 10,000 kW. Evergreen Exhibit 1/Facility Nameplate.
  - 9. The facility is incapable of exceeding 10,000 kW Net Output.
- 10. On November 15, 2016, Evergreen submitted to PGE an acknowledged copy of its FERC Form 556 QF Self-Certification, detailed information about its facility, and a request for a standard PPA under Schedule 201. Evergreen filled out PGE's *Schedule 201 Initial Information Form* on December 10 and provided additional requested information on December 16 and December 27, 2016. On February 14 or shortly thereafter, PGE acknowledged receipt of all information it required to prepare a PPA. PGE subsequently sent Evergreen several draft PPAs. At no time prior to May 25 did PGE make known to Evergreen any concern about the Facility's size.
- 11. On May 11, 2017, PGE sent Evergreen a letter stating that it could not accept Evergreen's Net Output at Evergreen's proposed Point of Delivery (PACW.PGE). It stated, further, that if Evergreen would deliver to one of several listed alternative delivery points, then "PGE is willing to provide and promptly execute a final PPA, consistent with the avoided cost prices in effect as of the date of this letter." **Evergreen Exhibit 2/May 11 Letter**. Evergreen told PGE that it did not have a right to refuse to purchase power at a delivery point selected by the QF. However, Evergreen acquiesced to PGE's position in reliance on PGE's offer to promptly execute a final PPA.
- 12. On May 16, 2017, PGE sent Evergreen an executable Schedule 201 PPA (specifying a Point of Delivery acceptable to PGE) with the October 12, 2016 vintage avoided costs. The cover letter to the PPA stated, in part:

This letter confirms that the applicable prices for Evergreen's output is PGE's current Renewable Fixed Price Option for Base Load QF, effective on and after October 12, 2016.

If all information in the attached PPA is correct, PGE requests that Evergreen immediately sign the PPA and return the partially-executed PPA to PGE by electronic mail. *Once Evergreen executes the attached PPA, PGE will have a legally-enforceable obligation to purchase Evergreen's output in accordance with the prices, terms and conditions contained therein.* 

Evergreen Exhibit 3/ May 16 letter (emphasis added).

13. Evergreen returned a scanned version of the signed PPA via electronic mail to PGE on May 16, 2017. Evergreen's attorney enclosed the May 16 PPA in an email to PGE's attorney, Denise Saunders, at 8:49 pm. The e-mail stated, in part:

Mr. Freres has signed the PPA you tendered today and authorized me to deliver it to you now. **His intent is to enter Evergreen into a legally enforceable obligation with PGE effective May 16, 2017**, under such terms and conditions set forth in the PPA below.

Evergreen Exhibit 4/May 16 Evergreen E-mail (emphasis added).

- 14. Evergreen sent the original paper version to PGE the next day (May 17, 2017). Evergreen Exhibit 5/ May 16 PPA.
- 15. Evergreen contacted PGE on May 23 and May 25 to ask when PGE intended to execute the PPA. On May 25, PGE's attorney spoke with Evergreen's attorney by telephone and stated that PGE believed that the Facility might not be eligible

for a standard PPA. PGE threatened to not execute the May 16 PPA or, alternatively, to execute and promptly terminate the May 16 PPA. PGE promised to send Evergreen a written statement setting forth its position but PGE did not send Evergreen a statement.

16. On May 31, 2017, PGE sent Evergreen the fully executed May 16 PPA via electronic mail. However, PGE also stated, in a May 31 e-mail, that:

PGE is concerned that Evergreen may be in breach of the warranties in the PPA, and the OPUC established 10 MW eligibility threshold. \* \* \*Please be aware that, in the event we determine that your client is in breach of the PPA, we would need to move to terminate.

Evergreen Exhibit 6/ May 31 e-mails (emphasis added).

- 17. Evergreen met with PGE on June 6 in a confidential settlement conference; however, the parties were unable to reach a resolution.
- 18. As long as PGE is claiming a right to terminate the May 16 contract, Evergreen is suffering irreparable harm. In order to deliver output to PGE commencing on January 1, 2018, Evergreen must make substantial investment in the interconnection agreement and transmission rights necessary to deliver to PGE. It must pre-sell Thermal RECs that will be generated in 2018 and beyond. And it must finalize fuel supply agreements. PGE's threat to terminate makes Facility improvements unfinanceable or else forces Evergreen to make large financial commitments without knowing if it can rely on the May 16 PPA.
- 19. Evergreen may wish to contract with PGE in the future (at Lyons or elsewhere), and if it does, PGE may repeat the actions described above.

## LEGAL CLAIM --VIOLATION OF THE QF CONTRACTING RULES

20. Evergreen re-alleges ¶1-19, above.

#### COUNT 1--FAILURE TO FOLLOW SCHEDULE 201 TIMELINES

- 21. In Order 06-538, the Commission required the utilities to specify in their schedule for standard QF PPAs the number of days by which a QF will receive a final, executable contract after agreement on all terms and conditions are reached.
- 22. PGE's Schedule 201 (Sheet No. 201-2) implemented this requirement by providing that "[w]hen both parties are in full agreement as to all terms and conditions of the draft Standard PPA, the Company will prepare and forward to the Seller a final executable version of the agreement within 15 business days." (emphasis added).
- 23. PGE knew, or should have known, the Facility's eligibility no later than May 16, 2017--the date it tendered an executable PPA. PGE's delivery of the executable PPA on May 16, 2017, under the aforementioned Schedule 201 rule above, signified that PGE had already gathered the information necessary to determine eligibility and prepare the executable PPA.
- 24. Waiting for six months (and after tendering an executable PPA) to determine eligibility unfairly burdens the QF by: (a) putting at risk months of effort spent in the Schedule 201 process; (b) depriving the developer of time necessary to mitigate harms resulting from PGE's determination; and (c) adversely impacting the financeability of the executed PPA.

25. PGE's demand for additional information from Evergreen after delivering the executable PPA violated Order 06-538, as implemented in PGE's Schedule 201.

# COUNT 2--FAILURE TO RECOGNIZE A LEGALLY ENFORCEABLE OBLIGATION (OFFER AND ACCEPTANCE)

- 26. In Docket No. UM 1610, the Commission determined that a legally enforceable obligation arises when a QF signs and delivers a final draft of an executable PPA. Order No. 16-174, 27.
- 27. PGE's May 16 letter and delivery of a final executable PPA to Evergreen constituted an offer of a standard PPA at the terms and prices set forth therein.
- 28. Evergreen's May 16 e-mail delivering the signed May 16 PPA constituted an acceptance of PGE's offer.
- 29. PGE's continuing threat to terminate the May 16 PPA made on the same day it executed the PPA violates the Commission's rule (¶26, *supra*) regarding creation of a LEO.

# COUNT 3--FAILURE TO RECOGNIZE A LEGALLY ENFORCEABLE OBLIGATION (DETRIMENTAL RELIANCE)

- 30. PGE's May 11 letter included a promise to promptly execute a final PPA if Evergreen altered its planned Point of Delivery to PGE.
  - 31. Evergreen's reliance on such a promise was foreseeable.
- 32. Evergreen did rely on PGE's promise, making a new transmission service request to BPA at substantial expense.
- 33. PGE, having induced Evergreen to provide it a benefit, is now bound to honor the May 16 PPA.

# COUNT 4--FAILURE TO PROPERLY DETERMINE A FACILITY'S ELIGIBILITY FOR A SCHEDULE 201 PPA

34. In Order No. 05-584, the Commission determined that:

Design capacity, as defined by the *manufacturer's nameplate capacity*for a QF project, will continue to be the measure of eligibility for

standard contracts. In order to be eligible to receive standard contract

terms and conditions, a QF must have a manufacturer's nameplate

capacity at or under 10 MW.

Order 05-584, p. 40 (emphasis added).

- 35. The May 16 PPA, Section 1.17, defines "Nameplate Capacity Rating" as "the maximum capacity of the Facility as stated by the manufacturer, expressed in kW, which shall not exceed 10,000 kW".
- 36. Evergreen's Facility plainly complies with ¶¶34-35 (see Evergreen Exhibit 1/Facility Nameplate).
- 37. By declaring that Evergreen's facility is too large for a standard PPA, PGE acted arbitrarily and in violation of Order 05-584 and PGE's Schedule 201 standard PPA.

# COUNT 5--FAILURE TO PROPERLY DETERMINE THE 15-YEAR FIXED PRICE PERIOD

- 38. In Order No. 05-584, the Commission ordered the utilities to allow the QF to elect to receive up to 15 years of fixed prices.
- 39. Evergreen requested fixed prices for 15 years commencing on the January1, 2018 first energy delivery date.
- 40. PGE would only agree to fixed prices for 15 years commencing on the execution date of the PPA.

- 41. Because reasonable parties do not wait until one day before commencing energy deliveries to execute a PPA, PGE's interpretation of the Commission's 15-year fixed price requirement means that QFs selling to PGE will never, or almost never, enjoy the benefit of 15 years of fixed prices.
- 42. PGE's insistence on starting Evergreen's 15-year fixed price term on the execution date wrongfully deprived Evergreen of 7 months of fixed prices.

#### VIII

#### PRAYER FOR RELIEF

WHEREFORE Evergreen respectfully prays this Commission for:

- 43. An order declaring that Evergreen's Facility satisfies the 10,000kW size cap or else is entitled to a waiver of the size cap due to its prior qualification by PacifiCorp.
- 44. An order declaring that PGE has a legally enforceable obligation to purchase power from Evergreen under the terms and conditions set forth in the May 16 PPA;
- 45. An order prohibiting PGE from challenging Evergreen's or any other QF's eligibility for a Schedule 201 PPA after offering it a final PPA, absent changes to the Facility undertaken after PGE offered a final PPA, or fraud;
- 46. An order requiring PGE to offer Evergreen the right to amend the May 16 PPA to provide 15 years of fixed prices commencing on the date of first delivery of energy;
- 47. Penalties up to \$10,000 under ORS 756.990(2) for Count 1, Count 2, Count 3, and Count 4; and

48. Such other relief the Commission may devise to provide Seller the benefits of a standard Schedule 201 PPA with terms and conditions applicable on May 31, 2017.

Dated this 13<sup>th</sup> day of June 2017.

Respectfully submitted,

By:

Kenneth E. Kaufmann, OSB 982672 Attorney for Evergreen BioPower, LLC

**Attachments** 





May 11, 2017

Kyle Freres Vice President, Freres Lumber Co., Inc Manager, Evergreen BioPower LLC P.O. Box 276 Lyons, OR 97358 kfreres@frereslumber.com

Dear Kyle:

On April 19, 2017, you informed PGE that your requested Point of Delivery (POD) for the Evergreen Biopower project is PACW.PGE. As we have discussed, the Available Transmission Capacity (ATC) at that POD is extremely limited. Yearly firm ATC at the PACW.PGE POD has ranged from 0-4 MW since August 1, 2015, and is currently 4MW. This information is available on PGE's OASIS website.

Given these circumstances, PGE is willing to provide and promptly execute a final PPA, consistent with the avoided cost prices in effect as of the date of this letter<sup>1</sup> and with your planned commercial operation date of January 1, 2018, if you make arrangements to deliver your project's output by either:

- Revising your requested POD from PACW.PGE to one of the following Bonneville Power Administration "BPA" PODs, all of which have sufficient ATC:
  - BPAT.PGE
    - PGE Contiguous
      - · Pearl 230 kV (Sherwood)
      - McLoughlin 230 kV
      - Keeler 230 kV (St. Marys)
      - Rivergate 230 kV
    - Bethel 230 kV
    - Troutdale 230 kV (Blue Lake); or
- Agreeing to pay for upgrades required to add sufficient transmission capacity at the PACW.PGE POD to accommodate your project's output. Please advise PGE if you are interested in discussing a study to estimate the required upgrades and costs.

If you have any questions regarding these alternatives, PGE would be happy to schedule a meeting to discuss.

Regards,

Angeline D. Chong

Portland General Electric |

121 SW Salmon St. 3WTC0306 | Portland, Oregon 97204|

W: 503-464-7343 | F: 503-464-2605 |

E: angeline.chong@pgn.com

<sup>&</sup>lt;sup>1</sup> Please note that the avoided cost prices filed with the Public Utility Commission on May 1, 2017, have not yet been approved.



V. Denise Saunders Associate General Counsel

May 16, 2017

VIA ELECTRONIC MAIL (ken@kaufmann.law) Kenneth Kaufmann Attorney at Law 1785 Willamette Falls Drive, Suite 5 West Linn, OR 97068

Re: Evergreen BioPower LLC

Dear Ken:

Thank you for your letter confirming that Evergreen BioPower LLC (Evergreen) is willing to agree to deliver its output to the BPAT.PGE point of delivery (POD). Attached per your request is a final executable Schedule 201 Standard Off-System Non-Variable Power Purchase Agreement (PPA) for your project, a 10,000 megawatt biomass generating facility. PGE understands that Evergreen (Seller) is a Limited Liability Corporation formed under the laws of the State of Oregon, is the owner of the Evergreen project, and will be the Seller under the attached PPA. The attached draft is consistent with Evergreen's March 31, 2016 request letter, with the following two changes:

- 1. Change in Termination Date in Section 2.3 to May 31, 2032; and
- Designation of POD at BPAT.PGE in Section 1.22.

This letter confirms that the applicable prices for Evergreen's output is PGE's current Renewable Fixed Price Option for Base Load QF, effective on and after October 12, 2016.

If all information in the attached PPA is correct, PGE requests that Evergreen immediately sign the PPA and return the partially-executed PPA to PGE by electronic mail. Once Evergreen executes the attached PPA, PGE will have a legally-enforceable obligation to purchase Evergreen's output in accordance with the prices, terms and conditions contained therein.

Please contact us promptly if you have any questions.

Sincerely.

V. Denise Saunders

Associate General Counsel

miss and

Enclosure

From: Ken Kaufmann Ken@kaufmann.law

Subject: Evergreen BioPower--Partially Executed Power Purchase Agreement--PLEASE CONFIRM RECEIPT

Date: May 16, 2017 at 8:49 PM

To: Denise Saunders denise.saunders@pgn.com

Cc: Angeline.Chong@pgn.com, Kyle Freres kfreres@frereslumber.com

#### Dear Denise,

This email responds to PGE's May 16, 2017 offer to Evergreen BioPower LLC of a 15-year Schedule 201 Standard Off-system Non-Variable Power Purchase Agreement with PGE's Renewable Fixed Price Option for Base Load QF prices effective on and after October 12, 2016.

Mr. Freres has signed the PPA you tendered today and authorized me to deliver it to you now. His intent is to enter Evergreen into a legally enforceable obligation with PGE effective May 16, 2017, under such terms and conditions set forth in the PPA below. I have also asked Mr. Freres to print this email, enclose it with two original partially executed PPAs, and send them to PGE at the address set forth in Section 20 of the PPA. When PGE has executed the PPAs, please return one original to Mr. Freres at Seller's address set forth in Section 20 of the PPA.

On behalf of Mr. Freres and myself, thank you for your hard work to get this done today.

Sincerely, Ken Kaufmann



# STANDARD RENEWABLE OFF-SYSTEM NON-VARIABLE POWER PURCHASE

#### **AGREEMENT**

THIS AGREEMENT is between **Evergreen BioPower LLC** ("Seller") and Portland General Electric Company ("PGE") (hereinafter each a "Party" or collectively, "Parties") and is effective upon execution by both Parties ("Effective Date").

#### **RECITALS**

Seller intends to construct, own, operate and maintain a Biomass facility for the generation of electric power located in Linn County Latitude: 44.771, Longitude: 122.612, County, Oregon with a Nameplate Capacity Rating of 10,000 kilowatt ("kW"), as further described in Exhibit B ("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 1.19, 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 B provided by Seller in accordance with Section 4.4 following completion of construction of the Facility, describing the Facility as actually built.
- 1.2. "Billing Period" means from the start of the first day of each calendar month to the end of the last day of each calendar month.
- 1.3. "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.
- 1.4. "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:
- 1.4.1. (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 amounts required by this

Agreement and in accordance with all other terms and conditions of this Agreement (certifications required under this Section 1.4 can be provided by one or more LPEs);

- 1.4.2. Start-Up Testing of the Facility has been completed in accordance with Section 1.29;
- 1.4.3. (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 uninterrupted for a Test Period at a rate in kW of at least 75 percent of average annual Net Output divided by 8,760 based upon any sixty (60) minute period for the entire testing period. The Facility must provide ten (10) working days written notice to PGE prior to the start of the initial testing period. If the operation 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;
- 1.4.4. (facilities with nameplate under 500 kW exempt from following requirement) PGE has received a certificate addressed to PGE from an LPE stating that all required interconnection facilities have been constructed and all required interconnection tests have been completed;
- 1.4.5. (facilities with nameplate under 500 kW 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;
- 1.4.6. PGE has received a copy of the executed Generation Interconnection and Transmission Agreements.
- 1.5. "Contract Price" means the applicable price, including on-peak and off-peak prices, as specified in the Schedule.
- 1.6. "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.
  - 1.7. "Effective Date" has the meaning set forth in Section 2.1.
- 1.8. "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.

- 1.9. "Facility" has the meaning set forth in the Recitals.
- 1.10. "Forward Replacement Price" means the price at which PGE, acting in a commercially reasonable manner, purchases for delivery at the Point of Delivery a replacement for any Net Output that Seller is required to deliver under this Agreement plus (i) costs reasonably incurred by PGE in purchasing such replacement Net Output, and (ii) additional transmission charges, if any, reasonably incurred by PGE in causing replacement energy to be delivered to the Point of Delivery. If PGE elects not to make such a purchase, costs of purchasing replacement Net Output shall be Mid-C Index Price for such energy not delivered, plus any additional cost or expense incurred as a result of Seller's failure to deliver, as determined by PGE in a commercially reasonable manner (but not including any penalties, ratcheted demand or similar charges).
- 1.11. "Generation Interconnection Agreement" means an agreement governing the interconnection of the Facility with PacifiCorp electric system.
- 1.12. "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.
- 1.13. "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.
- 1.14. "Lost Energy Value" means for a Contract Year: zero plus any reasonable costs incurred by PGE to purchase replacement power and/or transmission to deliver the replacement power to the Point of Delivery, unless the Contract Year's Net Output is less than the Minimum Net Output and the Contract Year's time-weighted average of the Mid-C Index Price for On-Peak and Off-Peak Hours is greater than the time-weighted average of the Contract Price for On-Peak and Off-Peak Hours for that Contract Year, in which case Lost Energy Value equals: (Minimum Net Output Net Output for the Contract Year) X (the lower of: the time-weighted average of the Contract Price for On-Peak and Off-Peak Hours; or the time-weighted average of the Mid-C Index Price for On-Peak and Off-Peak Hours the time-weighted average of the Contract Price for On-Peak and Off-Peak Hours) minus Transmission Curtailment Replacement Energy Cost, if any, for like period plus any reasonable costs incurred by PGE to purchase replacement power and/or transmission to deliver the replacement power to the Point of Delivery.
- 1.15. "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.

- 1.16. "Minimum Net Output" shall have the meaning provided in Section 4.2 of this Agreement.
- 1.17. "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.
- 1.18. "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.
- 1.19. "Net Output" means all energy expressed in kWhs produced by the Facility, less station and other onsite use and less transformation and transmission losses.
  - 1.20. "Off-Peak Hours" has the meaning provided in the Schedule.
  - 1.21. "On-Peak Hours" has the meaning provided in the Schedule.
  - 1.22. "Point of Delivery" means the BPAT.PGE point on the PGE System.
- 1.23. "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.
- 1.24. "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.
- 1.25. "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 C.

- 1.26. "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.
- 1.27. "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 E, the terms of which are hereby incorporated by reference.
- 1.28. "Senior Lien" means a prior lien which has precedence as to the property under the lien over another lien or encumbrance.
- 1.29. "Start-Up Testing" means the completion of applicable required factory and start-up tests as set forth in Exhibit D.
- 1.30. "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.
- 1.31. "Term" shall mean the period beginning on the Effective Date and ending on the Termination Date.
- 1.32. "Test Period" shall mean a period of sixty (60) days or a commercially reasonable period determined by the Seller.
- 1.33. "Transmission Agreement" means an agreement executed by the Seller and the Transmission Provider(s) for Transmission Services.
- 1.34. "Transmission Curtailment" means a limitation on Seller's ability to deliver any portion of the scheduled energy to PGE due to the unavailability of transmission to the Point of Delivery (for any reason other than Force Majeure).
- 1.35. "Transmission Curtailment Replacement Energy Cost" means the greater of zero or the difference between Dow Jones Mid C Index Price Contract Price X curtailed energy for periods of Transmission Curtailment.
- 1.36. "Transmission Provider(s)" means the signatory (other than the Seller) to the Transmission Agreement.
- 1.37. "Transmission Services" means any and all services (including but not limited to ancillary services and control area services) required for the firm transmission and delivery of Energy from the Facility to the Point of Delivery for a term not less than the Term of this Agreement.

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

Schedule 201

Standard Renewable Off-System Non-Variable Power Purchase 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 January 1, 2018 Seller shall begin initial deliveries of Net Output; and
- 2.2.2. By January 1, 2018 Seller shall have completed all requirements under Section 1.4 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 on May 31, 2032 or the date the Agreement is terminated in accordance with Section 8 or 11.2, 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 Limited Liability Company 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 3,000 kW.
- 3.1.9. Seller estimates that the average annual Net Output to be delivered by the Facility to PGE is 45,544,617 kilowatt-hours ("kWh"), which amount PGE will include in its resource planning.
- 3.1.10. Seller will schedule and deliver from the Facility to PGE at the Point of Delivery Net Output not to exceed a maximum of 60,000,000 kWh of Net Output during each Contract Year ("Maximum Net Output"). The cost of delivering energy from the Facility to PGE is the sole responsibility of the Seller.
- 3.1.11. By the Commercial Operation Date, Seller has entered into a Generation Interconnection Agreement for a term not less than the term of this Agreement.
- 3.1.12. 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.
- 3.1.13. Seller warrants that 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 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 Commission upon the Commission's request.

3.1.14. Seller warrants that it will comply with all requirements necessary for all Transferred RECs (as defined in Section 4.6) 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 from the Facility. Seller's Net Output shall be scheduled and delivered to PGE at the Point of Delivery in accordance with Section 4.5. PGE shall pay Seller the Contract Price for all scheduled and delivered Net Output.
- 4.2. Seller shall schedule and deliver to PGE from the Facility for each Contract Year Net Output equal to or greater than the Minimum Net Output (either (a) if Seller does not select the Alternative Minimum Amount as defined in Exhibit A of this Agreement, a minimum of seventy-five percent (75%) of its average annual Net Output or (b) if selected by Seller, the Alternative Minimum Amount), provided that such Minimum Net Output for the final Contract Year shall be reduced pro rata to reflect the Commercial Operation Date, and further provided that such Minimum Net Output shall be reduced on a pro-rata basis for any periods during a Contract Year that the Facility was prevented from generating electricity for reasons of Force Majeure.
- 4.3. Seller agrees that if Seller does not deliver the Minimum Net Output each Contract Year for reasons other than Transmission Curtailment, PGE will suffer losses equal to the Lost Energy Value. As damages for Seller's failure to deliver the Minimum Net Output (subject to adjustment for reasons of Force Majeure as provided in Section 4.2) in any Contract Year, notwithstanding any other provision of this Agreement the purchase price payable by PGE for future deliveries shall be reduced until Lost Energy Value is recovered. PGE and Seller shall work together in good faith to establish the period, in monthly amounts, of such reduction so as to avoid Seller's default on its commercial or financing agreements necessary for its continued operation of the Facility for QF Facilities sized at 100 kW or smaller, the provisions of this section shall not apply.
- 4.4. 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 B 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 3.1.10 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 of the Facility 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.

- 4.5. Seller shall provide preschedules for all deliveries of energy hereunder, including identification of receiving and generating control areas, by 9:00:00 PPT on the last business day prior to the scheduled date of delivery. All energy shall be scheduled according to the most current North America Energy Reliability Corporation (NERC) and Western Electricity Coordinating Council (WECC) scheduling rules and practices. The real-time Parties' respective representatives shall maintain hourly coordination; provided, however, that in the absence of such coordination, the hourly schedule established by the exchange of preschedules shall be considered final. Seller and PGE shall maintain records of hourly energy schedules for accounting and operating purposes. The final E-Tag shall be the controlling evidence of the Parties' schedule. All energy shall be prescheduled according to customer WECC scheduling practices. Seller shall make commercially reasonable efforts to schedule in any hour an amount equal to its expected Net Output for such hour. Seller shall maintain a minimum of two years records of Net Output and shall agree to allow PGE to have access to such records and to imbalance information kept by the Transmission Provider.
- From the start of the Renewable Resource Deficiency Period through the remainder of the Term of this Agreement, 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, 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 Attributes not transferred to PGE under this Agreement ("Seller-Retained 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

51. 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 or transmission to PGE's electric system is curtailed, disconnected, suspended or interrupted, in whole or in part. 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.

- 52 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.
- 53. If the Facility ceases operation for unscheduled maintenance, Seller immediately shall notify PGE of the necessity of such unscheduled maintenance that could affect the generation, scheduling or delivery of energy to PGE, 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 ten (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 (Minimum Net Output / 8760). 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: BILLINGS, COMPUTATIONS AND PAYMENTS

- 7.1. 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 and any other agreement related to the Facility between the Parties or otherwise.
- 7.2. 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 8: DEFAULT, REMEDIES AND TERMINATION

8.1. In addition to any other event that may constitute a default under this Agreement, the following events shall constitute defaults under this Agreement:

- 8.1.1. Breach by Seller or PGE of a representation or warranty, except for Section 3.1.4, set forth in this Agreement.
- 8.1.2. Seller's failure to provide default security, if required by Section 6, prior to delivery of any Net Output to PGE or within ten (10) days of notice.
- 8.1.3. Seller's failure to deliver the Minimum Net Output for two consecutive Contract Years.
  - 8.1.4. If Seller is no longer a Qualifying Facility.
  - 8.1.5. Failure of PGE to make any required payment pursuant to Section 7.1.
  - 8.1.6. Seller's failure to meet the Commercial Operation Date.
- 8.2. In the event of a default under Section 8.1.6, 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 8.3. PGE's resource sufficiency/deficiency position shall have no bearing on PGE's right to terminate the Agreement under this Section 8.2
- 8.3. In the event of a default hereunder, the non-defaulting party may immediately terminate this Agreement at its sole discretion by delivering written notice to the other Party, and, except for damages related to a default pursuant to Section 8.1.3, by a QF sized at 100 kW or smaller, 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. Such termination shall be effective upon the date of delivery of notice, as provided in Section 20.1. The rights provided in this Section 8 are cumulative such that the exercise of one or more rights shall not constitute a waiver of any other rights.
- 8.4. If this Agreement is terminated as provided in this Section 8, 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.
- 8.5. If this Agreement is terminated as a result of Seller's default, Seller shall pay PGE the positive difference, if any, obtained by subtracting the Contract Price from the sum of the Forward Replacement Price for the Minimum Net Output that Seller was otherwise obligated to provide for a period of twenty-four (24) months from the date of termination plus any cost incurred for transmission purchased by PGE to deliver the replacement power to the Point of Delivery and the estimated administrative cost to the utility to acquire replacement power. Accounts owed by Seller pursuant to this paragraph shall be due within five (5) business days after any invoice from PGE for the same.
- 8.6. In the event PGE terminates this Agreement pursuant to this Section 8, 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.

8.7. Sections 8.1, 8.4, 8.5, 8.6, 10, and 19.2 shall survive termination of this Agreement.

# **SECTION 9: TRANSMISSION CURTAILMENTS**

- 9.1. Seller shall give PGE notice as soon as reasonably practicable of any Transmission Curtailment that is likely to affect Seller's ability to deliver any portion of energy scheduled pursuant to Sections 4.5 of this Agreement.
- 9.2. If as the result of a Transmission Curtailment, Seller does not deliver any portion of energy (including real-time adjustments), scheduled pursuant to Section 4.5 of this Agreement, Seller shall pay PGE the Transmission Curtailment Replacement Energy Cost for the number of MWh of energy reasonably determined by PGE as the difference between (i) the scheduled energy that would have been delivered to PGE under this Agreement during the period of Transmission Curtailment and (ii) the actual energy, if any, that was delivered to PGE for the period.

#### 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 Transmission Curtailment, 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 of 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.

Schedule 201

Standard Renewable Off-System Non-Variable Power Purchase Agreement

#### 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:

To Seller:

PO Box 276

Lyons, Or 97358

With a copy to:

1785 Willamette Falls Dr., Suite 5

West Linn, OR 97068

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.

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PGE Approved By:

Business Terms

Credit

Legal

Risk Mgt.

Schedule 201 Standard Renewable Off-System Non-Variable Power Purchase Agreement

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

By: Maria W. Pope
Title: SRVP Power Supply &
Date: Operations & Resource Strategy

\$\int | 2017

Evergreen BioPower LLC

(Name Seller)

PGE

Name: T. Kyle Frencs

Title: Vice Prosident, Frence Lumber Co., Inc., Manager, Evergreen 5:0 Pour LLC

Date: 5/16/17

# EXHIBIT A MINIMUM NET OUTPUT

In this Exhibit, Seller may designate an alternative Minimum Net Output to seventy-five (75%) percent of annual average Net Output specified in Section 3.1.9 of the Agreement ("Alternative Minimum Amount"). Such Alternative Minimum Amount, if provided, shall exceed zero, and shall be established in accordance with Prudent Electrical Practices and documentation supporting such a determination shall be provided to PGE upon execution of the Agreement. Such documentation shall be commercially reasonable, and may include, but is not limited to, documents used in financing the project, and data on output of similar projects operated by seller, PGE or others.

# EXHIBIT B DESCRIPTION OF SELLER'S FACILITY

### Monthly Output/Daily Profile of Generation

1. On and Off Peak Generation

Year		Off peak (kwh)			
2014	31,661,995	23,151,415	54,813,410	57.8%	42.2%
2015	32,646,773	23,772,069	56,418,842	57.9%	42.1%
2016 (Through Oct.)	25,278,568	18,280,954	43,559,522	58.0%	42.0%

<sup>\*</sup>Generation summarized from PacifiCorp's EnergyProfiler system

### 2. Average generation by month

2014-2016	Average
Generation	By Month

# 9-Year Average 2008-2016

Gener	ation By Month	Month	Average (kWh/yr)
Month	Average (kWh/yr)	January	3,049,801
January	3,698,343	February	2,840,222
February	3,110,444	March	3,212,670
March	4,043,566	April	3,648,291
April	4,662,441	May	3,950,034
May	4,801,296	June	3,842,659
June	5,377,056	July	4,176,764
July	5,491,307	August	4,920,474
August	5,492,641	September	4,448,830
September	4,995,740	October	4,656,571
October	4,795,049	November	3,478,285
November	3,918,440	December	3,320,016
December	3,547,777	and with the said of which are supply and a singly and a supply a supply and a supply a supply and a supply a su	
Total	53,934,099	Total	45,544,617

### **Short Description of Equipment**

Seller's Facility consists of one generator manufactured by General Electric. More specifically, generator at the Facility is described as:

Model: ATB-2 Number of Phases: 3

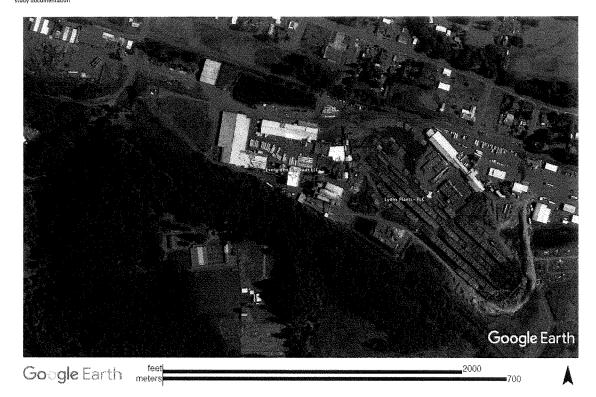
Rated Current (A): Stator: 1034 A;Rotor: 199A Maximum kW Output: 10,000 kW (turbine limited)

Minimum kW output: 1500 kW

	Note this of nemation is considered representative design information it high is to be updated at the time of
Biomass Faciley Character exics:	project construction and a subject to design finalization
1. Generation	
a. Output simulation results detail, including but not limited to	
Annual MWh (AC) for the first calendar year of commercial operation and any annual degradation factor	Frouted previously
ii. Average 74-nr profile of generation 699h (AC) for each month during the first calendar year	Provided previously
iii. Maximum annusi output (monthly MM/h detail)	Provided provingely
b. Lozs Diagram	
c. Design Capacity factor	.10 m/V
d. Expected Capacity factor	9.75 mW
6. Minman bundaun caracty	8.5 mW
But a harmonic and here and harmonic and har	Spiler operates continuously.
g, Start time to fig. lead	:190 minutes
h. Ramp rate design mov/mis)	10 mm after reaching 1,500 9PM on turbine
Rampine of crimation	
). Ramo rate up and down	17,000 kW/haus
5. Cold start time to name capacity	100 marctes
es. Cold start time to may capacity	190 manetes
. W. Hot start time to muse capacity	: 20 minutes
v. Hot start time to may capacity	:: 60 mintue:
ye. Holding time after cycling	If a ready warm, no holding time, if sold start, 15 minutes on lower and
vis. Mainganeso tars	Bolier operates continuousla
Description of Generation feeling including.	MALKA A MAN MALA CANADA
a. Design life of the facility	130 veg#4
b. Component detemption	The state of the s
. Turbina hterufasturas mage i and type	G€ ₹178642
Botter Technology and blanufacturer	Floriass, Waltons
ik. Major process syste component descriptions	Fuel System, Water Treatment, Furnace, Ash System
.v. Description of the process system	See attached
Generative Manufacturer model and type	GE #8384481, Art Coched
Design curves an technical specifications	See FIRC Form S56 for Feed by process diegram and operating parameters.
d. Coping Technology	Taki ful i caus 350 cm i ser it bactessonelism sen besiente bassanister
Type and manufacturer	De Lavai Tube & Sheii 2-bss, Midwest Counter Flory Cooling Yorker
Type and manufacturer     Design curves and coping medium consumption	- Mates - Sa taria i coé a tuen tribis fordisas colasias voy cociude i culas
Water consumption as You'day'	190,000 gallons/day
h. Scheduled Maintenance (Weeks) Yr.)	\$ steet/yeer
Typical Maintenance Ferind (Aporthici)     Typical Maintenance Ferind (Aporthici)	Quarterly maintenance, 3-4 days, Annual maintenance bib days.
3. EPC parac	The Fecility achieved commercial operation in 1007 anches operated continuously since.
.k. Facility AC rating	The manufacturer's nameplate rating of the turbine generator is 10.000kW.
: The way of the second of the	Blemacs, Quarterly Purchase Orders, Dependable: Offsita supply delivered by trusk & internal by conveyor, \$
3. Fuel supply defeats (type, terms, dependability, delicery structure and timing, fuel storage capability on site)	week große Murage
A. Description of Facility permitting restrictions and requirements (local, state, or federal) prior to and during	
operations	TIME VILEPA
-5. Description of transformers	and the second
a. # of transformers	ing ways against a control of the first of t
b. Notes	Attyers Surius WTSF149650
.c. High Voltage Ruling	72000
d. Low Voltage Rating	13803
. W. M. Arating	15 #A+ 1E #A/#A
15. High votage connect on	The main transformer rights de veltage is 59 kVA
E. Fals Adjase counector	The main transformer ovi side voltage is US-SRVA
6. Description of metering, communications, and modiforing	2 meters, Fiber, PacifiCorp

.375 mW Currently interconnected with PacifiCorp Transmission.

Description of station service requirements
 Description and timeline of Interconnection and transmission plan
 Transaction Service Request Number, Interconnection Queue number, and System impact/interconnection study documentation



B-1

# EXHIBIT C REQUIRED FACILITY DOCUMENTS

Sellers Generation Interconnection Agreement

Firm Transmission Agreement between Seller and Transmission Provider

Air Contamination Discharge Permit

Engineering, Procurement and Construction Contract

conditional permits use as required

Access Permits if required

Schedule 201

Standard Renewable Off-System Non-Variable Power Purchase Agreement

### EXHIBIT D START-UP TESTING

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):

- 1. Pressure tests of all steam system equipment;
- 2. Calibration of all pressure, level, flow, temperature and monitoring instruments;
- 3. Operating tests of all valves, operators, motor starters and motor;
- 4. Alarms, signals, and fail-safe or system shutdown control tests;
- 5. Insulation resistance and point-to-point continuity tests;
- 6. Bench tests of all protective devices;
- 7. 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):

- 1. Turbine/generator mechanical runs including shaft, vibration, and bearing temperature measurements;
- 2. Running tests to establish tolerances and inspections for final adjustment of bearings, shaft run-outs;
- 3. Brake tests:
- 4. Energization of transformers;
- 5. Synchronizing tests (manual and auto):
- 6. Stator windings dielectric test;
- 7. Armature and field windings resistance tests;
- 8. Load rejection tests in incremental stages from 5, 25, 50, 75 and 100 percent load;
- 9. Heat runs;
- 10. Tests required by manufacturer of equipment;
- 11. Excitation and voltage regulation operation tests;
- 12. 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. Auto stop/start sequence;
- 16. Level control system tests; and
- 17. Completion of all state and federal environmental testing requirements.

> EXHIBIT E SCHEDULE

Sheet No. 201-1

# SCHEDULE 201 QUALIFYING FACILITY 10 MW or LESS AVOIDED COST POWER PURCHASE INFORMATION

### **PURPOSE**

To provide information about Standard Avoided Costs and Renewable Avoided Costs, Standard Power Purchase Agreements (PPA) and Negotiated PPAs, power purchase prices and price options for power delivered by a Qualifying Facility (QF) to the Company with nameplate capacity of 10,000 kW (10MW) or less.

### **AVAILABLE**

To owners of QFs making sales of electricity to the Company in the State of Oregon (Seller).

#### **APPLICABLE**

For power purchased from small power production or cogeneration facilities that are QFs as defined in 18 Code of Federal Regulations (CFR) Section 292, that meet the eligibility requirements described herein and where the energy is delivered to the Company's system and made available for Company purchase pursuant to a Standard PPA.

### **ESTABLISHING CREDITWORTHINESS**

The Seller must establish creditworthiness prior to service under this schedule. For a Standard PPA, a Seller may establish creditworthiness with a written acknowledgment that it is current on all existing debt obligations and that it was not a debtor in a bankruptcy proceeding within the preceding 24 months. If the Seller is not able to establish creditworthiness, the Seller must provide security deemed sufficient by the Company as set forth in the Standard PPA.

### POWER PURCHASE INFORMATION

A Seller may call the Power Production Coordinator at (503) 464-8000 to obtain more information about being a Seller or how to apply for service under this schedule.

### PPA

In accordance with terms set forth in this schedule and the Commission's Rules as applicable, the Company will purchase any Energy in excess of station service (power necessary to produce generation) and amounts attributable to conversion losses, which are made available from the Seller.

A Seller must execute a PPA with the Company prior to delivery of power to the Company. The agreement will have a term of up to 20 years as selected by the QF.

A QF with a nameplate capacity rating of 10 MW or less as defined herein may elect the option of a Standard PPA.

### PPA (Continued)

Any Seller may elect to negotiate a PPA with the Company. Such negotiation will comply with the requirements of the Federal Energy Regulatory Commission (FERC), and the Commission including the guidelines in Order No. 07-360, and Schedule 202. Negotiations for power purchase pricing will be based on either the filed Standard Avoided Costs or Renewable Avoided Costs in effect at that time.

### STANDARD PPA (Nameplate capacity of 10 MW or less)

A Seller choosing a Standard PPA will complete all informational and price option selection requirements in the applicable Standard PPA and submit the executed Agreement to the Company prior to service under this schedule. The Standard PPA is available at <a href="https://www.portlandgeneral.com">www.portlandgeneral.com</a>. The available Standard PPAs are:

- Standard In-System Non-Variable Power Purchase Agreement
- Standard Off-System Non-Variable Power Purchase Agreement
- Standard In-System Variable Power Purchase Agreement
- Standard Off-System Variable Power Purchase Agreement
- Standard Renewable In-System Non-Variable Power Purchase Agreement
- Standard Renewable Off-System Non-Variable Power Purchase Agreement
- Standard Renewable In-System Variable Power Purchase Agreement
- Standard Renewable Off-System Variable Power Purchase Agreement

The Standard PPAs applicable to variable resources are available only to QFs utilizing wind, solar or run of river hydro as the primary motive force.

### GUIDELINES FOR 10 MW OR LESS FACILITIES ELECTING STANDARD PPA

To execute the Standard PPA the Seller must complete all of the general project information requested in the applicable Standard PPA.

When all information required in the Standard PPA has been received in writing from the Seller, the Company will respond within 15 business days with a draft Standard PPA.

The Seller may request in writing that the Company prepare a final draft Standard PPA. The Company will respond to this request within 15 business days. In connection with such request, the QF must provide the Company with any additional or clarified project information that the Company reasonably determines to be necessary for the preparation of a final draft Standard PPA.

When both parties are in full agreement as to all terms and conditions of the draft Standard PPA, the Company will prepare and forward to the Seller a final executable version of the agreement within 15 business days. Following the Company's execution, an executed copy will be returned to the Seller. Prices and other terms and conditions in the PPA will not be final and binding until the Standard PPA has been executed by both parties.

#### **OFF-SYSTEM PPA**

A Seller with a facility that interconnects with an electric system other than the Company's electric system may enter into a PPA with the Company after following the applicable Standard or Negotiated PPA guidelines and making the arrangements necessary for transmission of power to the Company's system.

### BASIS FOR POWER PURCHASE PRICE

#### **AVOIDED COST SUMMARY**

The power purchase prices are based on either the Company's Standard Avoided Costs or Renewable Avoided Costs in effect at the time the agreement is executed. Avoided Costs are defined in 18 CFR 292.101(6) as "the incremental costs to an electric utility of electric energy or capacity or both which, but for the purchase from the qualifying facility or qualifying facilities, such utility would generate itself or purchase from another source."

Monthly On-Peak prices are included in both the Standard Avoided Costs as listed in Tables 1a, 2a, and 3a and Renewable Avoided Costs as listed in Tables 4a, 5a, and 6a. Monthly Off-Peak prices are included in both the Standard Avoided Costs as listed in Tables 1b, 2b, and 3b and Renewable Avoided Costs as listed in Tables 4b, 5b, and 6b.

#### **ON-PEAK PERIOD**

The On-Peak period is 6:00 a.m. until 10:00 p.m., Monday through Saturday.

### **OFF-PEAK PERIOD**

The Off-Peak period is 10:00 p.m. until 6:00 a.m., Monday through Saturday, and all day on Sunday.

Standard Avoided Costs are based on forward market price estimates through the Resource Sufficiency Period, the period of time during which the Company's Standard Avoided Costs are associated with incremental purchases of Energy and capacity from the market. For the Resource Deficiency Period, the Standard Avoided Costs reflect the fully allocated costs of a natural gas fueled combined cycle combustion turbine (CCCT) including fuel and capital costs. The CCCT Avoided Costs are based on the variable cost of Energy plus capitalized Energy costs at a 93% capacity factor based on a natural gas price forecast, with prices modified for shrinkage and transportation costs.

Renewable Avoided Costs are based on forward market price estimates through the Renewable Resource Sufficiency Period, the period of time during which the Company's Renewable Avoided Costs are associated with incremental purchases of energy and capacity from the market. For the Renewable Resource Deficiency Period, the Renewable Avoided Costs reflect the fully allocated costs of a wind plant including capital costs.

#### PRICING FOR STANDARD PPA

Pricing represents the purchase price per MWh the Company will pay for electricity delivered to a Point of Delivery (POD) within the Company's service territory pursuant to a Standard PPA up to the nameplate rating of the QF in any hour. Any Energy delivered in excess of the nameplate rating will be purchased at the applicable Off-Peak Prices for the selected pricing option.

The Standard PPA pricing will be based on either the Standard or Renewable Avoided Costs in effect at the time the agreement is executed.

The Company will pay the Seller either the Off-Peak Standard Avoided Cost pursuant to Tables 1b, 2b, or 3b or the Off-Peak Renewable Avoided Costs pursuant to Tables 4b, 5b, or 6b for: (a) all Net Output delivered prior to the Commercial Operation Date; (b) all Net Output deliveries greater than Maximum Net Output in any PPA year; (c) any generation subject to and as adjusted by the provisions of Section 4.3 of the Standard PPA; (d) Net Output delivered in the Off-Peak Period; and (e) deliveries above the nameplate capacity in any hour. The Company will pay the Seller either the On-Peak Standard Avoided Cost pursuant to Tables 1a, 2a, or 3a or the On-Peak Renewable Avoided Costs pursuant to Tables 4a, 5a, or 6a for all other Net Output. (See the PPA for defined terms.)

### 1) Standard Fixed Price Option

The Standard Fixed Price Option is based on Standard Avoided Costs including forecasted natural gas prices. It is available to all QFs.

This option is available for a maximum term of 15 years. Prices will be as established at the time the Standard PPA is executed and will be equal to the Standard Avoided Costs in Tables 1a and 1b, 2a and 2b, or 3a and 3c, depending on the type of QF, effective at execution. QFs using any resource type other than wind and solar are assumed to be Base Load QFs.

Prices paid to the Seller under the Standard Fixed Price Option include adjustments for the capacity contribution of the QF resource type relative to that of the avoided proxy resource. Both the Base Load QF resources (Tables 1a and 1b) and the avoided proxy resource, the basis used to determine Standard Avoided Costs for the Standard Fixed Price Option, are assumed to have a capacity contribution to peak of 100%. The capacity contribution for Wind QF resources (Tables 2a and 2b) is assumed to be 5%. The capacity contribution for Solar QF resources (Tables 3a and 3b) is assumed to be 5%.

Prices paid to the Seller under the Standard Fixed Price Option for Wind QFs (Tables 2a and 2b) include a reduction for the wind integration costs in Table 7. However, if the Wind QF is outside of PGE's Balancing Authority Area as contemplated in the Commission's Order No. 14-058, the Seller is paid the wind integration charges in Table 7, in addition to the prices listed in Tables 2a and 2b, for a net-zero effect.

Sheet No. 201-5

### SCHEDULE 201 (Continued)

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

Sellers with PPAs exceeding 15 years will receive pricing equal to the Mid-C Index Price for all years up to five in excess of the initial 15.

					T	ABLE 1a						
						ided Cos	ts					
			St	andard F				e Load (	)F			
					n-Peak F							
							.i					
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	28.21	22.46	15.61	14.71	12.46	16.96	23.96	26.96	24.96	23.71	26.71	31.46
2017	29.96	28.21	24.71	20.96	19.46	20.46	27.96	30.96	29.46	27.71	28.71	33.71
2018	31.71	31.11	28.11	22.13	21.28	21.28	29.93	33.37	30.63	28.61	31.86	35.71
2019	33.94	31.95	27.97	23.70	22.00	23.13	31.67	35.08	33.37	31.38	32.52	38.21
2020	35.74	33.64	29.45	24.95	23.15	24.35	33.34	36.94	35.14	33.04	34.24	40.24
2021	67.43	67.34	65.41	64.69	64.41	64.50	64.61	64.73	64.84	65.48	68.60	68.72
2022	69.01	68.84	68.08	67.13	66.81	66.91	67.04	67.17	67.29	67.83	71.38	71.70
2023	71.95	71.76	70.39	69.19	69.07	69.18	69.31	69.45	69.58	70.12	73.56	73.70
2024	74.17	73.85	72.67	71.29	71.10	71.21	71.35	71.50	71.63	72.20	76.49	76.64
2025	77.19	77.30	75.84	74.88	75.02	75.14	75.30	75.47	75.62	75.80	82.57	82.89
2026	85.18	85.30	82.77	81.28	81.22	81.36	81.56	81.74	81.90	82.36	89.02	88.72
2027	86.85	86.76	85.14	83.12	82.89	83.03	83.00	83.32	83.46	83.97	91.39	91.15
2028	89.32	89.31	87.96	85.46	85.30	85.46	85.31	85.64	85.95	86.65	94.66	93.55
2029	94.06	93.99	91.23	88.74	87.97	88.15	87.71	88.06	88.61	89.34	98.37	98.11
2030	97.60	97.54	94.87	92.62	92.40	92.57	92.61	93.00	93.12	93.68	102.42	102.70
2031	99.56	99.50	96.78	94.48	94.26	94.43	94.47	94.87	94.99	95.56	104.47	104.76
2032	103.85	103.80	100.57	98.18	97.96	98.15	98.23	98.65	98.76	99.36	108.86	109.41
2033	106.56	106.51	103.17	100.72	100.50	100.69	100.78	101.21	101.32	101.93	111.67	112.26
2034	109.12	109.07	105.60	103.10	102.88	103.08	103.17	103.61	103.72	104.35	114.33	114.96
2035	111.55	111.51	107.91	105.35	105.12	105.33	105.43	105.89	105.99	106.63	116.87	117.54
2036	113.85	113.80	110.14	107.53	107.30	107.51	107.60	108.07	108.18	108.83	119.27	119.95
2037	116.50	116.45	112.72	110.06	109.82	110.04	110.14	110.61	110.73	111.39	122.03	122.73
2038	119.08	119.03	115.22	112.51	112.27	112.49	112.59	113.08	113.19	113.87	124.71	125.42
2039	121.47	121.42	117.54	114.77	114.53	114.75	114.85	115.35	115.47	116.15	127.21	127.93
2040	124.25	124.20	120.25	117.43	117.18	117.41	117.51	118.02	118.14	118.84	130.10	130.85
2041	126.72	126.67	122.64	119.76	119.51	119.74	119.85	120.36	120.49	121.20	132.68	133.44

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						BLE 1b	4						
			04-			ded Cos		- 1 4 6	\ <del>-</del>				
			Sta		ixed Pric	<del></del>		e Load C	<u> </u>	<del> </del>			
	Off-Peak Forecast(\$/MWH)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
2016	25.61	20.71	13.96	11.41	6.31	10.11	15.71	20.96	20.96	21.21	23.46	26.71	
2017	25.71	24.21	22.21	15.71	13.71	12.71	19.71	25.21	25.46	24.71	25.71	27.96	
2018	26.17	28.12	25.56	19.46	14.68	12.54	19.71	27.04	26.93	25.35	28.20	30.62	
2019	29.84	28.09	25.75	18.15	15.81	14.64	22.83	29.26	29.55	28.67	29.84	32.47	
2020	31.75	29.88	27.38	19.28	16.79	15.54	24.27	31.12	31.43	30.50	31.75	34.55	
2021	28.88	28.79	26.86	26.15	25.87	25.95	26.07	26.19	26.30	26.94	30.06	30.18	
2022	29.73	29.56	28.79	27.85	27.53	27.63	27.75	27.88	28.00	28.54	32.09	32.42	
2023	31.78	31.59	30.21	29.01	28.90	29.00	29.14	29.27	29.40	29.95	33.38	33.52	
2024	33.48	33.16	31.98	30.60	30.41	30.52	30.66	30.81	30.95	31.51	35.80	35.96	
2025	35.58	35.69	34.24	33.27	33.42	33.53	33.70	33.86	34.01	34.19	40.97	41.28	
2026	42.77	42.89	40.36	38.87	38.81	38.95	39.15	39.34	39.50	39.95	46.62	46.31	
2027	43.63	43.54	41.91	39.89	39.66	39.80	39.77	40.09	40.24	40.74	48.16	47.92	
2028	45.26	45.25	43.90	41.40	41.23	41.40	41.25	41.58	41.89	42.59	50.60	49.48	
2029	49.15	49.08	46.32	43.83	43.06	43.24	42.80	43.15	43.70	44.43	53.46	53.20	
2030	51.82	51.76	49.09	46.84	46.62	46.79	46.83	47.22	47.34	47.90	56.64	56.92	
2031	52.90	52.84	50.11	47.82	47.59	47.77	47.81	48.21	48.33	48.90	57.81	58.10	
2032	56.59	56.54	53.31	50.92	50.70	50.89	50.97	51.39	51.50	52.10	61.60	62.15	
2033	58.08	58.03	54.69	52.24	52.02	52.21	52.30	52.73	52.84	53.45	63.19	63.78	
2034	59.54	59.50	56.03	53.52	53.30	53.50	53.59	54.04	54.15	54.77	64.76	65.39	
2035	61.18	61.14	57.54	54.98	54.75	54.96	55.06	55.52	55.62	56.26	66.50	67.17	
2036	62.67	62.62	58.96	56.35	56.12	56.33	56.43	56.89	57.00	57.65	68.09	68.78	
2037	64.17	64.12	60.39	57.73	57.49	57.71	57.80	58.28	58.39	59.06	69.69	70.39	
2038	65.73	65.69	61.88	59.17	58.93	59.15	59.25	59.73	59.85	60.52	71.37	72.08	
2039	67.09	67.04	63.16	60.40	60.15	60.38	60.48	60.98	61.09	61.78	72.83	73.56	
2040	68.83	68.78	64.83	62.01	61.76	61.99	62.09	62.60	62.72	63.42	74.68	75.42	
2041	70.23	70.17	66,14	63.27	63.02	63.25	63.36	63.87	63.99	64.71	76.19	76.95	

					TA	ABLE 2a							
			<del></del>			ded Cos	ts						
*			;	Standard	Fixed F	rice Opt	ion for V	Vind QF					
		······································		0	n-Peak F	orecast(	MWH)						
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
2016	24.37	18.62	11.77	10.87	8.62	13.12	20.12	23.12	21.12	19.87	22.87	27.62	
2017	26.05	24.30	20.80	17.05	15.55	16.55	24.05	27.05	25.55	23.80	24.80	29.80	
2018	27.72	27.12	24.12	18.14	17.29	17.29	25.94	29.38	26.64	24.62	27.87	31.72	
2019	29.87	27.88	23.90	19.63	17.93	19.06	27.60	31.01	29.30	27.31	28.45	34.14	
2020	31.59	29.49	25.30	20.80	19.00	20.20	29.19	32.79	30.99	28.89	30.09	36.09	
2021	30.68	30.59	28.66	27.94	27.66	27.75	27.87	27.99	28.10	28.74	31.86	31.98	
2022	31.56	31.39	30.62	29.68	29.36	29.46	29.59	29.72	29.84	30.38	33.93	34.25	
2023	33.67	33.48	32.11	30.91	30.79	30.90	31.03	31.17	31.30	31.84	35.28	35.42	
2024	35.38	35.06	33.88	32.49	32.30	32.42	32.56	32.70	32.84	33.40	37.70	37.85	
2025	37.53	37.64	36.18	35.22	35.36	35.48	35.64	35.81	35.96	36.14	42.91	43.23	
2026	44.75	44.87	42.35	40.86	40.79	40.94	41.13	41.32	41.48	41.94	48.60	48.29	
2027	45.65	45.56	43.93	41.91	41.68	41.82	41.79	42.12	42.26	42.76	50.18	49.94	
2028	47.32	47.31	45.96	43.46	43.30	43.46	43.31	43.64	43.95	44.65	52.66	51.55	
2029	51.25	51.18	48.43	45.94	45.16	45.34	44.90	45.25	45.80	46.53	55.57	55.30	
2030	53.96	53.90	51.23	48.98	48.76	48.93	48.97	49.36	49.48	50.04	58.78	59.06	
2031	55.08	55.02	52.29	50.00	49.77	49.95	49.99	50.38	50.51	51.08	59.99	60.28	
2032	58.77	58.72	55.49	53.10	52.88	53.07	53,15	53.57	53.68	54.28	63.78	64.33	
2033	60.35	60.30	56.96	54.51	54.29	54.49	54.57	55.00	55.11	55.72	65.46	66.05	
2034	61.88	61.83	58.36	55.86	55.63	55.84	55.93	56.37	56.48	57.10	67.09	67.72	
2035	63.54	63.49	59.90	57.34	57.11	57.32	57.42	57.87	57.98	58.62	68.86	69.53	
2036	65.04	65.00	61.33	58.72	58.49	58.70	58.80	59.27	59.38	60.03	70.46	71.15	
2037	66.61	66.57	62.83	60.17	59.93	60.15	60.25	60.73	60.84	61.50	72.14	72.84	
2038	68.23	68.18	64.37	61.66	61.42	61.64	61.74	62.23	62.34	63.02	73.86	74.57	
2039	69.64	69.59	65.71	62.94	62.70	62.92	63.03	63.52	63.64	64.33	75.38	76.11	
2040	71.42	71.37	67.41	64.60	64.35	64.58	64.68	65.18	65.30	66.00	77.27	78.01	
2041	72.87	72.82	68.79	65.92	65.66	65.90	66.00	66.52	66.64	67.35	78.84	79.59	

					TA	BLE 2b								
						ded Cos	ts							
			:	Standard	Fixed F			Vind QF						
	Off-Peak Forecast (\$/MWH)													
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
2016	21.77	16.87	10.12	7.57	2.47	6.27	11.87	17.12	17.12	17.37	19.62	22.87		
2017	21.80	20.30	18.30	11.80	9.80	8.80	15.80	21.30	21.55	20.80	21.80	24.05		
2018	22.18	24.13	21.57	15.47	10.69	8.55	15.72	23.05	22.94	21.36	24.21	26.63		
2019	25.77	24.02	21.68	14.08	11.74	10.57	18.76	25.19	25.48	24.60	25.77	28.40		
2020	27.60	25.73	23.23	15.13	12.64	11.39	20.12	26.97	27.28	26.35	27.60	30.40		
2021	24.65	24.56	22.63	21.92	21.64	21.72	21.84	21.96	22.07	22.71	25.83	25.95		
2022	25.42	25.25	24.48	23.54	23.22	23.32	23.44	23.57	23.69	24.23	27.78	28.11		
2023	27.39	27.20	25.82	24.62	24.51	24.61	24.75	24.88	25.01	25.56	28.99	29.13		
2024	29.01	28.69	27.51	26.13	25.94	26.05	26.19	26.34	26.48	27.04	31.33	31.49		
2025	31.02	31.13	29,68	28.71	28.86	28.97	29.14	29.30	29.45	29.63	36.41	36.72		
2026	38.12	38.24	35.71	34.22	34.16	34.30	34.50	34.69	34.85	35.30	41.97	41.66		
2027	38.89	38.80	37.17	35.15	34.92	35.06	35.03	35.35	35.50	36.00	43.42	43.18		
2028	40.43	40.42	39.07	36.57	36.40	36.57	36.42	36.75	37.06	37.76	45.77	44.65		
2029	44.23	44.16	41.40	38.91	38.14	38.32	37.88	38.23	38.78	39.51	48.54	48.28		
2030	46.80	46.74	44.07	41.82	41.60	41.77	41.81	42.20	42.32	42.88	51.62	51.90		
2031	47.78	47.72	44.99	42.70	42.47	42.65	42.69	43.09	43.21	43.78	52.69	52,98		
2032	51.38	51.33	48.10	45.71	45.49	45.68	45.76	46.18	46.29	46.89	56.39	56.94		
2033	52.77	52.72	49.38	46.93	46.71	46.90	46.99	47.42	47.53	48.14	57.88	58.47		
2034	54.12	54.08	50.61	48.10	47.88	48.08	48.17	48.62	48.73	49.35	59.34	59.97		
2035	55.66	55.62	52.02	49.46	49.23	49.44	49.54	50.00	50.10	50.74	60.98	61.65		
2036	57.04	56.99	53.33	50.72	50.49	50.70	50.80	51.26	51.37	52.02	62.46	63.15		
2037	58.43	58.38	54.65	51.99	51.75	51.97	52.06	52.54	52.65	53.32	63.95	64.65		
2038	59.88	59.84	56.03	53.32	53.08	53.30	53.40	53.88	54.00	54.67	65.52	66.23		
2039	61.13	61.08	57.20	54.44	54.19	54.42	54.52	55.02	55.13	55.82	66.87	67.60		
2040	62.75	62.70	58.75	55.93	55.68	55.91	56.01	56.52	56.64	57.34	68.60	69.34		
2041	64.04	63.98	59.95	57.08	56.83	57.06	57.17	57.68	57.80	58.52	70.00	70.76		

		***************************************			TA	ABLE 3a						
1.0.200					Avoi	ded Cos	ts					***************************************
				Standard	Fixed F	rice Opt	ion for S	olar QF				
				0	n-Peak F	orecast(	\$/MWH)					
				:								
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	28.21	22.46	15.61	14.71	12.46	16.96	23.96	26.96	24.96	23.71	26.71	31.46
2017	29.96	28.21	24.71	20.96	19.46	20.46	27.96	30.96	29.46	27.71	28.71	33.71
2018	31.71	31.11	28.11	22.13	21.28	21.28	29.93	33.37	30.63	28.61	31.86	35.71
2019	33.94	31.95	27.97	23.70	22.00	23.13	31.67	35.08	33.37	31.38	32.52	38.21
2020	35.74	33.64	29.45	24.95	23.15	24.35	33.34	36.94	35.14	33.04	34.24	40.24
2021	33.98	33.89	31.96	31.24	30.96	31.05	31.16	31.28	31.39	32.03	35.15	35.27
2022	34.92	34.75	33.98	33.04	32.72	32.82	32.94	33.08	33.20	33.74	37.28	37.61
2023	37.09	36.90	35.52	34.32	34.21	34.31	34.44	34.58	34.71	35.26	38.69	38.83
2024	38.86	38.54	37.36	35.98	35.79	35.90	36.04	36.19	36.32	36.88	41.18	41.33
2025	41.08	41.19	39.73	38.77	38.92	39.03	39.19	39.36	39.51	39.69	46.46	46.78
2026	48.37	48.49	45.97	44.48	44.42	44.56	44.75	44.94	45.10	45.56	52.22	51.91
2027	49.34	49.25	47.62	45.61	45.38	45.51	45.48	45.81	45.95	46.45	53.87	53.63
2028	51.08	51.07	49.72	47.22	47.06	47.22	47.07	47.40	47.72	48.41	56.42	55.31
2029	55.08	55.01	52.26	49.77	48.99	49.17	48.73	49.08	49.63	50.36	59.40	59.13
2030	57.87	57.81	55.14	52.89	52.67	52.84	52.88	53.27	53.39	53.95	62.69	62.97
2031	59.07	59.00	56.28	53.98	53.76	53.93	53.98	54.37	54.49	55.06	63.98	64.26
2032	62.83	62.78	59.56	57.16	56.94	57.13	57.21	57.64	57.75	58.34	67.85	68.39
2033	64.49	64.44	61.09	58.64	58.42	58.62	58.70	59.14	59.25	59.86	69.60	70.18
2034	66.10	66.05	62.58	60.08	59.85	60.05	60.14	60.59	60.70	61.32	71.31	71.94
2035	67.84	67.79	64.20	61.64	61.41	61.62	61.71	62.17	62.28	62.92	73.16	73.83
2036	69.43	69.38	65.72	63.11	62.88	63.09	63.19	63.66	63.77	64.42	74.85	75.54
2037	71.08	71.04	67.30	64.64	64.40	64.62	64.72	65.20	65.31	65.97	76.61	77.31
2038	72.78	72.73	68.93	66.22	65.98	66.20	66.30	66.78	66.90	67.57	78.42	79.13
2039	74.28	74.23	70.35	67.58	67.34	67.56	67.67	68.16	68.28	68.97	80.02	80.75
2040	76.15	76.10	72.15	69.33	69.08	69.31	69.42	69.92	70.04	70.74	82.01	82.75
2041	77.69	77.64	73.61	70.74	70.48	70.72	70.82	71.34	71.46	72.17	83.66	84.41

					TA	BLE 3b						
	10				Avoi	ded Cos	ts					
				Standard	l Fixed F	rice Opt	ion for S	olar QF				
				Of	f-Peak F	orecast	(\$/MWH)					
		······································						· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·		
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	25.61	20.71	13.96	11.41	6.31	10.11	15.71	20.96	20.96	21.21	23.46	26.71
2017	25.71	24.21	22.21	15.71	13.71	12.71	19.71	25.21	25.46	24.71	25.71	27.96
2018	26.17	28.12	25.56	19.46	14.68	12.54	19.71	27.04	26.93	25.35	28.20	30.62
2019	29.84	28.09	25.75	18.15	15.81	14.64	22.83	29.26	29.55	28.67	29.84	32.47
2020	31.75	29.88	27.38	19.28	16.79	15.54	24.27	31,12	31.43	30.50	31.75	34.55
2021	28.88	28.79	26.86	26.15	25.87	25.95	26.07	26.19	26.30	26.94	30.06	30.18
2022	29.73	29.56	28.79	27.85	27.53	27.63	27.75	27.88	28.00	28.54	32.09	32.42
2023	31.78	31.59	30.21	29.01	28.90	29.00	29.14	29.27	29.40	29.95	33.38	33.52
2024	33.48	33.16	31.98	30.60	30.41	30.52	30.66	30.81	30.95	31.51	35.80	35.96
2025	35.58	35.69	34.24	33.27	33.42	33.53	33.70	33.86	34.01	34.19	40.97	41.28
2026	42.77	42.89	40.36	38.87	38.81	38.95	39.15	39.34	39.50	39.95	46.62	46.31
2027	43.63	43.54	41.91	39.89	39.66	39.80	39.77	40.09	40.24	40.74	48.16	47.92
2028	45.26	45.25	43.90	41.40	41.23	41.40	41.25	41.58	41.89	42.59	50.60	49.48
2029	49.15	49.08	46.32	43.83	43.06	43.24	42.80	43.15	43.70	44.43	53.46	53.20
2030	51.82	51.76	49.09	46.84	46.62	46.79	46.83	47.22	47.34	47.90	56.64	56.92
2031	52.90	52.84	50.11	47.82	47.59	47.77	47.81	48.21	48.33	48.90	57.81	58.10
2032	56.59	56.54	53.31	50.92	50.70	50.89	50.97	51.39	51.50	52.10	61.60	62.15
2033	58.08	58.03	54.69	52.24	52.02	52.21	52.30	52.73	52.84	53.45	63.19	63.78
2034	59.54	59.50	56.03	53.52	53.30	53.50	53.59	54.04	54.15	54.77	64.76	65.39
2035	61.18	61.14	57.54	54.98	54.75	54.96	55.06	55.52	55.62	56.26	66.50	67.17
2036	62.67	62.62	58.96	56.35	56.12	56.33	56.43	56.89	57.00	57.65	68.09	68.78
2037	64.17	64.12	60.39	57.73	57.49	57.71	57.80	58.28	58.39	59.06	69.69	70.39
2038	65.73	65.69	61.88	59.17	58.93	59.15	59.25	59.73	59.85	60.52	71.37	72.08
2039	67.09	67.04	63.16	60.40	60.15	60.38	60.48	60.98	61.09	61.78	72.83	73.56
2040	68.83	68.78	64.83	62.01	61.76	61.99	62.09	62.60	62.72	63.42	74.68	75.42
2041	70.23	70.17	66.14	63.27	63.02	63.25	63.36	63.87	63.99	64.71	76.19	76.95

PRICING OPTIONS FOR STANDARD PPA (Continued)

### 2) Renewable Fixed Price Option

The Renewable Fixed Price Option is based on Renewable Avoided Costs. It is available only to Renewable QFs that generate electricity from a renewable energy source that may be used by the Company to comply with the Oregon Renewable Portfolio Standard as set forth in ORS 469A.005 to 469A.210.

This option is available for a maximum term of 15 years. Prices will be as established at the time the Standard PPA is executed and will be equal to the Renewable Avoided Costs in Tables 4a and 4b, 5a and 5b, or 6a and 6b, depending on the type of QF, effective at execution. QFs using any resource type other than wind and solar are assumed to be Base Load QFs.

Sellers will retain all Environmental Attributes generated by the facility during the Renewable Resource Sufficiency Period. A Renewable QF choosing the Renewable Fixed Price Option must cede all RPS Attributes generated by the facility to the Company from the start of the Renewable Resource Deficiency Period through the remainder of the PPA term.

Prices paid to the Seller under the Renewable Fixed Price Option include adjustments for the capacity contribution of the QF resource type relative to that of the avoided proxy resource. Both Wind QF resources (Tables 5a and 5b) and the avoided proxy resource, the basis used to determine Renewable Avoided Costs for the Renewable Fixed Price Option, are assumed to have a capacity contribution to peak of 5%. The capacity contribution for Solar QF resources (Tables 6a and 6b) is assumed to be 5%. The capacity contribution for Base Load QF resources (Tables 4a and 4b) is assumed to be 100%.

The Renewable Avoided Costs during the Renewable Resource Deficiency Period reflect an increase for avoided wind integration costs, shown in Table 7.

Prices paid to the Seller under the Renewable Fixed Price Option for Wind QFs (Tables 5a and 5b) include a reduction for the wind integration costs in Table 7, which cancels out wind integration costs included in the Renewable Avoided Costs during the Renewable Resource Deficiency Period. However, if the Wind QF is outside of PGE's Balancing Authority Area as contemplated in the Commission's Order No. 14-058, the Seller is paid the wind integration charges in Table 7, in addition to the prices listed in Tables 5a and 5b.

Sellers with PPAs exceeding 15 years will receive pricing equal to the Mid-C Index Price for all years up to five in excess of the initial 15.

		·			T/	ABLE 4a							
				R	enewabl	e Avoide	d Costs				,		
			Rei	newable	Fixed Pr	ice Optic	n for Ba	se Load	QF				
				0	n-Peak F	orecast(	\$/MWH)						
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
2016	28.36	22.61	15.76	14.86	12.61	17.11	24.11	27.11	25.11	23.86	26.86	31.61	
2017	30.11	28.36	24.86	21.11	19.61	20.61	28.11	31.11	29.61	27.86	28.86	33.86	
2018	31.86	31.26	28.26	22.28	21.43	21.43	30.08	33.52	30.78	28.76	32.01	35.86	
2019	34.10	32.11	28.13	23.86	22.16	23.29	31.83	35.24	33.53	31.54	32.68	38.37	
2020	115.34	115.32	114.56	115.02	118.22	117.33	117.01	116.89	115.60	114.63	115.47	114.45	
2021	117.94	118.18	116.67	117.75	120.59	119.83	119.26	119.77	118.26	117.25	118.55	117.22	
2022	120.48	120.36	118.46	120.19	123.17	122.14	121.69	121.65	120.55	119.55	120.98	119.53	
2023	123.26	122.83	120.85	122.92	125.37	124.64	124.29	123.92	123.08	121.92	123.63	122.53	
2024	124.86	125.01	123.06	125.07	127.80	126.78	126.67	126.41	126.22	123.83	124.83	124.96	
2025	127.73	128.05	125.86	128.21	131.66	130.48	129.53	129.66	128.84	126.59	127.76	127.41	
2026	130.91	130.58	129.12	131.30	135.76	132.28	132.28	132.69	132.40	129.34	131.17	130.23	
2027	133.47	133.03	131.38	133.50	139.48	134.88	134.51	135.95	134.79	131.96	133.26	132.78	
2028	135.95	134.91	132.89	136.24	141.79	136.93	137.64	137.65	136.77	134.76	135.84	135.06	
2029	138.81	138.57	135.91	139.29	149.30	140.74	140.82	140.82	140.86	137.50	138.32	138.21	
2030	141.68	141.39	139.11	142.00	153.18	145.20	143.05	142.93	144.31	140.18	140.75	140.79	
2031	144.29	143.79	142.17	145.52	156.10	149.27	145.71	146.65	146.86	143.04	144.15	143.71	
2032	146.51	146.00	144.35	147.76	158.51	151.58	147.95	148.91	149.13	145.24	146.37	145.92	
2033	149.91	149.40	147.71	151.19	162.18	155.09	151.39	152.37	152.59	148.62	149.77	149.31	
2034	152.96	152.43	150.71	154.26	165.46	158.24	154.46	155.46	155.68	151.64	152.81	152.35	
2035	155.76	155.22	153.46	157.08	168.50	161.14	157.29	158.31	158.54	154.41	155.60	155.13	
2036	158.31	157.76	155.97	159.65	171.26	163.78	159.86	160.90	161.13	156.94	158.15	157.67	
2037	161.83	161.27	159.44	163.20	175.07	167.42	163.42	164.48	164.71	160.43	161.67	161.18	
2038	164.95	164.38	162.52	166.35	178.45	170.65	166.57	167.65	167.89	163.52	164.79	164.29	
2039	168.13	167.55	165.66	169.56	181.89	173.94	169.79	170.89	171.13	166.68	167.97	167.46	
2040	171.05	170.46	168.54	172.51	185.04	176.96	172.74	173.85	174.10	169.58	170.89	170.37	
2041	174.69	174.08	172.11	176.17	188.98	180.72	176.40	177.55	177.80	173.18	174.52	173.99	

					TA	BLE 4b						
				Re	enewable	Avoide	d Costs					
			Ren	newable l	Fixed Pri	ice Optic	n for Ba	se Load	QF			
				Of	f-Peak F	orecast (	\$/MWH)					
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	25.76	20.86	14.11	11.56	6.46	10.26	15.86	21.11	21.11	21.36	23.61	26.86
2017	25.86	24.36	22.36	15.86	13.86	12.86	19.86	25.36	25.61	24.86	25.86	28.11
2018	26.32	28.27	25.71	19.61	14.83	12.69	19.86	27.19	27.08	25.50	28.35	30.77
2019	30.00	28.25	25.91	18.31	15.97	14.80	22.99	29.42	29.71	28.83	30.00	32.63
2020	62.76	63.02	64.56	63.31	59.92	60.16	60.45	61.61	62.52	63.74	63.55	63.99
2021	64.93	64.15	65.85	64.48	61.58	61.62	62.27	62.62	63.78	65.82	63.38	65.09
2022	65.85	65.52	67.77	65.49	62.45	62.82	64.33	63.35	65.00	67.04	64.42	66.29
2023	66.70	66.75	69.10	67.28	62.84	64.01	65.40	64.85	66.14	68.41	65.38	67.63
2024	67.25	67.31	70.47	67.09	63.18	65.92	64.75	65.12	66.62	68.68	67.42	68.05
2025	68.62	68.60	71.94	68.08	63.17	66.28	66.12	67.12	67.23	70.19	69.68	69.06
2026	68.95	69.85	72.28	68.56	63.85	67.22	67.05	67.75	67.05	71.12	69.85	69.89
2027	71.31	71.29	73.13	70.34	63.69	68.45	68.79	68.16	68.57	73.22	70.67	71.18
2028	72.28	72.90	75.41	72.10	63.09	69.98	70.15	68.82	70.20	73.79	71.48	73.41
2029	72.78	73.60	76.79	73.50	58.25	70.29	71.37	70.00	71.53	74.58	73.61	74.68
2030	73.91	74.82	78.36	73.64	58.00	70.89	72.02	72.19	72.00	75.99	75.36	76.23
2031	75.51	76.70	79.40	74.00	59.17	70.67	73.55	73.71	72.16	77.24	77.07	76.31
2032	76.76	77.97	80.71	75.23	60.15	71.83	74.76	74.93	73.35	78.52	78.34	77.57
2033	78.46	79.69	82.50	76.89	61.48	73.42	76.42	76.58	74.97	80.25	80.07	79.29
2034	79.97	81.23	84.09	78.37	62.66	74.84	77.89	78.06	76.42	81.80	81.62	80.82
2035	81.52	82.80	85.71	79.88	63.87	76.28	79.39	79.57	77.89	83.38	83.19	82.38
2036	82,86	84.17	87.13	81.20	64.93	77.54	80.70	80.88	79.18	84.76	84.57	83.74
2037	84.69	86.03	89.05	83.00	66.36	79.25	82.49	82.67	80.93	86.63	86.44	85.59
2038	86.33	87.69	90.77	84.60	67.64	80.78	84.08	84.26	82.49	88.30	88.11	87.24
2039	87.99	89.38	92.52	86.23	68.95	82.34	85.70	85.89	84.08	90.01	89.81	88.92
2040	89.45	90.85	94.05	87.66	70.09	83.70	87.12	87.31	85.47	91.49	91.29	90.39
2041	91.42	92.86	96.13	89.59	71.63	85.55	89.04	89.24	87.36	93.51	93.31	92.39

Sheet No. 201-15

### **SCHEDULE 201 (Continued)**

Γ	TABLE 5a											
	Renewable Avoided Costs											
	Renewable Fixed Price Option for Wind QF											
				0	n-Peak F	orecast(	\$/MWH)					
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	24.52	18.77	11.92	11.02	8.77	13.27	20.27	23.27	21.27	20.02	23.02	27.77
2017	26.20	24.45	20.95	17.20	15.70	16.70	24.20	27.20	25.70	23.95	24.95	29.95
2018	27.87	27.27	24.27	18.29	17.44	17.44	26.09	29.53	26.79	24.77	28.02	31.87
2019	30.03	28.04	24.06	19.79	18.09	19.22	27.76	31.17	29.46	27.47	28.61	34.30
2020	75.38	75.37	74.61	75.06	78.26	77.37	77.05	76.93	75.64	74.67	75.51	74.49
2021	77.10	77.33	75.83	76.90	79.75	78.99	78.41	78.92	77.41	76.40	77.70	76.38
2022	78.85	78.72	76.82	78.56	81.53	80.51	80.05	80.02	78.92	77.92	79.34	77.90
2023	80.71	80.27	78.29	80.37	82.82	82.08	81.73	81.37	80.53	79.36	81.08	79.97
2024	81.74	81.89	79.93	81.95	84.68	83.66	83.55	83.28	83.10	80.71	81.71	81.84
2025	83.64	83.97	81.78	84.13	87.57	86.40	85.44	85.57	84.75	82.51	83.68	83.32
2026	85.97	85.64	84.18	86.37	90.82	87.34	87.34	87.75	87.46	84.40	86.23	85.29
2027	87.67	87.23	85.57	87.69	93.67	89.07	88.71	90.15	88.99	86.16	87.45	86.98
2028	89.26	88.22	86.20	89.55	95.10	90.24	90.95	90.96	90.08	88.07	89.15	88.37
2029	91.22	90.98	88.32	91.70	101.72	93.16	93.23	93.23	93.28	89.92	90.73	90.62
2030	93.17	92.88	90.60	93.49	104.67	96.69	94.54	94.42	95.80	91.67	92.24	92.28
2031	94.84	94.34	92.72	96.07	106.65	99.82	96.26	97.20	97.42	93.59	94.70	94.26
2032	96.40	95.90	94.24	97.65	108.40	101.47	97.85	98.80	99.02	95.13	96.26	95.82
2033	98.55	98.03	96.34	99.82	110.81	103.72	100.02	101.00	101.22	97.25	98.40	97.95
2034	100.44	99.91	98.19	101.74	112.94	105.72	101.94	102.94	103.17	99.12	100.29	99.83
2035	102.38	101.85	100.09	103.71	115.13	107.76	103.92	104.93	105.16	101.04	102.23	101.76
2036	104.06	103.51	101.72	105.40	117.01	109.53	105.61	106.65	106.88	102.69	103.90	103.42
2037	106.37	105.81	103.99	107.74	119.61	111.96	107.96	109.02	109.26	104.97	106.21	105.72
2038	108.42	107.86	105.99	109.82	121.92	114.12	110.05	111.12	111.37	107.00	108.26	107.76
2039	110.52	109.94	108.04	111.95	124.27	116.33	112.17	113.27	113.52	109.07	110.36	109.85
2040	112.32	111.73	109.81	113.77	126.31	118.23	114.00	115.12	115.37	110.85	112.16	111.64
2041	114.83	114.23	112.26	116.31	129.12	120.86	116.55	117.69	117.95	113.32	114.66	114.13

<del> </del>	TABLE 5b											
	Renewable Avoided Costs											
	Renewable Fixed Price Option for Wind QF											
				0	ff-Peak F	orecast(	\$/MWH)					
,												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	21.92	17.02	10.27	7.72	2.62	6.42	12.02	17.27	17.27	17.52	19.77	23.02
2017	21.95	20.45	18.45	11.95	9.95	8.95	15.95	21.45	21.70	20.95	21.95	24.20
2018	22.33	24.28	21.72	15.62	10.84	8.70	15.87	23.20	23.09	21.51	24.36	26.78
2019	25.93	24.18	21.84	14.24	11.90	10.73	18.92	25.35	25.64	24.76	25.93	28.56
2020	58.61	58.87	60.41	59.16	55.77	56.01	56.30	57.46	58.37	59.59	59.40	59.84
2021	60.70	59.92	61.62	60.25	57.35	57.39	58.04	58.39	59.55	61.59	59.15	60.86
2022	61.54	61.21	63.46	61.18	58.14	58.51	60.02	59.04	60.69	62.73	60.11	61.98
2023	62.31	62.36	64.71	62.89	58.45	59.62	61.01	60.46	61.75	64.02	60.99	63.24
2024	62.78	62.84	66.00	62.62	58.71	61.45	60.28	60.65	62.15	64.21	62.95	63.58
2025	64.06	64.04	67.38	63.52	58.61	61.72	61.56	62.56	62.67	65.63	65.12	64.50
2026	64.30	65.20	67.63	63.91	59.20	62.57	62.40	63.10	62.40	66.47	65.20	65.24
2027	66.57	66.55	68.39	65.60	58.95	63.71	64.05	63.42	63.83	68.48	65.93	66.44
2028	67.45	68.07	70.58	67.27	58.26	65.15	65.32	63.99	65.37	68.96	66.65	68.58
2029	67.86	68.68	71.87	68.58	53.33	65.37	66.45	65.08	66.61	69.66	68.69	69.76
2030	68.89	69.80	73.34	68.62	52.98	65.87	67.00	67.17	66.98	70.97	70.34	71.21
2031	70.39	71.58	74.28	68.88	54.05	65.55	68.43	68.59	67.04	72.12	71.95	71.19
2032	71.55	72.76	75.50	70.02	54.94	66.62	69.55	69.72	68.14	73.31	73.13	72.36
2033	73.15	74.38	77.19	71.58	56.17	68.11	71.11	71.27	69.66	74.94	74.76	73.98
2034	74.55	75.81	78.67	72.95	57.24	69.42	72.47	72.64	71.00	76.38	76.20	75.40
2035	76.00	77.28	80.19	74.36	58.35	70.76	73.87	74.05	72.37	77.86	77.67	76.86
2036	77.23	78.54	81.50	75.57	59.30	71.91	75.07	75.25	73.55	79.13	78.94	78.11
2037	78.95	80.29	83.31	77.26	60.62	73.51	76.75	76.93	75.19	80.89	80.70	79.85
2038	80.48	81.84	84.92	78.75	61.79	74.93	78.23	78.41	76.64	82.45	82.26	81.39
2039	82.03	83.42	86.56	80.27	62.99	76.38	79.74	79.93	78.12	84.05	83.85	82.96
2040	83.37	84.77	87.97	81.58	64.01	77.62	81.04	81.23	79.39	85.41	85.21	84.31
2041	85.23	86.67	89.94	83.40	65.44	79.36	82.85	83.05	81.17	87.32	87.12	86.20

Sheet No. 201-17

### **SCHEDULE 201 (Continued)**

	TABLE 6a											
	Renewable Avoided Costs											
	Renewable Fixed Price Option for Solar QF											
				0	n-Peak F	orecast(	\$/MWH)					
									<del></del>			
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	28.36	22.61	15.76	14.86	12.61	17.11	24.11	27.11	25.11	23.86	26.86	31.61
2017	30.11	28.36	24.86	21.11	19.61	20.61	28.11	31.11	29.61	27.86	28.86	33.86
2018	31.86	31.26	28.26	22.28	21.43	21.43	30.08	33.52	30.78	28.76	32.01	35.86
2019	34.10	32.11	28.13	23.86	22.16	23.29	31.83	35.24	33.53	31.54	32.68	38.37
2020	78.62	78.60	77.84	78.30	81.50	80.60	80.29	80.17	78.88	77.91	78.74	77.73
2021	80.39	80.63	79.12	80.20	83.04	82.28	81.71	82.22	80.71	79.70	81.00	79.67
2022	82.21	82.08	80.18	81.92	84.89	83.87	83.41	83.38	82.27	81.27	82.70	81.25
2023	84.12	83.69	81.71	83.78	86.23	85.50	85.15	84.78	83.94	82.78	84.50	83.39
2024	85.22	85.37	83.41	85.43	88.16	87.14	87.03	86.76	86.58	84.19	85.19	85.32
2025	87.19	87.52	85.33	87.68	91.12	89.95	88.99	89.12	88.30	86.06	87.23	86.87
2026	89.59	89.26	87.80	89.99	94.44	90.96	90.96	91.37	91.08	88.02	89.85	88.91
2027	91.36	90.92	89.26	91.39	97.36	92.76	92.40	93.84	92.68	89.85	91.14	90.67
2028	93.02	91.98	89.96	93.31	98.86	94.00	94.71	94.72	93.84	91.84	92.91	92.13
2029	95.05	94.81	92.15	95.53	105.55	96.99	97.06	97.06	97.11	93.75	94.56	94.45
2030	97.08	96.79	94.51	97.40	108.58	100.60	98.45	98.33	99.71	95.58	96.15	96.19
2031	98.83	98.33	96.70	100.05	110.63	103.81	100.25	101.19	101.40	97.58	98.69	98.25
2032	100.47	99.96	98.30	101.71	112.47	105.53	101.91	102.87	103.08	99.20	100.32	99.88
2033	102.68	102.16	100.47	103.95	114.95	107.86	104.16	105.14	105.36	101.38	102.53	102.08
2034	104.66	104.13	102.41	105.96	117.16	109.94	106.16	107.16	107.38	103.34	104.51	104.05
2035	106.68	106.15	104.39	108.01	119.43	112.06	108.21	109.23	109.46	105.34	106.53	106.06
2036	108.44	107.90	106.11	109.79	121.40	113.91	110.00	111.04	111.27	107.08	108.29	107.81
2037	110.84	110.28	108.46	112.21	124.08	116.43	112.43	113.49	113.73	109.44	110.68	110.19
2038	112.98	112.41	110.55	114.38	126.47	118.68	114.60	115.68	115.92	111.55	112.82	112.32
2039	115.16	114.58	112.68	116.59	128.92	120.97	116.81	117.91	118.16	113.71	115.00	114.49
2040	117.06	116.47	114.54	118.51	131.04	122.96	118.74	119.86	120.11	115.58	116.89	116.37
2041	119.65	119.05	117.07	121.13	133.94	125.68	121.37	122.51	122.76	118.14	119.48	118.95

	TABLE 6b											
	Renewable Avoided Costs											
	Renewable Fixed Price Option for Solar QF											
				0	ff-Peak F	orecast(	\$/MWH)					
			γ					·				
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	25.76	20.86	14.11	11.56	6.46	10.26	15.86	21.11	21.11	21.36	23.61	26.86
2017	25.86	24.36	22.36	15.86	13.86	12.86	19.86	25.36	25.61	24.86	25.86	28.11
2018	26.32	28.27	25.71	19.61	14.83	12.69	19.86	27.19	27.08	25.50	28.35	30.77
2019	30.00	28.25	25.91	18.31	15.97	14.80	22.99	29.42	29.71	28.83	30.00	32.63
2020	62.76	63.02	64.56	63.31	59.92	60.16	60.45	61.61	62.52	63.74	63.55	63.99
2021	64.93	64.15	65.85	64.48	61.58	61.62	62.27	62.62	63.78	65.82	63.38	65.09
2022	65.85	65.52	67.77	65.49	62.45	62.82	64.33	63.35	65.00	67.04	64.42	66.29
2023	66.70	66.75	69.10	67.28	62.84	64.01	65.40	64.85	66.14	68.41	65.38	67.63
2024	67.25	67.31	70.47	67.09	63.18	65.92	64.75	65.12	66.62	68.68	67.42	68.05
2025	68.62	68.60	71.94	68.08	63.17	66.28	66.12	67.12	67.23	70.19	69.68	69.06
2026	68.95	69.85	72.28	68.56	63.85	67.22	67.05	67.75	67.05	71.12	69.85	69.89
2027	71.31	71.29	73.13	70.34	63.69	68.45	68.79	68.16	68.57	73.22	70.67	71.18
2028	72.28	72.90	75.41	72.10	63.09	69.98	70.15	68.82	70.20	73.79	71.48	73.41
2029	72.78	73.60	76.79	73.50	58.25	70.29	71.37	70.00	71.53	74.58	73.61	74.68
2030	73.91	74.82	78.36	73.64	58.00	70.89	72.02	72.19	72.00	75.99	75.36	76.23
2031	75.51	76.70	79.40	74.00	59.17	70.67	73.55	73.71	72.16	77.24	77.07	76.31
2032	76.76	77.97	80.71	75.23	60.15	71.83	74.76	74.93	73.35	78.52	78.34	77.57
2033	78.46	79.69	82.50	76.89	61.48	73.42	76.42	76.58	74.97	80.25	80.07	79.29
2034	79.97	81.23	84.09	78.37	62.66	74.84	77.89	78.06	76.42	81.80	81.62	80.82
2035	81.52	82.80	85.71	79.88	63.87	76.28	79.39	79.57	77.89	83.38	83.19	82.38
2036	82.86	84.17	87.13	81.20	64.93	77.54	80.70	80.88	79.18	84.76	84.57	83.74
2037	84.69	86.03	89.05	83.00	66.36	79.25	82.49	82.67	80.93	86.63	86.44	85.59
2038	86.33	87.69	90.77	84.60	67.64	80.78	84.08	84.26	82.49	88.30	88.11	87.24
2039	87.99	89.38	92.52	86.23	68.95	82.34	85.70	85.89	84.08	90.01	89.81	88.92
2040	89.45	90.85	94.05	87.66	70.09	83.70	87.12	87.31	85.47	91.49	91.29	90.39
2041	91.42	92,86	96.13	89.59	71.63	85.55	89.04	89.24	87.36	93.51	93.31	92.39

### WIND INTEGRATION

TABLE 7							
Wind Integration							
Year	Cost						
2015	3.77						
2016	3.84						
2017	3.91						
2018	3.99						
2019	4.07						
2020	4.15						
2021	4.23						
2022	4.31						
2023	4.39						
2024	4.47						
2025	4.56						
2026	4.65						
2027	4.74						
2028	4.83						
2029	4.92						
2030	5.02						
2031	5.12						
2032	5.21						
2033	5.31						
2034	5.42						
2035	5.52						
2036	5.63						
2037 2038	5.74						
2038	5.85 5.96						
2039	6.08						
2040	80.0						

### MONTHLY SERVICE CHARGE

Each separately metered QF not associated with a retail Customer account will be charged \$10.00 per month.

#### **INSURANCE REQUIREMENTS**

The following insurance requirements are applicable to Sellers with a Standard PPA:

- 1) QFs with nameplate capacity ratings greater than 200 kW are required to secure and maintain a prudent amount of general liability insurance. The Seller must certify to the Company that it is maintaining general liability insurance coverage for each QF at prudent amounts. A prudent amount will be deemed to mean liability insurance coverage for both bodily injury and property damage liability in the amount of not less than \$1,000,000 each occurrence combined single limit, which limits may be required to be increased or decreased by the Company as the Company determines in its reasonable judgment, that economic conditions or claims experience may warrant.
- Such insurance will include an endorsement naming the Company as an additional insured insofar as liability arising out of operations under this schedule and a provision that such liability policies will not be canceled or their limits reduced without 30 days' written notice to the Company. The Seller will furnish the Company with certificates of insurance together with the endorsements required herein. The Company will have the right to inspect the original policies of such insurance.
- 3) QFs with a design capacity of 200 kW or less are encouraged to pursue liability insurance on their own. The Oregon Public Utility Commission in Order No. 05-584 determined that it is inappropriate to require QFs that have a design capacity of 200 kW or less to obtain general liability insurance.

### TRANSMISSION AGREEMENTS

If the QF is located outside the Company's service territory, the Seller is responsible for the transmission of power at its cost to the Company's service territory.

### INTERCONNECTION REQUIREMENTS

Except as otherwise provided in a generation Interconnection Agreement between the Company and Seller, if the QF is located within the Company's service territory, switching equipment capable of isolating the QF from the Company's system will be accessible to the Company at all times. At the Company's option, the Company may operate the switching equipment described above if, in the sole opinion of the Company, continued operation of the QF in connection with the utility's system may create or contribute to a system emergency.

### INTERCONNECTION REQUIREMENTS (Continued)

The QF owner interconnecting with the Company's distribution system must comply with all requirements for interconnection as established pursuant to Commission rule, in the Company's Rules and Regulations (Rule C) or the Company's Interconnection Procedures contained in its FERC Open Access Transmission Tariff (OATT), as applicable. The Seller will bear full responsibility for the installation and safe operation of the interconnection facilities.

# DEFINITION OF A SMALL COGENERATION FACILITY OR SMALL POWER PRODUCTION FACILITY ELIGIBLE TO RECEIVE PRICING UNDER THE STANDARD PPA

A QF will be eligible to receive pricing under the Standard PPA if the nameplate capacity of the QF, together with any other electric generating facility using the same motive force, owned or controlled by the Same Person(s) or Affiliated Person(s), and located at the Same Site, does not exceed 10 MW. A Community-Based or Family-Owned QF is exempt from these restrictions.

### **Definition of Community-Based**

- a. A community project (or a community sponsored project) must have a recognized and established organization located within the county of the project or within 50 miles of the project that has a genuine role in helping the project be developed and must have some not insignificant continuing role with or interest in the project after it is completed and placed in service.
- b. After excluding the passive investor whose ownership interests are primarily related to green tag values and tax benefits as the primary ownership benefit, the equity (ownership) interests in a community sponsored project must be owned in substantial percentage (80 percent or more) by the following persons (individuals and entities): (i) the sponsoring organization, or its controlled affiliates; (ii) members of the sponsoring organization (if it is a membership organization) or owners of the sponsorship organization (if it is privately owned); (iii) persons who live in the county in which the project is located or who live a county adjoining the county in which the project is located; or (iv) units of local government, charities, or other established nonprofit organizations active either in the county in which the project is located or active in a county adjoining the county in which the project is located.

### **Definition of Family-Owned**

After excluding the ownership interest of the passive investor whose ownership interests are primarily related to green tag values and tax benefits as the primary ownership benefit, five or fewer individuals own 50 percent or more of the equity of the project entity, or fifteen or fewer individuals own 90 percent or more of the project entity. A "look through" rule applies to closely held entities that hold the project entity, so that equity held by LLCs, trusts, estates, corporations, partnerships or other similar entities is considered held by the equity owners of the look through entity. An individual is a natural person. In counting to five or fifteen, spouses or children of an equity owner of the project owner who also have an equity interest are aggregated and counted as a single individual.

DEFINITION OF A SMALL COGENERATION FACILITY OR SMALL POWER PRODUCTION FACILITY ELIGIBLE TO RECEIVE PRICING UNDER THE STANDARD PPA (Continued)

### **Definition of Person(s) or Affiliated Person(s)**

As used above, the term "Same Person(s)" or "Affiliated Person(s)" means a natural person or persons or any legal entity or entities sharing common ownership, management or acting jointly or in concert with or exercising influence over the policies or actions of another person or entity. However, two facilities will not be held to be owned or controlled by the Same Person(s) or Affiliated Person(s) solely because they are developed by a single entity.

Furthermore, two facilities will not be held to be owned or controlled by the Same Person(s) or Affiliated Person(s) if such common person or persons is a "passive investor" whose ownership interest in the QF is primarily related to utilizing production tax credits, green tag values and MACRS depreciation as the primary ownership benefit and the facilities at issue are independent family-owned or community-based projects. A unit of Oregon local government may also be a "passive investor" in a community-based project if the local governmental unit demonstrates that it will not have an equity ownership interest in or exercise any control over the management of the QF and that its only interest is a share of the cash flow from the QF, which share will not exceed 20%. The 20% cash flow share limit may only be exceeded for good cause shown and only with the prior approval of the Commission.

#### **Definition of Same Site**

For purposes of the foregoing, generating facilities are considered to be located at the same site as the QF for which qualification for pricing under the Standard PPA is sought if they are located within a five-mile radius of any generating facilities or equipment providing fuel or motive force associated with the QF for which qualification for pricing under the Standard PPA is sought.

### **Definition of Shared Interconnection and Infrastructure**

QFs otherwise meeting the above-described separate ownership test and thereby qualified for entitlement to pricing under the Standard PPA will not be disqualified by utilizing an interconnection or other infrastructure not providing motive force or fuel that is shared with other QFs qualifying for pricing under the Standard PPA so long as the use of the shared interconnection complies with the interconnecting utility's safety and reliability standards, interconnection agreement requirements and Prudent Electrical Practices as that term is defined in the interconnecting utility's approved Standard PPA.

### **OTHER DEFINITIONS**

### Mid-C Index Price

As used in this schedule, the daily Mid-C Index Price shall be the Day Ahead Intercontinental Exchange ("ICE") for the bilateral OTC market for energy at the Mid-C Physical for Average

### OTHER DEFINITIONS (Continued)

On-Peak Power and Average Off-Peak Power found on the following website: <a href="https://www.theice.com/products/OTC/Physical-Energy/Electricity">https://www.theice.com/products/OTC/Physical-Energy/Electricity</a>. 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.

#### **Definition of RPS Attributes**

As used in this schedule, 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.

#### **Definition of Environmental Attributes**

As used in this schedule, 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 gases (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.

### **Definition of Resource Sufficiency Period**

This is the period from the current year through 2020.

### **Definition of Resource Deficiency Period**

This is the period from 2021 through 2034.

### **Definition of Renewable Resource Sufficiency Period**

This is the period from the current year through 2019.

### **Definition of Renewable Resource Deficiency Period**

This is the period from 2020 through 2034.

Sheet No. 201-24

### SCHEDULE 201 (Concluded)

#### DISPUTE RESOLUTION

Upon request, the QF will provide the purchasing utility with documentation verifying the ownership, management and financial structure of the QF in reasonably sufficient detail to allow the utility to make an initial determination of whether or not the QF meets the above-described criteria for entitlement to pricing under the Standard PPA.

The QF may present disputes to the Commission for resolution using the following process:

The QF may file a complaint asking the Commission to adjudicate disputes regarding the formation of the standard contract. The QF may not file such a complaint during any 15-day period in which the utility has the obligation to respond, but must wait until the 15-day period has passed.

The utility may respond to the complaint within ten days of service.

The Commission will limit its review to the issues identified in the complaint and response, and utilize a process similar to the arbitration process adopted to facilitate the execution of interconnection agreements among telecommunications carriers. See OAR 860, Division 016. The administrative law judge will not act as an arbitrator.

### SPECIAL CONDITIONS

- 1. Delivery of energy by Seller will be at a voltage, phase, frequency, and power factor as specified by the Company.
- 2. If the Seller also receives retail Electricity Service from the Company at the same location, any payments under this schedule will be credited to the Seller's retail Electricity Service bill. At the option of the Customer, any net credit over \$10.00 will be paid by check to the Customer.
- 3. Unless required by state or federal law, if the 1978 Public Utility Regulatory Policies Act (PURPA) is repealed, PPAs entered into pursuant to this schedule will not terminate prior to the Standard or Negotiated PPA's termination date.

### **TERM OF AGREEMENT**

Not less than one year and not to exceed 20 years.

From: Denise Saunders Denise.Saunders@pgn.com

Subject: RE: Evergreen BioPower LLC PPA

Date: May 31, 2017 at 3:25 PM

To: Ken Kaufmann Ken@kaufmann.law

Cc: John Morton John.Morton@pgn.com, Angeline Chong Angeline.Chong@pgn.com

Ken – PGE will want to review the information you provide to confirm that the project meets the eligibility threshold. In the event that the project is not eligible for a Schedule 201 contract and, if Evergreen wishes to negotiate a contract under Schedule 202, we will make every effort to complete negotiations and execute a contract by January 1.

### **Denise**

From: Ken Kaufmann [mailto:Ken@kaufmann.law]

**Sent:** Wednesday, May 31, 2017 2:48 PM

To: Denise Saunders

Cc: John Morton; Angeline Chong

Subject: Re: Evergreen BioPower LLC PPA

\*\*\*Please take care when opening links, attachments or responding to this email as it originated outside of PGE.\*\*\*

#### Denise.

I have requested a picture of the Nameplate and will forward asap. I can't answer the second question today but note that the 10,500kW number was in the QF form 556 Evergreen provided PGE in November 2016, and Evergreen is prejudiced by PGE waiting until now to bring it up.

If the photo of the Nameplate will get PGE to withdraw its cloud on Evergreen's eligibility then I will not file a complaint. Otherwise I intend to file by 5:00 pm today.

Thank you.

Ken

>

On May 31, 2017, at 2:36 PM, Denise Saunders < <u>Denise.Saunders@pgn.com</u>> wrote:

- > Ken I've attached an executed copy of the PPA. As indicated in my earlier email, PGE continues to have concerns about Evergreen BioPower LLC's (Evergreen) eligibility for a standard Schedule 201 power purchase agreement. PGE is requesting the following:
- >> please provide photos of the physical nameplate rating on the turbine, generator and transformer.
- >> please explain how the project is able to produce 10,500kW (based on information provided in form QF06) when the turbine is only rated to 10,000kW.
- > PGE is committed to trying to resolve this matter as quickly as possible.
- > Denise
- Denis
- > -----Original Message-----
- > From: Ken Kaufmann [mailto:Ken@kaufmann.law]
- > Sent: Wednesday, May 31, 2017 9:30 AM
- > To: Denise Saunders
- > Cc: John Morton; Angeline Chong
- > Subject: Re: Evergreen BioPower LLC PPA

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>
> ***Please take care when opening links, attachments or responding to this email as it originated outside of PGE.***
>
>
> Denise,
> Thank you for your email. For context, I recount that the Evergreen facility was vetted by PacifiCorp and determined
to be eligible for a standard PPA, in 2007. The facility has a nameplates capacity of 10,000kW, has generated an average
of 5.2 MW over the last 9 years, and to the best of Evergreen's knowledge has not and cannot exceed 10MW.
> For PGE, after having more than 6 months to do its diligence and after promising to execute a standard PPA, to now
state that it MAY terminate the PPA immediately based on unspecified warranty violations falls short of good faith and
fair dealing. I note that I requested on May 25, the day you first alerted me of your concerns, that you submit your
questions regarding the project to me so that Evergreen could respond. I never received any such questions from you.
> Are you sure that PGE is not willing to accept this PPA and clear the cloud your email below casts upon it?
> Thank you for your consideration.
> Sincerely,
> Ken
> On May 31, 2017, at 9:02 AM, Denise Saunders < Denise Saunders@pgn.com > wrote:
>> Ken,
>>
>> As I explained in our phone conversation last week, PGE has obtained information that calls into question Evergreen
BioPower LLC's (Evergreen) eligibility for a standard Schedule 201 power purchase agreement. Given our questions,
PGE is concerned that Evergreen may be in breach of the warranties in the PPA, and the OPUC established 10 MW
eligibility threshold.
>>
>> Based on further discussions with my client, and given the current circumstances, PGE will go ahead and execute the
Standard Off-system Non-Variable Power Purchase Agreement (PPA) with Evergreen immediately, with the
understanding that Evergreen will continue to work with PGE to clarify the relevant information. To that end, I will
send you PGE's questions related to the project's eligibility for the PPA next week. Please be aware that, in the event
we determine that your client is in breach of the PPA, we would need to move to terminate.
>>
>> I appreciate your cooperation, and look forward to resolving this matter in a mutually satisfactory fashion.
>>
>> Denise
>>
> Kenneth Kaufmann
> Attorney at Law
> 1785 Willamette Falls Dr., Suite 5
> West Linn, OR 97068
> (503) 230-7715 (office)
> (503) 972-2921 (fax)
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> ken@kaufmann.law
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### 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 <a href="https://www.puc.state.or.us">www.puc.state.or.us</a>. 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.