fax (503) 334-2235 min@sanger-law.com

December 28, 2018

Via USPS Mail and E-mail

Public Utility Commission of Oregon Attn: Filing Center 201 High St. SE, Suite 100 Salem, OR 97301

Re: In the Matter of the Complaint of PORTLAND GENERAL ELECTRIC COMPANY

against ALFALFA SOLAR I LLC, et al.

Docket No. UM 1931

Dear Filing Center:

Please find enclosed Response Testimonies of John Lowe and Irion Sanger.

Let me know if you have any questions.

Sincerely,

Min Hu

# BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

### **UM 1931**

| PORTLAND GENERAL ELECTRIC COMPANY, | ) |
|------------------------------------|---|
| Complainant,                       | ) |
| v.                                 | ) |
| ALFALFA SOLAR I LLC, et al.        | ) |
| Defendants.                        | ) |

### RESPONSE TESTIMONY OF

### IRION A. SANGER

### ON BEHALF OF THE

# COMMUNITY RENEWABLE ENERGY ASSOCIATION NORTHWEST AND INTERMOUNTAIN POWER PRODUCERS COALITION RENEWABLE ENERGY COALITION

**December 28, 2018** 

- 1 Q. Mr. Sanger, please state your name and business address.
- 2 A. My name is Irion A. Sanger. I am an attorney with Sanger Law. My business
- address is 1117 SE 53<sup>rd</sup> Ave., Portland, Oregon 97215.
- 4 Q. Please describe your background and experience.
- 5 A. I graduated from Lewis and Clark Law School in Portland, Oregon in 2000 with
- 6 cum laude honors and an Environmental Law Certificate, and from World College
- 7 Institute of New College of California in 1995 with a bachelor's degree in the
- 8 Humanities with an emphasis in International Environmental Studies. I provide
- 9 legal and consulting advice and advocacy to on energy, administrative,
- transactional, and public utility law. I represent energy trade associations,
- municipalities, electric cooperatives, irrigation districts, end-use industrial and
- commercial consumers, investor owned water utilities, and renewable and
- cogeneration electricity producers in state and federal courts as well as before
- energy related administrative agencies, including the Oregon Public Utility
- 15 Commission, the Idaho Public Utilities Commission, the Utah Public Service
- 16 Commission, the Washington Utilities and Transportation Commission, the
- 17 Wyoming Public Service Commission, and the Federal Energy Regulatory
- 18 Commission. I am also an adjunct instructor at Lewis and Clark Law School
- 19 (Northwest Energy Law), and in Portland Community College's Paralegal
- 20 Program (Administrative Law, Environmental Law, Introduction to Law, and Law
- 21 Practice Management).

- 1 Q. On whose behalf are you appearing in this proceeding?
- 2 A. I am testifying on behalf of the Community Renewable Energy Association
- 3 ("CREA"), the Northwest and Intermountain Power Producers Coalition, and the
- 4 Renewable Energy Coalition.
- 5 Q. Have you previously filed testimony in an administrative proceeding?
- 6 **A.** No, this is my first time.

8

- 7 Q. Please summarize your testimony.
  - **A.** My testimony has a limited purpose, which is to describe the background and
- 9 negotiations that resulted in the Standard Renewable Power Purchase Agreement
- 10 ("PPA") contract form and Schedule 201 that are in dispute in this proceeding.
- 11 This testimony is in response to Portland General Electric Company's ("PGE")
- witness Robert Macfarlane's testimony regarding changes that PGE proposed and
- made to the version of PGE's standard renewable form contract after the
- 14 Commission's renewable rate order was issued in Order No. 11-505. The
- negotiations and draft documents demonstrate that: 1) PGE proposed language to
- the contract forms and Schedule 201 that would state that the 15-year fixed price
- period started at the time of execution rather than the time of power deliveries; 2)
- PGE's efforts were opposed by some of the parties; 3) PGE withdrew its proposal
- to start the 15-year fixed period at the time of execution; 4) CREA proposed
- language that was intended to make clear that the 15-year period began at the
- 21 Commercial Operation Date (for purposes of determining the date of change in
- renewable energy certificate ownership) and not the time of execution; and 5)
- 23 PGE agreed to CREA's language. I am not testifying regarding the meaning of

PGE/100, Macfarlane/20-22.

| 1  |           | the Standard Renewable PPA and Schedule 201, but only to the factual              |
|----|-----------|---|
| 2  |           | circumstances surrounding the formation of the disputed documents.                |
| 3  | Q.        | Did you participate in the relevant proceedings and negotiations?                 |
| 4  | <b>A.</b> | Yes. In UM 1396, I was an attorney representing the Industrial Customers of       |
| 5  |           | Northwest Utilities ("ICNU") an industrial consumer trade association. ICNU       |
| 6  |           | included a number of industrial ratepayers that also operated cogeneration, and   |
| 7  |           | biomass facilities, and sold their net output to utilities. ICNU participated in  |
| 8  |           | regulatory proceeding related to the Public Utility Regulatory Policies Act       |
| 9  |           | ("PURPA") to ensure that: 1) rates for end use consumers were fair, just and      |
| 10 |           | reasonable; and 2) prices and terms and conditions for contracts were fair,       |
| 11 |           | reasonable, and allowed qualifying facilities ("QF") to obtain adequate financing |
| 12 |           | and operate for their entire contracts. In UM 1610, I also represented ICNU       |
| 13 |           | during the early part of the proceeding; however, other than intervening ICNU did |
| 14 |           | not participate in UM 1610. In UM 1610, I primarily represented the Renewable     |
| 15 |           | Energy Coalition and Coronal Development Services (now known as Coronal           |
| 16 |           | Energy). The Renewable Energy Coalition includes small and large QFs who          |
| 17 |           | own and operate renewable energy generation facilities in Oregon, Idaho,          |
| 18 |           | Montana, Washington, Utah, and Wyoming. The Renewable Energy Coalition            |
| 19 |           | advocates on their behalf of its members to adopt state and federal policies that |
| 20 |           | fairly implement PURPA. Coronal Energy is a national solar energy services        |
| 21 |           | provider and project development firm.  |

| 1 2      | Q.        | Why did PGE file standard contract forms and a Schedule 201 with renewable avoided cost rates?                             |
|----------|-----------|--|
| 3        | A.        | The OPUC ordered that PGE provide a standard renewable contract and standard   |
| 4        |           | renewable avoided cost rates in Order No. 11-505. <sup>2</sup> PGE formally filed its                                      |
| 5        |           | compliance filing in Docket No. UM 1396 on March 16, 2012.   |
| 6        | Q.        | Please summarize PGE's filing.   |
| 7        | <b>A.</b> | This compliance filing contained a proposed Schedule 211 that would address  |
| 8        |           | renewable rates and contract terms separately from the pre-existing Schedule   |
| 9        |           | 201.3  |
| 10       |           | PGE's March 16, 2012 Schedule 211 as filed as PGE Exhibit 102 in Docket  |
| 11       |           | No. UM 1396 is attached to my testimony as Exhibit CREA-NIPPC-REC/201.   |
| 12       |           | As relevant to the 15-year term issues, PGE proposed the following language on   |
| 13       |           | page 4 and page 7 in describing the renewable fixed price option:  |
| 14       |           | This option is available for a maximum period of 15 years  |
| 15       |           | immediately following the effective date of the Standard Renewable   |
| 16       |           | PPA. Sellers with a PPA term exceeding 15 years will make a one  |
| 17       |           | time election at execution to select a Market-Based Option from  |
| 18       |           | Schedule 201 for all years up to five after the initial 15 years   |
| 19       |           | immediately following the effective date of the Standard Renewable   |
| 20       |           | PPA. Under the Renewable Fixed Price for a Variable Resource   |
| 21       |           | without Integration, prices will be as established at the time the   |
| 22       |           | Standard Renewable PPA is executed and will be equal to the  |
| 23       |           | Renewable Avoided Costs in Tables 1 and 2 effective at execution   |
| 24<br>25 |           | for a period of up to 15 years <i>immediately following the effective</i> date of the Standard Renewable PPA. <sup>4</sup> |
| 25<br>26 |           | une of the Standard Renewable FFA.   |
| ∠∪       |           |  |

<sup>&</sup>lt;sup>2</sup> Re Commission Investigation Into Resource Sufficiency Pursuant to Order No. 06-538, Docket No. UM 1396, Order No. 11-505 (Dec. 13, 2011).

Schedule 211 never became an effective tariff and PGE's avoided cost tariffs are Schedule 201 and 202.

<sup>&</sup>lt;sup>4</sup> CREA-NIPPC-REC/201, Sanger/4 (emphasis added).

| 1   | The italicized language was not contained in prior or subsequent   |
|---|--|
| 2   | PGE Schedule 201 tariffs approved by the PUC. This new language  |
| 3   | proposed that the fixed price period would run from "the effective date" of  |
| 4   | the PPA.   |
| 5   | PGE also proposed a Standard Renewable PPA, labeled as Exhibit   |
| 6   | 104, included with the March 16, 2012 filing in Docket No. UM 1396 is  |
| 7   | attached to my testimony as Exhibit CREA-NIPPC-REC/202. It provided  |
| 8   | in Section 5:  |
| 9<br>10<br>11<br>12<br>13<br>14<br>15<br>16<br>17<br>18<br>19<br>20<br>21<br>22<br>23<br>24 | PGE shall pay Seller for the price options 5.1, 5.2, 5.3 or 5.4, as selected below, pursuant to the Schedule. Seller shall indicate which price option it chooses by marking its choice below with an X. If Seller chooses the option in Section 5.1, it must mark below with a second X, a single second option from Section 5.2, 5.3, or 5.4 for all Contract Years in excess of 15 until the end of the Term. <sup>5</sup> This proposed PPA further provided in Section 1.6:  'Contract Year' means each twelve (12) month period during the Term 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. <sup>6</sup> Because the Contract Year ran from the Commercial Operation Date, Section 5 |
|   |  |
| 25  | stated the fixed prices applied for 15 years from the Commercial Operation Date,   |
| 26  | not the Effective Date as stated in Schedule 211.  |
| 27  | Thus, PGE's UM 1396 proposal filed on March 16, 2012, was somewhat   |
| 28  | unclear, but included a significant revision to the pre-existing terms of Schedule   |
|   |  |

<sup>&</sup>lt;sup>5</sup> CREA-NIPPC-REC/202, Sanger/9 (emphasis added).

<sup>6</sup> *Id.* at 2.

| 1   |          | 201 in the proposed Schedule 211 by proposing to state the 15-year period   |
|---|----------|---|
| 2   |          | expired 15 years after execution of the contract in the Schedule 211 tariff.  |
| 3   | Q.       | Did PGE make similar changes to its revised Schedule 201?   |
| 4   | A.       | Yes. The changes were not identified in a redline or legislative format, and could  |
| 5   |          | only be discovered by a careful comparison. PGE made similar proposals in the   |
| 6   |          | same filing to change the language of its Schedule 201, adding the phrase   |
| 7   |          | "immediately following the effective date." <sup>7</sup>  |
| 8   | Q.       | Were the compliance filings suspended for investigation?  |
| 9   | A.       | Yes. The parties to Docket No. UM 1396 engaged in workshops to address  |
| 10  |          | numerous disputed issues with PGE's and PacifiCorp's compliance filings over  |
| 11  |          | the course of many months.  |
|   |          |   |
| 12<br>13  | Q.       | Did the parties attempt to resolve any disagreements regarding PGE's compliance filing?   |
|   | Q.<br>A. |   |
| 13  |          | compliance filing?  |
| 13<br>14  |          | compliance filing?  Yes. About nine months after PGE's filing, on December 17, 2012, PGE's  |
| <ul><li>13</li><li>14</li><li>15</li></ul>                                  |          | compliance filing?  Yes. About nine months after PGE's filing, on December 17, 2012, PGE's attorney, David White, circulated an email to all parties to UM 1396, which  |
| <ul><li>13</li><li>14</li><li>15</li><li>16</li></ul>                       |          | Yes. About nine months after PGE's filing, on December 17, 2012, PGE's attorney, David White, circulated an email to all parties to UM 1396, which provided PGE's proposed revisions to a settlement agreement and the tariffs and  |
| <ul><li>13</li><li>14</li><li>15</li><li>16</li><li>17</li></ul>            |          | Yes. About nine months after PGE's filing, on December 17, 2012, PGE's attorney, David White, circulated an email to all parties to UM 1396, which provided PGE's proposed revisions to a settlement agreement and the tariffs and standard form PPAs to be attached to the settlement agreement as the forms that  |
| <ul><li>13</li><li>14</li><li>15</li><li>16</li><li>17</li><li>18</li></ul> |          | Yes. About nine months after PGE's filing, on December 17, 2012, PGE's attorney, David White, circulated an email to all parties to UM 1396, which provided PGE's proposed revisions to a settlement agreement and the tariffs and standard form PPAs to be attached to the settlement agreement as the forms that PGE proposed the parties would agree to recommend be approved by the   |
| 13<br>14<br>15<br>16<br>17<br>18  |          | Yes. About nine months after PGE's filing, on December 17, 2012, PGE's attorney, David White, circulated an email to all parties to UM 1396, which provided PGE's proposed revisions to a settlement agreement and the tariffs and standard form PPAs to be attached to the settlement agreement as the forms that PGE proposed the parties would agree to recommend be approved by the Commission. This email was a delayed follow-up correspondence to a settlement   |
| 13<br>14<br>15<br>16<br>17<br>18<br>19<br>20                                |          | Yes. About nine months after PGE's filing, on December 17, 2012, PGE's attorney, David White, circulated an email to all parties to UM 1396, which provided PGE's proposed revisions to a settlement agreement and the tariffs and standard form PPAs to be attached to the settlement agreement as the forms that PGE proposed the parties would agree to recommend be approved by the Commission. This email was a delayed follow-up correspondence to a settlement discussion held in July 2012. Mr. White's email and with only the attachment of |

<sup>&</sup>lt;sup>7</sup> UM 1396, PGE/105, Macfarlane/4, 6.

| 1   | Q. | Did PGE propose changes to the 15-year pricing provisions?  |
|---|----|---|
| 2   | A. | Yes. PGE's December 17, 2012 Standard Renewable PPA form contained  |
| 3   |    | material changes from its initially filed form in UM 1396 with regard to the 15-  |
| 4   |    | year pricing issue in Section 5. The changes were apparently made to make the   |
| 5   |    | Standard Renewable PPA consistent with the proposed Schedule 211 with respect   |
| 6   |    | to the 15-year pricing period. Once again, these changes were not presented by  |
| 7   |    | Mr. White in redline or legislative format or otherwise explained in his email.   |
| 8   |    | The key language is reproduced below with significant changes emphasized:   |
| 9<br>10<br>11<br>12<br>13<br>14<br>15<br>16<br>17<br>18<br>19<br>20 |    | PGE shall pay Seller the Contract Price for the Net Output delivered to PGE under this Agreement. For the period prior to the 15th anniversary of the Effective Date, the Contract Price is equal to the Fixed Price Non Variable or Integrated Resource as set forth in Schedule 211 and as adjusted pursuant to Section 5.2 below. For the period (if any) from the 15th anniversary of the Effective Date until the end of the Term, Seller has the price options listed below as adjusted pursuant to the terms of Section 5.2 below. The price for the price options listed below shall be established pursuant to the terms of Schedule 201.8 |
| 21  |    | consistent with the proposed Schedule 211 it had proposed, which stated the 15-   |
| 22  |    | year period began at the time of execution.   |
| 23<br>24<br>25  | Q. | Did the parties agree that the Standard Renewable PPA and Schedule 201 should be revised to include language stating that the 15-year fixed price period began at the time of execution?  |
| 26  | A. | No. On January 31, 2013, PUC Staff representative, Adam Bless, responded to   |
| 27  |    | David White's December 17, 2012 proposal with an email to all parties to UM   |
| 28  |    | 1396, which is contained with a portion of its attachments as Exhibit CREA-   |
| 29  |    | NIPPC-REC/204. Among other things, Staff identified issues in the non-  |

<sup>&</sup>lt;sup>8</sup> CREA-NIPPC-REC/203, Sanger/10-11 (emphasis added).

renewable PPAs and Schedule 201 that it considered to be substantive changes from existing Commission-approved tariffs, and stated that Staff would not agree to resolve those changes through the settlement process. Staff was willing to allow the renewable rates and contracts go into effect as proposed by PGE, apparently to avoid delay in making the rates available, and to have disputed aspects of them addressed for future contracts after completion of UM 1610.

One of the substantive changes Staff rejected was the newly proposed language regarding the 15-year period of fixed prices PGE had proposed to Schedule 201, which mirrored the language quoted above for PGE's proposal for Schedule 211 by stating the 15-year period of fixed prices applies for the 15 years "immediately following the effective date." In a comment bubble in response to this proposed change to Schedule 201, Staff explained: "SUBSTANTIVE. The topic of contract term and when the 15 year period starts is a UM 1610 issue, and was not part of Order No. 11-505 or the July settlement discussion meeting. Should be removed."

### Q. How was the issue resolved in UM 1396?

**A.** It was not resolved in UM 1396. Ultimately, the parties did not agree on language
18 to propose to the PUC for the PGE renewable rate tariff and Standard Renewable
19 PPAs or PGE's proposed revisions to Schedule 201 and its Standard Non20 Renewable PPAs, and the filings and drafts in UM 1396 never went into effect.

<sup>9</sup> UM 1396, PGE/105, Macfarlane/4, 6 (emphasis added).

<sup>10</sup> CREA-NIPPC-REC/204, Sanger/6.

| 1        |    | The resolution of resolved issues were rolled into a larger list of potential   |
|----------|----|---|
| 2        |    | issues for UM 1610. This had the practical effect of delaying availability of the   |
| 3        |    | renewable rates to prospective QFs for two additional years.  |
| 4<br>5   | Q. | In which proceeding was the issue of renewable avoided cost rates ultimately resolved?                                    |
| 6        | A. | In Phase I of UM 1610, which concluded with the issuance of PUC Order No. 14-   |
| 7        |    | 058. <sup>11</sup> The Commission made further policy changes affecting the renewable                                     |
| 8        |    | rates and contracts (but did not directly address the start date of the 15-year term)                                     |
| 9        |    | and directed that utilities, including PGE, make compliance filings with new  |
| 10       |    | tariffs and standard contracts.   |
| 11       | Q. | Did PGE make a compliance filing?   |
| 12       | A. | Yes. PGE made its initial UM 1610 compliance filing on May 30, 2014, which  |
| 13       |    | again included a new proposed Standard Renewable PPA and renewable rates and  |
| 14       |    | terms in the tariff. In this filing, PGE had eliminated Schedule 211 and proposed   |
| 15       |    | to use Schedule 201 for both the renewable and the non-renewable rates, and   |
| 16       |    | included newly proposed Standard Renewable PPAs. Workshops were scheduled   |
| 17       |    | to resolve any disputed issues in the filings by all three Oregon utilities.  |
| 18<br>19 | Q. | Did PGE use the UM 1396 Standard Renewable PPA and rate schedule as the starting point for its UM 1610 compliance filing? |
| 20       | A. | Yes. In response to inquiry during the PGE-specific workshop process, PGE's   |
| 21       |    | attorney, Richard George, stated in email dated July 22, 2014, that with respect to                                       |
| 22       |    | the Standard Renewable PPA, PGE had "used the 1396 filing as a base, which  |
| 23       |    | started with the non-renewable agreement and added terms to make it   |
|          | 11 | Re Commission Investigation Into Qualifying Facility Contracting and Pricing  |

Re Commission Investigation Into Qualifying Facility Contracting and Pricing, Docket No. UM 1610, Order No. 14-058 (Feb. 24, 2014).

1 renewable." This email is attached to my testimony as Exhibit CREA-NIPPC-

2 REC/205. According to Mr. George, therefore, PGE made revisions to the

proposals it made in UM 1396, and PGE's proposal from UM 1396 was the

4 starting point of PGE's revisions in UM 1610.

5

12

13

14

15

16

17

18

19

20

21

### Q. Did PGE provide the parties with copies of these documents?

Yes. PGE's proposed Standard Renewable PPA and Schedule 201 as filed by
PGE on May 30, 2014, are attached to my testimony and included in Exhibit

CREA-NIPPC-REC/206. This includes an email and some attachments thereto as
distributed on July 29, 2014, by PGE representative, Rob Macfarlane, to provide
parties a clean word version of PGE's compliance filing documents for purposes
of allowing parties to discuss and propose revisions to the documents.

### Q. Did PGE's compliance filing address the issue of when the 15-year fixed price term began?

A. Yes. As can be seen, PGE had withdrawn its proposal to use the new language in Schedule 201, which stated that the fixed rate period is for renewable and non-renewable rates began 15 years "immediately following the effective date." Instead, PGE used the language it had previously used in Schedule 201 (at page 10): "This option is available for a maximum term of 15 years." Additionally, PGE had removed from the proposed Standard Renewable PPA the unmarked revisions distributed previously by David White, which would have stated: "For the period prior to the 15th anniversary of the Effective Date, the Contract Price

<sup>12</sup> CREA-NIPPC-REC/205, Sanger/1.

<sup>&</sup>lt;sup>13</sup> UM 1396, PGE/105, Macfarlane/4, 6.

<sup>14</sup> CREA-NIPPC-REC/206, Sanger/11.

1 is equal to the Fixed Price Non Variable or Integrated Resource as set forth in 2 Schedule 211."15 3 Therefore, PGE abandoned its effort to have the 15-year-from-effective-4 date expressly stated in the tariff and the contract for renewable rates. 5 Q. Did this resolve all issues related to the start time for the 15-year fixed price 6 period? 7 Α. No. The date of the end of the 15-year fixed-price period had to be resolved in 8 the renewable contracts due to the need to resolve ownership of renewable energy 9 certificates sold with energy at the renewable fixed prices. In non-renewable 10 Standard PPAs issued since 2005, PGE had disclaimed ownership of the 11 Environmental Attributes in all years, but the new Standard Renewable PPAs 12 would need to assign PGE the ownership of the renewable energy certificates for 13 all years during which PGE was paying the renewable fixed prices, as ordered by 14 Order No. 11-505. Even though the precise start and finish of the 15-year fixed-15 price period had not been addressed in the 2014 order that PGE's filing was 16 required to comply, the end of the 15-year period was at issue because of the need 17 to address ownership of renewable energy certificates. Thus, it was necessary to 18 resolve the start and end date for the 15-year period because renewable energy 19 certificates would not be transferred to PGE after the end of the 15-year period. 20 Q. Did PGE's original proposed language become the language adopted in its 21 new Standard Renewable PPA? 22 No. The language that PGE proposed in the May 30, 2014 filing is included in Α. 23 Exhibit CREA-NIPPC-REC/206. PGE's proposed Standard Renewable PPA

<sup>&</sup>lt;sup>15</sup> CREA-NIPPC-REC/203, Sanger/10 (emphasis added).

provided in Section 4.5, in pertinent part, that: "Commencing on the Effective

Date and continuing through the Term of the Agreement, Seller shall provide and

PGE shall acquire the Environmental Attributes for the Contract Years specified in the Schedule." In turn, PGE's proposed Schedule 201 stated, at page 10:

A Renewable QF choosing the Renewable Fixed Price Option must cede all Renewable Energy Certificates and all other Environmental Attributes generated by the facility to the Company during the deficiency period starting in 2020 . . . . Sellers with contracts 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.<sup>17</sup>

Thus, PGE's May 30, 2014 filing suggested that the renewable QF would convey the Environmental Attributes to PGE for all years after 2020, including the last five years of a 20-year contract.

### Q. Why wasn't this language adopted?

Because the parties agreed to use language that was consistent with a separate 15 A. 16 agreement reached with PacifiCorp in parallel UM 1610 workshops at the time 17 regarding its renewable rates and contracts. PacifiCorp and the parties agreed that 18 the renewable QF would retain ownership of Environmental Attributes after the 19 pricing switched from the renewable fixed pricing to the market index pricing. 20 The PacifiCorp stipulation executed on August 11, 2014 stated: "The Stipulating 21 Parties agree that renewable PPAs signed during Phase II will include language 22 assigning ownership of all Environmental Attributes to the QF during the last five years of a 20-year contract when prices are at market." PacifiCorp reserved the 23

5

6

7

8

9

10

11

12

13

14

<sup>16</sup> CREA-NIPPC-REC/206, Sanger/30.

<sup>17</sup> *Id.* at 11.

Re Commission Investigation Into Qualifying Facility Contracting and Pricing, Docket No. UM 1610, Advice No. 14-007 at 4-5 (Aug. 11, 2014) (also provided

1 right to challenge this arrangement in Phase II of UM 1610 and to request that the 2 Commission adopt a policy for future contracts that the utility retain the 3 renewable energy certificates even during the last five years where it pays only 4 the market index prices (an argument with which PacifiCorp was ultimately 5 successful with in a PUC order issued and finally implemented over two years 6 later). 7 Q. So, PGE agreed to revise its Standard Renewable PPA and Schedule 201 to be consistent with the PacifiCorp agreement? 8 9 A. Yes. During workshops PGE agreed it would use the same policy as agreed to by 10 PacifiCorp on this point for contracts executed pending the outcome of Phase II of 11 UM 1610. PGE's proposed Schedule 201 was first edited on this point by the 12 Oregon Department of Energy ("ODOE"), which is reflected in an email 13 distributed by Kacia Brockman of ODOE, dated July 31, 2014, and is attached to 14 my testimony as Exhibit CREA-NIPPC-REC/207. Her email states: "Attached is 15 a redline version of PGE's filed Schedule 201 with the comments and suggested edits that I described in our meeting on July 29." Among other edits, the 16 17 attached Schedule 201 contained the following edit at page 10, with ODOE edit in 18 underline: "Sellers with contracts exceeding 15 years will receive pricing equal to 19 the Mid-C Index Price and will retain Environmental Attributes generated by the facility for all years up to five in excess of the initial 15."<sup>20</sup> In a comment bubble 20 21 on the revised draft, Ms. Brockman of ODOE explained: "This clarifies that RECs

in the prior Adams Declaration In Support Of the NewSun Parties' Motion for Summary Disposition at Exhibit E and discussed in the Motion for Summary Disposition).

<sup>19</sup> CREA-NIPPC-REC/207, Sanger/1.

<sup>20</sup> *Id.* at 14.

1 are not ceded after the Seller stops receiving deficiency period avoided cost 2 rates."<sup>21</sup> In other words, Ms. Brockman's edits was intended to ensure that the 3 date of change in REC ownership would be the date PGE stops paying the fixed 4 renewable prices.

#### Q. Did PGE agree to this edit?

5

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

6 A. It appears so. PGE indicated it agreed to accept this edit to Schedule 201 in its 7 next exchanged drafts on August 20, 2014, which are attached to my testimony as 8 Exhibit CREA-NIPPC-REC/208. The Schedule 201 was attached to an email 9 from PGE attorney Richard George's administrative assistant, Barbara Parr, 10 which also established the date of the next workshop on September 3, 2014. 11 PGE's August 20, 2014 drafts reflected very minor edits to Section 4.6 of the 12 Standard Renewable PPA to distinguish "RPS Attributes" conveyed to PGE from 13 the broader term "Environmental Attributes." It provided (in clean format):

> Commencing on the Effective Date and continuing through the Term of this Agreement, Seller shall provide and PGE shall acquire the RPS Attributes for the Contract Years as specified in 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 RECs") 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 RECs, and PGE shall not report under such program that such Seller-Retained RECs 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.<sup>22</sup>

<sup>21</sup> Id.

<sup>22</sup> CREA-NIPPC-REC/208, Sanger/39.

#### Q. Did the parties propose additional changes?

2 Α. Yes. September 2, 2014, the CREA's attorney, Greg Adams, distributed an email 3 that proposed additional edits to further clarify the precise time when the 15-year 4 period began for purposes of determining the date of change in REC ownership 5 and the end of payment of the fixed renewable prices. This email and one of the 6 representative Standard Renewable PPA drafts is attached to my testimony as 7 Exhibit CREA-NIPPC-REC/209. It provided in Section 4.6 of the Standard 8 Renewable PPA, with CREA's proposed edits in underline and strikethrough:

> During the Renewable Resource Deficiency Period as specified in the Schedule Commencing on the Effective Date and continuing through 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 retains ownership of all other Environmental Attributes (if any). Seller retains ownership of all Environmental Attributes during the Renewable Resource Sufficiency Period as specified in the Schedule and any period within the Term of this Agreement after completion of the first fifteen (15) years after the Commercial Operation Date.<sup>23</sup>

18 19 20

21

22

23

9

10

11

12

13

14

15 16

17

1

In the comment bubble for these changes, CREA explained: "These edits are consistent with the PacifiCorp contract. QFs will need this clarity in the contract if they are going to be able to use the attributes that they retain."<sup>24</sup> As noted earlier, the PacifiCorp agreement was that for PPAs executed during Phase II of UM

<sup>23</sup> CREA-NIPPC-REC/209, Sanger/45. Not all edits in the Exhibit CREA-NIPPC-REC/209 can be correctly viewed because some were apparently lost in the conversion process of document forms. This is likely because PGE's documents upon which CREA was required to make edits were distributed in pdf format, not word, and the conversion from pdf to word with track changes, etc., was imperfect. For example, the portion of the last sentence in Section 4.6 after "1992" does not appear in CREA-NIPPC-REC/209. In any case, CREA-NIPPC-REC/209 accurately reflects CREA's edits to the first and second sentence of Section 4.6.

<sup>24</sup> 

| 1                       |    | 1610, the ownership of the RPS Attributes would shift to QF at the same time the  |
|-------------------------|----|---|
| 2                       |    | utility stopped paying the renewable fixed prices. In other words, for the last five  |
| 3                       |    | years of the contract when the QF is paid the market index prices, the QF owned   |
| 4                       |    | all Environmental Attributes. The intention of CREA's change was that the last  |
| 5                       |    | five years of the contract would be from commercial operations and not contract   |
| 6                       |    | execution.  |
| 7<br>8<br>9<br>10<br>11 | Q. | Did PGE agree to the collective edits of ODOE and CREA that were intended to unambiguously clarify that the ownership of the RPS Attributes would shift to QF at the same time the utility stopped paying the renewable fixed prices and that date would be 15 years after the Commercial Operation Date? |
| 12                      | A. | Yes. This is reflected in PGE's email from Barbara Parr and signed by PGE   |
| 13                      |    | attorney Richard George, dated October 3, 2014 to all parties to UM 1610 stating  |
| 14                      |    | it provided PPAs "representative of substantially all [of] the changes previously   |
| 15                      |    | discussed in the September 3 workshop and other prior workshops."25 The   |
| 16                      |    | attached PPAs and Schedule 201 included the collective ODOE and CREA edits  |
| 17                      |    | discussed above. This email and representative attachments are attached to my   |
| 18                      |    | testimony as Exhibit CREA-NIPPC-REC/210.  |
| 19                      | Q. | Did PGE make any edits to ODOE's proposed language revisions?   |
| 20                      | A. | No. The final Schedule 201 distributed by PGE in Exhibit CREA-NIPPC-  |
| 21                      |    | REC/210 made no edits to ODOE's requested language and stated on page 10:   |
| 22                      |    | "Sellers with PPAs exceeding 15 years will receive pricing equal to the Mid-C   |

<sup>&</sup>lt;sup>25</sup> CREA-NIPPC-REC/210, Sanger/1.

1 Index Price and will retain Environmental Attributes generated by the facility for 2 all years up to five in excess of the initial 15."<sup>26</sup> 3 Q. Did PGE make any edits to CREA's proposed language revisions? 4 A. PGE incorporated CREA's revisions with only minor edits. The final Section 4.6 5 of the Standard Renewable PPA distributed by PGE in Exhibit CREA-NIPPC-6 REC/210 made minor edits to CREA's requested language and stated (with edits 7 in strikethrough and underline shown on PGE's document to its initially filed 8 version from May 30, 2014): 9 During the Renewable Resource Deficiency Period Commencing 10 on the Effective Date and continuing through the Term of this Agreement, 11 Seller shall provide and PGE shall acquire the Environmental RPS 12 Attributes for the Contract Years as specified in the Schedule and Seller 13 shall retain ownership of all other Environmental Attributes (if any). 14 During the Renewable Resource Sufficiency Period, and any period within 15 the Term of this Agreement after completion of the first fifteen (15) years 16 after the Commercial Operation Date, Seller shall retain all Environmental 17 Attributes in accordance with the Schedule. The Contract Price includes 18 full payment for the Net Output and any Environmental RPS Attributes 19 transferred to PGE under this Agreement. With respect to Environmental 20 Attributes not transferred to PGE under this Agreement ("Seller-Retained 21 RECs Environmental Attributes") Seller may report under §1605(b) of the 22 Energy Policy Act of 1992 or under any applicable program as belonging 23 to Seller any of the Seller-Retained RECs-Environmental Attributes, and 24 PGE shall not report under such program that such Seller-Retained RECs 25 Environmental Attributes belong to it. With respect to Environmental RPS Attributes transferred to PGE under this Agreement ("Transferred RECs"), 26 27 PGE may report under §1605(b) of the Energy Policy Act of 1992 or 28 under any applicable program as belonging to it any of the Transferred 29 RECs, and Seller shall not report under such program that such 30 Transferred RECs belong to it.<sup>27</sup>

In the comment bubble, PGE stated: "Incorporates CREA's suggested changes." <sup>28</sup>

<sup>26</sup> *Id.* at 16.

-

31 32

<sup>27</sup> *Id.* at 45.

<sup>&</sup>lt;sup>28</sup> *Id*.

### Q. Therefore, PGE agreed to ODOE and CREA's changes?

2 A. Yes. PGE agreed to revisions where the intent of those revisions expressed to 3 PGE by ODOE was that the RECs are not ceded by the QF after the PGE stops 4 paying fixed renewable rates and an express statement in Section 4.6 that the QF 5 stops ceding the RECs to PGE 15 years after the Commercial Operation Date. 6 PGE also agreed to CREA's revisions that during the last five years of a twenty 7 year contract the Seller shall retain all environmental attributes and that "[d]uring 8 the Renewable Resource Deficiency Period . . . [the] Seller shall retain ownership 9 of all other Environmental Attributes . . . [in] any period within the Term of this 10 Agreement after completion of the first fifteen (15) years after the Commercial Operation Date."29 11

### Q. Did PGE's UM 1610 compliance filings become effective?

13 Yes. Under those circumstances, CREA, ODOE, PUC Staff, Renewable Energy Α. 14 Coalition, and the other stakeholders in the PGE-specific workshops agreed not 15 object to PGE's revised compliance filing, and PGE filed the revised compliance 16 filing containing Schedule 201 and the Standard Renewable PPA on November 17 10, 2014, which is contained in the Adams Declaration In Support Of Motion for 18 Summary Disposition, Exhibit B. The filing contained the final revisions 19 discussed above related to the date of change of ownership of the RPS Attributes 20 and the change from payment at renewable fixed prices to market index prices, 21 which were later contained in the Renewable Standard PPAs executed by the 22 NewSun Parties.

1

12

<sup>29</sup> 

- 1 Q. Does this conclude your testimony?
- 2 A Yes

# BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

### UM 1931

| PORTLAND GENERAL ELECTRIC COMPANY, | )      |
|------------------------------------|--------|
| Complainant,                       | )      |
| v.                                 | )      |
| ALFALFA SOLAR I LLC, et al.        | )      |
| Defendants.                        | )<br>) |

### **EXHIBIT CREA-NIPPC-REC/201**

**UM 1396 PGE SCHEDULE 211** 

**December 28, 2018** 

## SCHEDULE 211 QUALIFYING FACILITY 10 MW or LESS RENEWABLE AVOIDED COST POWER PURCHASE INFORMATION

#### **PURPOSE**

To provide information about Renewable Avoided Costs, Standard Renewable Power Purchase Agreements (PPA) and Negotiated Renewable PPAs, and power purchase prices 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 eligible electricity and environmental attributes, including renewable energy certificates (REC) to the Company in the State of Oregon (Seller).

#### **APPLICABLE**

For power purchased from small power production or cogeneration facilities that meet the definition of QF in 18 Code of Federal Regulations (CFR) Section 292, meet the eligibility requirements described herein and make energy available for Company purchase and deliver to the Company's system pursuant to a Standard Renewable PPA.

### **ESTABLISHING CREDITWORTHINESS**

The Seller must establish creditworthiness prior to service under this schedule. For a Standard Renewable 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 as deemed sufficient by the Company as set out in the applicable Standard Renewable 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.

#### **RENEWABLE PPA**

In accordance with terms set out in this schedule and the Commission's Rules as applicable, the Company will purchase Net Output from Seller. Net Output shall mean the Energy no greater than the Nameplate Rating expressed in kWhs produced by the Facility, less station and other onsite use and less transformation and transmission losses. Net Output does not include any environmental attributes, imbalance power, or power from an integrating entity.

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

CREA-NIPPC-REC/201 Sanger/2 UM\_\_\_/ PGE / Exhibit 102 Macfarlane Page 2

### Portland General Electric Company Effective

### **SCHEDULE 211 (Continued)**

RENEWABLE PPA (Continued)

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

Any Seller may elect to negotiate a Renewable 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 212. Negotiations for power purchase pricing may use the applicable filed Renewable Avoided Costs in effect at that time as a starting point for negotiations. Avoided Costs for Negotiated PPAs may be updated and will not be final until execution of a Renewable PPA.

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

A Seller choosing a Standard Renewable PPA will complete all informational and price option selection requirements in the applicable Standard Renewable PPA and submit the executed Agreement to the Company prior to service under this schedule. The Standard Renewable PPA is available at <a href="https://www.portlandgeneral.com">www.portlandgeneral.com</a>. The available Standard Renewable PPAs are: Standard Renewable In System Non-Variable Power Purchase Agreement, Standard Renewable Off System Non-Variable Power Purchase Agreement, Standard Renewable In System Variable Resource Power Purchase Agreement, and Standard Renewable Off System Integrated Variable Resource Power Purchase Agreement. The Standard PPAs applicable to Variable Resources are available only to QFs utilizing wind or solar as the primary motive force. Standard Renewable PPAs are not available for QFs with cogeneration facilities or QFs utilizing hydro as the primary motive force.

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

In order to execute a Standard Renewable PPA the Seller must complete all of the general project information requested in the applicable Standard Renewable PPA.

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

The Seller may request in writing that the Company prepare a final draft Standard Renewable 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 Renewable PPA.

CREA-NIPPC-REC/201 Sanger/3 UM\_\_\_/ PGE / Exhibit 102 Macfarlane Page 3

### Portland General Electric Company Effective

### **SCHEDULE 211 (Continued)**

GUIDELINES FOR 10 MW OR LESS FACILITIES (Continued)

When both parties are in full agreement as to all terms and conditions of the draft Standard Renewable 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, a completely 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 Renewable PPA has been executed by both parties.

#### **OFF SYSTEM RENEWABLE PPA**

A Seller with a facility that interconnects with an electric system other than the Company's electric system may enter into a Renewable PPA with the Company after following the applicable off-system Standard or Negotiated PPA guidelines set forth above and making the arrangements necessary for transmission of power to the Company's system. Off System PPAs are available for non-variable resources and variable resources for which the QF provides or pays a third party to provide integration to the Company's service territory. PGE is not responsible for Seller's transmission costs, including ancillary services such as imbalance service or integration costs provided by Seller or a third party.

#### **BASIS FOR POWER PURCHASE PRICE**

### RENEWABLE AVOIDED COST SUMMARY

The power purchase rates are based on the Company's Renewable Avoided Costs. 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."

The Renewable Avoided Costs as listed in Tables 1, 2, 3, and 4 below include monthly Onand Off-Peak prices.

#### **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.

CREA-NIPPC-REC/201 Sanger/4 UM\_\_\_/ PGE / Exhibit 102 Macfarlane Page 4

### Portland General Electric Company Effective

### **SCHEDULE 211 (Continued)**

### PRICING FOR STANDARD RENEWABLE PPA

Renewable Avoided Costs are based on forward market price estimates through December 2014, the period of time during which the Company's Renewable Avoided Costs are associated with incremental purchases of Energy and capacity from the market. Avoided integration costs are deducted from the prices for in system variable resources. For the period 2015 through 2031, the Renewable Avoided Costs reflect the fully allocated costs of a wind plant identified in the Company's Updated Integrated Resource Plan (IRP) including capital costs and wheeling. Integration is reflected in the value for non-variable resources and off system variable resources where the the QF must provide or pays a third party to provide integration to the Company's service territory.

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 Renewable PPA up to the Net Output of the QF in any hour.

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

The pricing options include two Fixed Rate Options.

### 1) Renewable Fixed Price for an in System Variable Resource

The Renewable Fixed Price for an In System Variable Resource is based on Renewable Avoided Costs.

This option is available for a maximum period of 15 years immediately following the effective date of the Standard Renewable PPA. Sellers with a PPA term exceeding 15 years will make a one time election at execution to select a Market-Based Option from Schedule 201 for all years up to five after the initial 15 years immediately following the effective date of the Standard Renewable PPA. Under the Renewable Fixed Price for a Variable Resource without Integration, prices will be as established at the time the Standard Renewable PPA is executed and will be equal to the Renewable Avoided Costs in Tables 1 and 2 effective at execution for a period of up to 15 years immediately following the effective date of the Standard Renewable PPA.

### **SCHEDULE 211 (Continued)**

### PRICING FOR STANDARD RENEWABLE PPA (Continued)

| TABLE 1   |                         |        |        |        |        |        |        |        |        |        |        |        |
|---|-------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|   | Renewable Avoided Costs |        |        |        |        |        |        |        |        |        |        |        |
| Fixed Price Option for an In System Variable Resource |                         |        |        |        |        |        |        |        |        |        |        |        |
| On-Peak Forecast (\$/MWH)                             |                         |        |        |        |        |        |        |        |        |        |        |        |
|   |                         |        |        |        |        |        |        |        |        |        |        |        |
| Year  | Jan                     | Feb    | Mar    | Apr    | May    | Jun    | Jul    | Aug    | Sep    | Oct    | Nov    | Dec    |
| 2012  | 24.21                   | 21.92  | 19.88  | 19.37  | 16.32  | 13.01  | 25.74  | 29.56  | 27.79  | 26.00  | 28.29  | 31.86  |
| 2013  | 31.18                   | 30.17  | 28.13  | 24.56  | 21.25  | 18.70  | 35.52  | 39.85  | 37.82  | 34.24  | 34.75  | 38.57  |
| 2014  | 33.88                   | 32.78  | 30.59  | 26.76  | 23.19  | 20.46  | 38.54  | 43.20  | 41.02  | 37.17  | 37.71  | 41.83  |
| 2015  | 83.87                   | 84.24  | 84.43  | 85.73  | 92.91  | 96.74  | 89.67  | 88.81  | 85.48  | 84.10  | 85.03  | 84.09  |
| 2016  | 86.48                   | 86.47  | 85.78  | 86.48  | 91.60  | 92.55  | 90.39  | 89.15  | 86.95  | 86.73  | 86.71  | 85.58  |
| 2017  | 88.44                   | 88.50  | 87.32  | 87.63  | 90.45  | 90.36  | 90.48  | 90.03  | 88.28  | 88.73  | 88.55  | 87.29  |
| 2018  | 89.74                   | 90.40  | 89.07  | 89.76  | 92.13  | 91.20  | 92.45  | 92.05  | 90.47  | 90.02  | 89.80  | 89.19  |
| 2019  | 91.60                   | 92.06  | 90.94  | 91.09  | 94.39  | 93.92  | 93.84  | 93.53  | 92.65  | 91.60  | 91.51  | 91.22  |
| 2020  | 93.62                   | 93.60  | 92.70  | 93.24  | 97.01  | 95.95  | 95.58  | 95.44  | 93.92  | 92.78  | 93.77  | 92.57  |
| 2021  | 95.39                   | 95.66  | 93.89  | 95.15  | 98.49  | 97.60  | 96.93  | 97.53  | 95.75  | 94.57  | 96.10  | 94.54  |
| 2022  | 97.45                   | 97.30  | 95.07  | 97.11  | 100.59 | 99.39  | 98.86  | 98.82  | 97.53  | 96.35  | 98.02  | 96.33  |
| 2023  | 99.63                   | 99.12  | 96.80  | 99.23  | 102.10 | 101.24 | 100.83 | 100.40 | 99.42  | 98.06  | 100.07 | 98.77  |
| 2024  | 101.12                  | 101.30 | 99.00  | 101.37 | 104.56 | 103.37 | 103.24 | 102.93 | 102.71 | 99.91  | 101.09 | 101.24 |
| 2025  | 103.08                  | 103.46 | 100.90 | 103.65 | 107.68 | 106.30 | 105.19 | 105.34 | 104.38 | 101.76 | 103.12 | 102.71 |
| 2026  | 105.82                  | 105.43 | 103.73 | 106.28 | 111.48 | 107.41 | 107.42 | 107.89 | 107.56 | 103.98 | 106.12 | 105.02 |
| 2027  | 107.80                  | 107.29 | 105.36 | 107.84 | 114.81 | 109.45 | 109.02 | 110.70 | 109.35 | 106.05 | 107.56 | 107.00 |
| 2028  | 109.98                  | 108.76 | 106.39 | 110.32 | 116.80 | 111.12 | 111.95 | 111.96 | 110.94 | 108.59 | 109.84 | 108.93 |
| 2029  | 111.96                  | 111.69 | 108.59 | 112.53 | 124.19 | 114.22 | 114.30 | 114.31 | 114.36 | 110.45 | 111.39 | 111.26 |
| 2030  | 114.25                  | 113.91 | 111.26 | 114.62 | 127.63 | 118.35 | 115.84 | 115.70 | 117.31 | 112.51 | 113.16 | 113.22 |
| 2031  | 116.21                  | 115.63 | 113.74 | 117.63 | 129.93 | 122.00 | 117.86 | 118.95 | 119.20 | 114.76 | 116.04 | 115.54 |

### **SCHEDULE 211 (Continued)**

### PRICING FOR STANDARD RENEWABLE PPA (Continued)

| TABLE 2   |                         |       |       |       |       |       |       |       |       |       |       |       |  |
|---|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
|   | Renewable Avoided Costs |       |       |       |       |       |       |       |       |       |       |       |  |
| Fixed Price Option for an In System Variable Resource |                         |       |       |       |       |       |       |       |       |       |       |       |  |
| Off-Peak Forecast (\$/MWH)                            |                         |       |       |       |       |       |       |       |       |       |       |       |  |
|   |                         |       |       |       |       |       |       |       |       |       |       |       |  |
| Year  | Jan                     | Feb   | Mar   | Apr   | May   | Jun   | Jul   | Aug   | Sep   | Oct   | Nov   | Dec   |  |
| 2012  | 20.90                   | 18.10 | 15.81 | 13.51 | 5.36  | 0.00  | 13.51 | 18.86 | 20.91 | 21.92 | 23.70 | 26.51 |  |
| 2013  | 25.84                   | 24.82 | 22.27 | 16.66 | 7.49  | 0.36  | 19.98 | 25.84 | 28.39 | 28.13 | 27.87 | 30.68 |  |
| 2014  | 26.79                   | 25.74 | 23.10 | 17.30 | 7.82  | 0.44  | 20.74 | 26.79 | 29.44 | 29.16 | 28.90 | 31.80 |  |
| 2015  | 68.65                   | 68.48 | 68.69 | 66.21 | 57.93 | 51.15 | 60.63 | 63.14 | 66.56 | 68.34 | 68.07 | 68.35 |  |
| 2016  | 69.79                   | 69.19 | 69.90 | 69.06 | 63.29 | 60.75 | 64.83 | 65.23 | 68.41 | 69.48 | 68.73 | 70.18 |  |
| 2017  | 70.61                   | 70.01 | 71.24 | 71.76 | 66.91 | 67.20 | 68.02 | 67.49 | 70.04 | 70.24 | 69.67 | 72.07 |  |
| 2018  | 71.42                   | 70.94 | 72.36 | 72.44 | 68.12 | 69.55 | 68.88 | 68.23 | 71.55 | 71.05 | 71.47 | 73.02 |  |
| 2019  | 72.98                   | 72.77 | 74.74 | 73.81 | 69.12 | 71.14 | 69.89 | 70.32 | 72.72 | 72.98 | 73.23 | 74.38 |  |
| 2020  | 73.87                   | 74.18 | 76.00 | 74.53 | 70.53 | 70.81 | 71.16 | 72.53 | 73.59 | 75.03 | 74.80 | 75.32 |  |
| 2021  | 76.16                   | 75.24 | 77.24 | 75.62 | 72.22 | 72.27 | 73.04 | 73.44 | 74.80 | 77.19 | 74.34 | 76.34 |  |
| 2022  | 77.17                   | 76.78 | 79.42 | 76.74 | 73.18 | 73.61 | 75.38 | 74.23 | 76.16 | 78.56 | 75.48 | 77.68 |  |
| 2023  | 78.09                   | 78.15 | 80.90 | 78.76 | 73.57 | 74.94 | 76.57 | 75.92 | 77.43 | 80.09 | 76.55 | 79.18 |  |
| 2024  | 78.88                   | 78.95 | 82.66 | 78.70 | 74.11 | 77.33 | 75.95 | 76.38 | 78.14 | 80.55 | 79.08 | 79.82 |  |
| 2025  | 80.19                   | 80.17 | 84.07 | 79.57 | 73.83 | 77.46 | 77.28 | 78.44 | 78.57 | 82.03 | 81.43 | 80.71 |  |
| 2026  | 80.51                   | 81.57 | 84.39 | 80.05 | 74.56 | 78.49 | 78.29 | 79.11 | 78.30 | 83.04 | 81.56 | 81.61 |  |
| 2027  | 83.19                   | 83.17 | 85.31 | 82.06 | 74.30 | 79.86 | 80.25 | 79.52 | 80.00 | 85.42 | 82.45 | 83.04 |  |
| 2028  | 84.48                   | 85.20 | 88.14 | 84.27 | 73.74 | 81.80 | 81.99 | 80.43 | 82.05 | 86.25 | 83.54 | 85.81 |  |
| 2029  | 84.76                   | 85.72 | 89.43 | 85.59 | 67.84 | 81.86 | 83.12 | 81.52 | 83.30 | 86.86 | 85.73 | 86.97 |  |
| 2030  | 86.00                   | 87.06 | 91.18 | 85.68 | 67.48 | 82.48 | 83.80 | 83.99 | 83.77 | 88.42 | 87.68 | 88.69 |  |
| 2031  | 87.79                   | 89.17 | 92.31 | 86.03 | 68.79 | 82.15 | 85.50 | 85.69 | 83.89 | 89.80 | 89.60 | 88.72 |  |

Under the Fixed Price Option, the Company will pay Seller the Off-Peak Avoided Cost pursuant to Table 2 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; and (d) Net Output delivered in the Off-Peak Period. The Company will pay the Seller the On-Peak Avoided Cost pursuant to Table 1 for all other delivered Net Output. (See the Standard Renewable PPA for defined terms.)

### 2) Renewable Fixed Price for a Non-variable Resource or an Off System Integrated Variable Resource

The Renewable Fixed Price for a Firm Resource or an Integrated Variable Resource is based on Renewable Avoided Costs plus avoided integration costs. This option is available for non-variable resources and variable resources for which the QF provides or pays a third party to provide integration to the Company's service territory

### **SCHEDULE 211 (Continued)**

### PRICING FOR STANDARD RENEWABLE PPA (Continued)

This option is available for a maximum period of 15 years immediately following the effective date of the Standard Renewable PPA. Sellers with a PPA term exceeding 15 years will make a one time election at execution to select a Market-Based Option from Schedule 201 for all years up to five in excess of the initial 15 years immediately following the effective date of the Standard Renewable PPA. Under the Renewable Fixed Price for a Firm Resource or an Integrated Variable Resource, prices will be as established at the time the Standard Renewable PPA is executed and will be equal to the Renewable Avoided Costs in Tables 3 and 4 effective at execution for a period of up to 15 years immediately following the effective date of the Standard Renewable PPA.

|                           | TABLE 3  |        |        |        |        |        |        |        |        |        |        |        |  |
|---------------------------|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--|
|                           | Renewable Avoided Costs  |        |        |        |        |        |        |        |        |        |        |        |  |
|                           | Fixed Price Option for a Non-variable Resource or an Off System Integrated Variable Resource |        |        |        |        |        |        |        |        |        |        |        |  |
| On-Peak Forecast (\$/MWH) |  |        |        |        |        |        |        |        |        |        |        |        |  |
|                           |  |        |        |        |        |        |        |        |        |        |        |        |  |
| Year                      | Jan  | Feb    | Mar    | Apr    | May    | Jun    | Jul    | Aug    | Sep    | Oct    | Nov    | Dec    |  |
| 2012                      | 33.04  | 30.74  | 28.71  | 28.20  | 25.14  | 21.83  | 34.56  | 38.39  | 36.61  | 34.82  | 37.11  | 40.68  |  |
| 2013                      | 40.17  | 39.15  | 37.11  | 33.55  | 30.23  | 27.69  | 44.50  | 48.83  | 46.80  | 43.23  | 43.74  | 47.56  |  |
| 2014                      | 43.03  | 41.93  | 39.74  | 35.91  | 32.34  | 29.61  | 47.69  | 52.35  | 50.17  | 46.32  | 46.86  | 50.98  |  |
| 2015                      | 90.10  | 90.50  | 90.70  | 92.10  | 99.81  | 103.92 | 96.32  | 95.40  | 91.82  | 90.34  | 91.34  | 90.34  |  |
| 2016                      | 92.89  | 92.87  | 92.13  | 92.88  | 98.38  | 99.40  | 97.08  | 95.75  | 93.39  | 93.15  | 93.13  | 91.92  |  |
| 2017                      | 94.98  | 95.06  | 93.78  | 94.12  | 97.14  | 97.05  | 97.18  | 96.70  | 94.81  | 95.30  | 95.10  | 93.75  |  |
| 2018                      | 96.39  | 97.09  | 95.66  | 96.40  | 98.95  | 97.95  | 99.29  | 98.86  | 97.16  | 96.68  | 96.45  | 95.79  |  |
| 2019                      | 98.37  | 98.86  | 97.65  | 97.82  | 101.36 | 100.85 | 100.77 | 100.43 | 99.49  | 98.37  | 98.27  | 97.96  |  |
| 2020                      | 100.53   | 100.51 | 99.55  | 100.12 | 104.17 | 103.04 | 102.64 | 102.49 | 100.86 | 99.63  | 100.69 | 99.41  |  |
| 2021                      | 102.43   | 102.72 | 100.82 | 102.18 | 105.76 | 104.81 | 104.08 | 104.73 | 102.82 | 101.55 | 103.19 | 101.52 |  |
| 2022                      | 104.64   | 104.48 | 102.09 | 104.28 | 108.02 | 106.73 | 106.16 | 106.11 | 104.73 | 103.47 | 105.26 | 103.44 |  |
| 2023                      | 106.98   | 106.44 | 103.95 | 106.56 | 109.64 | 108.71 | 108.28 | 107.81 | 106.76 | 105.30 | 107.45 | 106.06 |  |
| 2024                      | 108.59   | 108.77 | 106.31 | 108.85 | 112.28 | 111.00 | 110.86 | 110.53 | 110.30 | 107.29 | 108.55 | 108.71 |  |
| 2025                      | 110.69   | 111.10 | 108.35 | 111.30 | 115.63 | 114.15 | 112.95 | 113.12 | 112.09 | 109.27 | 110.73 | 110.29 |  |
| 2026                      | 113.63   | 113.21 | 111.38 | 114.12 | 119.71 | 115.34 | 115.35 | 115.85 | 115.50 | 111.66 | 113.95 | 112.77 |  |
| 2027                      | 115.76   | 115.22 | 113.14 | 115.80 | 123.29 | 117.53 | 117.07 | 118.87 | 117.42 | 113.88 | 115.50 | 114.90 |  |
| 2028                      | 118.10   | 116.79 | 114.25 | 118.46 | 125.42 | 119.32 | 120.21 | 120.23 | 119.13 | 116.60 | 117.95 | 116.98 |  |
| 2029                      | 120.23   | 119.93 | 116.60 | 120.83 | 133.35 | 122.65 | 122.74 | 122.75 | 122.80 | 118.60 | 119.62 | 119.48 |  |
| 2030                      | 122.69   | 122.32 | 119.47 | 123.09 | 137.05 | 127.08 | 124.39 | 124.24 | 125.97 | 120.81 | 121.52 | 121.57 |  |
| 2031                      | 124.79   | 124.17 | 122.13 | 126.32 | 139.52 | 131.01 | 126.56 | 127.74 | 128.00 | 123.23 | 124.61 | 124.07 |  |

### **SCHEDULE 211 (Continued)**

### PRICING FOR STANDARD RENEWABLE PPA (Continued)

|                            |  |       |       |       |       | TABLE 4 |       |       |       |       |       |       |
|----------------------------|--|-------|-------|-------|-------|---------|-------|-------|-------|-------|-------|-------|
|                            | Renewable Avoided Costs  |       |       |       |       |         |       |       |       |       |       |       |
|                            | Fixed Price Option for a Non-variable Resource or an Off System Integrated Variable Resource |       |       |       |       |         |       |       |       |       |       |       |
| Off-Peak Forecast (\$/MWH) |  |       |       |       |       |         |       |       |       |       |       |       |
|                            | -  |       |       | _     |       |         |       |       | _     | _     |       |       |
| Year                       | Jan  | Feb   | Mar   | Apr   | May   | Jun     | Jul   | Aug   | Sep   | Oct   | Nov   | Dec   |
| 2012                       | 29.72  | 26.92 | 24.63 | 22.34 | 14.18 | 6.80    | 22.34 | 27.69 | 29.73 | 30.74 | 32.53 | 35.33 |
| 2013                       | 34.82  | 33.80 | 31.25 | 25.65 | 16.48 | 9.34    | 28.96 | 34.82 | 37.38 | 37.11 | 36.86 | 39.66 |
| 2014                       | 35.94  | 34.89 | 32.25 | 26.45 | 16.97 | 9.59    | 29.89 | 35.94 | 38.59 | 38.31 | 38.05 | 40.95 |
| 2015                       | 73.74  | 73.57 | 73.78 | 71.12 | 62.23 | 54.94   | 65.13 | 67.82 | 71.50 | 73.42 | 73.12 | 73.42 |
| 2016                       | 74.95  | 74.31 | 75.08 | 74.17 | 67.98 | 65.25   | 69.63 | 70.06 | 73.47 | 74.62 | 73.82 | 75.37 |
| 2017                       | 75.84  | 75.19 | 76.52 | 77.07 | 71.86 | 72.17   | 73.06 | 72.49 | 75.23 | 75.44 | 74.83 | 77.41 |
| 2018                       | 76.71  | 76.19 | 77.72 | 77.80 | 73.17 | 74.70   | 73.98 | 73.28 | 76.85 | 76.31 | 76.76 | 78.43 |
| 2019                       | 78.37  | 78.15 | 80.25 | 79.26 | 74.23 | 76.40   | 75.05 | 75.51 | 78.09 | 78.37 | 78.64 | 79.87 |
| 2020                       | 79.33  | 79.65 | 81.61 | 80.03 | 75.74 | 76.04   | 76.41 | 77.88 | 79.02 | 80.57 | 80.32 | 80.88 |
| 2021                       | 81.78  | 80.79 | 82.94 | 81.21 | 77.55 | 77.61   | 78.43 | 78.86 | 80.33 | 82.89 | 79.82 | 81.98 |
| 2022                       | 82.87  | 82.45 | 85.28 | 82.40 | 78.58 | 79.04   | 80.94 | 79.71 | 81.79 | 84.36 | 81.05 | 83.41 |
| 2023                       | 83.86  | 83.92 | 86.88 | 84.58 | 79.00 | 80.47   | 82.22 | 81.53 | 83.15 | 86.00 | 82.20 | 85.03 |
| 2024                       | 84.70  | 84.78 | 88.76 | 84.51 | 79.58 | 83.03   | 81.56 | 82.02 | 83.91 | 86.50 | 84.92 | 85.71 |
| 2025                       | 86.11  | 86.09 | 90.28 | 85.44 | 79.28 | 83.18   | 82.98 | 84.24 | 84.37 | 88.08 | 87.45 | 86.67 |
| 2026                       | 86.45  | 87.59 | 90.62 | 85.96 | 80.06 | 84.29   | 84.07 | 84.95 | 84.08 | 89.18 | 87.58 | 87.64 |
| 2027                       | 89.34  | 89.31 | 91.61 | 88.12 | 79.79 | 85.76   | 86.18 | 85.39 | 85.90 | 91.73 | 88.53 | 89.17 |
| 2028                       | 90.72  | 91.49 | 94.65 | 90.49 | 79.18 | 87.84   | 88.04 | 86.37 | 88.11 | 92.61 | 89.71 | 92.14 |
| 2029                       | 91.02  | 92.04 | 96.04 | 91.91 | 72.84 | 87.90   | 89.26 | 87.53 | 89.45 | 93.27 | 92.06 | 93.40 |
| 2030                       | 92.35  | 93.49 | 97.91 | 92.01 | 72.46 | 88.57   | 89.99 | 90.19 | 89.96 | 94.94 | 94.16 | 95.24 |
| 2031                       | 94.27  | 95.75 | 99.12 | 92.38 | 73.86 | 88.22   | 91.82 | 92.02 | 90.08 | 96.43 | 96.21 | 95.27 |

Under the Fixed Price Option, the Company will pay Seller the Off-Peak Avoided Cost pursuant to Table 4 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; and (d) Net Output delivered in the Off-Peak Period. The Company will pay the Seller the On-Peak Avoided Cost pursuant to Table 3 for all other delivered Net Output. (See the Standard Renewable PPA for defined terms.)

### **RENEWABLE ENERGY CERTIFICATES**

The QF must provide the bundled energy and all Environmental Attributes, including RECs, to the Company from January 1, 2015 through the end of the PPA.

#### MONTHLY SERVICE CHARGE

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

CREA-NIPPC-REC/201 Sanger/9 UM\_\_\_/ PGE / Exhibit 102 Macfarlane Page 9

### Portland General Electric Company Effective

### **SCHEDULE 211 (Continued)**

### **INSURANCE REQUIREMENTS**

The following insurance requirements are applicable to Sellers with a Standard Renewable 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 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 his/her 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 to the Company's service territory, including third party charges for ancillary services such as imbalance service or integration, as applicable.

### 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 must 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.

CREA-NIPPC-REC/201 Sanger/10 UM\_\_\_/ PGE / Exhibit 102 Macfarlane Page 10

### Portland General Electric Company Effective

### **SCHEDULE 211 (Continued)**

### 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.

#### **METERING DATA**

Seller shall maintain a minimum of two years records of scheduled and metered Net Output and shall allow PGE to have access to such records and imbalance information kept by the Transmission Provider as applicable. Seller shall take all required actions and grant permissions as necessary to allow PGE access to such information.

### DEFINITION OF A SMALL POWER PRODUCTION FACILITY ELIGIBLE TO RECEIVE THE STANDARD RENEWABLE RATES AND STANDARD RENEWABLE PPA

A QF will be eligible to receive the applicable standard rates and Standard Renewable 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. In addition, post January 1, 2015, the QF must provide all environmental attributes, including RECs that the may be used to satisfy Oregon's Renewable Portfolio Standard (RPS).

### **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 and MACRS depreciation as the primary ownership benefit. A unit of Oregon local government may also be a "passive investor" 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.

CREA-NIPPC-REC/201 Sanger/11 UM\_\_\_/ PGE / Exhibit 102 Macfarlane Page 11

### Portland General Electric Company Effective

### **SCHEDULE 211 (Continued)**

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

### **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 the standard rates and Standard Renewable 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 the standard rates and standard PPA is sought.

#### **Shared Interconnection and Infrastructure**

QFs otherwise meeting the above-described separate ownership test and thereby qualified for entitlement to the standard rate and Standard Renewable 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 the standard rate and Standard Renewable 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.

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

As used in this schedule, Environmental Attributes shall mean means any and all current or future credits, benefits, emissions reductions, environmental air quality credits, emissions reduction credits, offsets and allowances, howsoever entitled, resulting from the avoidance of the emission of any gas, chemical or other substance attributable to the Facility during the Term, or otherwise attributable to the generation, purchase, sale or use of energy from or by the Facility during the Term, including without limitation any of the same arising out of legislation or regulation concerned with oxides of nitrogen, sulfur or carbon, with particulate matter, soot or mercury, or implementing the United Nations Framework Convention on Climate Change (the "UNFCCC") or the Kyoto Protocol to the UNFCCC or crediting "early action" emissions reduction, or laws or regulations involving or administered by the Clean Air Markets Division of the Environmental Protection Agency or successor administrator, or any State or federal entity given jurisdiction over a program involving transferability of Environmental Attributes, including the Oregon Renewable Portfolio Standards, and any Green Tag Reporting Rights to such Environmental Attributes.

CREA-NIPPC-REC/201 Sanger/12 UM\_\_\_/ PGE / Exhibit 102 Macfarlane Page 12

### Portland General Electric Company Effective

### **SCHEDULE 211 (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 the standard rates and Standard Renewable PPA. Any dispute concerning a QF's entitlement to the standard rates and Standard Renewable PPA may be presented to the Commission for resolution.

#### **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. The Seller may enter into only one PPA at any given time per facility with the Company for power sales. All sales must commence within 12 months of execution of a PPA.
- 4. PPAs entered into pursuant to this schedule will not terminate prior to the Standard or Negotiated PPA's termination date if the 1978 Public Utility Regulatory Policies Act (PURPA) is repealed.

### **TERM OF AGREEMENT**

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

# BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

### UM 1931

| PORTLAND GENERAL ELECTRIC COMPANY, | ) |  |  |
|------------------------------------|---|--|--|
| Complainant,                       | ) |  |  |
| v.                                 | ) |  |  |
| ALFALFA SOLAR I LLC, et al.        |   |  |  |
| Defendants.                        | ) |  |  |

### **EXHIBIT CREA-NIPPC-REC/202**

### STANDARD RENEWABLE IN SYSTEM NON-VARIABLE POWER PURCHASE AGREEMENT

**December 28, 2018** 

CREA-NIPPC-REC/202 Sanger/1

UM\_\_\_ / PGE / Exhibit 104 Macfarlane

Standard Renewable In System Non-Variable Power Purchase Agreement

| 101 | •   | urchasc | /\gi | CCITICIT |  |
|-----|-----|---------|------|----------|--|
| Е   | ffe | ective  |      |          |  |

### STANDARD RENEWABLE IN SYSTEM NON-VARIABLE POWER PURCHASE

**AGREEMENT** 

| THIS AGREEMENT, entered into this day, 201 between ("Seller") and Portland General Electrompany ("PGE") (hereinafter each a "Party" or collectively, "Parties"). |                         |
|--|-------------------------|
| RECITALS   |                         |
| for the generation of electric power located inCou   | cility<br>unty,<br>watt |
| Seller intends to operate the Facility as a "Qualifying Facility," as such terr defined in Section 3.1.3, below.   | n is                    |
| Seller shall sell and PGE shall purchase the entire Net Output, as such terr defined in Section 1.19, below, from the Facility in accordance with the terms      |                         |

### AGREEMENT

NOW, THEREFORE, the Parties mutually agree as follows:

conditions of this Agreement.

### **SECTION 1: DEFINITIONS**

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

- "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.
- "Billing Period" means a period between PGE's readings of its power purchase billing meter at the Facility in the normal course of PGE's business. Such periods typically vary and may not coincide with calendar months.
- "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.
- "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:

Standard Renewable In System Non-Variable Power Purchase Agreement Effective \_\_\_\_\_

- 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. (facilities with nameplate under 500 kW exempt from following requirement) Start-Up Testing of the Facility has been completed in accordance with Section 1.28;
- 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 in accordance with the Generation Interconnection Agreement, all required interconnection facilities have been constructed, all required interconnection tests have been completed; and the Facility is physically interconnected with PGE's electric system.
- 1.4.5. (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;
- 1.5. "Contract Price" means the applicable price, including on-peak and offpeak prices, as selected by Seller in Section 5 and as specified in the Schedule.
- 1.6. "Contract Year" means each twelve (12) month period during the Term 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.

\_ / PGE / Exhibit 104 Macfarlane Schedule 211

Standard Renewable In System Non-Variable Power Purchase Agreement

| • | • | •  | •  |      | <br>• | ٠Э. | _ | ٠. | • • • | • • • • |
|---|---|----|----|------|-------|-----|---|----|-------|---------|
|   | E | ff | ec | tive |       |     |   |    |       |         |

- "Environmental Attributes" means any and all current or future credits, 1.8. benefits, emissions reductions, environmental air quality credits, emissions reduction credits, offsets and allowances, howsoever entitled, resulting from the avoidance of the emission of any gas, chemical or other substance attributable to the Facility during the Term, or otherwise attributable to the generation, purchase, sale or use of energy from or by the Facility during the Term, including without limitation any of the same arising out of legislation or regulation concerned with oxides of nitrogen, sulfur or carbon, with particulate matter, soot or mercury, or implementing the United Nations Framework Convention on Climate Change (the "UNFCCC") or the Kyoto Protocol to the UNFCCC or crediting "early action" emissions reduction, or laws or regulations involving or administered by the Clean Air Markets Division of the Environmental Protection Agency or successor administrator, or any State or federal entity given jurisdiction over a program involving transferability of Environmental Attributes, including the Oregon Renewable Portfolio Standards, and any Green Tag Reporting Rights to such Environmental Attributes.
  - "Facility" has the meaning set forth in the Recitals. 1.9.
- 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.
- "Generation Interconnection Agreement" 1.11. means the generation interconnection agreement to be entered into separately between Seller and PGE, providing for the construction, operation, and maintenance of PGE's interconnection facilities required to accommodate deliveries of Seller's Net Output.
- 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, unless the Net Output is less than Minimum Net Output and the mean Dow Jones Mid C Index Price is greater than the Contract Price, in which case Lost Energy Value equals: (Minimum Net Output - Net Output) X (the lower of the mean Contract Price or the Mean Dow Jones Mid C Index Price - mean Contract Price).

UM\_\_\_ / PGE / Exhibit 104 Macfarlane Schedule 211

Standard Renewable In System Non-Variable Power Purchase Agreement

| • | • | •  | • • • | • • • |   | <br>·9· | _ | _ | ٠. | <br>• | • |
|---|---|----|-------|-------|---|---------|---|---|----|-------|---|
|   | Ε | ff | ec    | tiv   | е |         |   |   |    |       |   |

- 1.15. "Mid-Columbia" means an area which includes points at any of the switchyards associated with the following four hydro projects: Rocky Reach, Rock Island, Wanapum and Priest Rapids. These switchyards include: Rocky Reach, Rock Island, Wanapum, McKenzie, Valhalla, Columbia, Midway and Vantage. Mid-Columbia shall also include points in the "Northwest Hub," as defined by Bonneville Power Administration. For scheduling purposes, the footprint described above shall dictate the delivery point name for the then current Western Electricity Coordinating Council ("WECC") scheduling protocols. If the footprint changes during the Term, a mutually agreed upon footprint that describes an area containing the most liquidity for trading purposes shall apply.
- 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. Net Output does not include any environmental attributes imbalance power, or power from an integrating entity.
  - 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 high side of the generation step up transformer(s) located at the point of interconnection between the Facility and PGE's distribution or transmission system, as specified in the Generation Interconnection Agreement.
- 1.23. "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

UM\_\_\_ / PGE / Exhibit 104 CREA-NIPPC-REC/202

Macfarlane Sanger/5 Schedule 211

Standard Renewable In System Non-Variable Power Purchase Agreement

Effective

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, maintenance of the Facility including without limitation those set forth in Exhibit C.
- 1.26. "Senior Lien" means a prior lien which has precedence as to the property under the lien over another lien or encumbrance.
- 1.27. "Start-Up Testing" means the completion of applicable required factory and start-up tests as set forth in Exhibit D.
- 1.28. "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.
- 1.29. "Schedule" shall mean PGE Schedule 211 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. In the event of a conflict between this Agreement and the Schedule, this Agreement shall apply.
- 1.30. "Term" shall mean the period beginning on the Effective Date and ending on the Termination Date.
- 1.31. "Test Period" shall mean a period of sixty (60) days or a commercially reasonable period determined by the Seller.
- 1.32. References to Recitals, Sections, and Exhibits are to be the recitals, sections and exhibits of this Agreement.

### SECTION 2: TERM; COMMERCIAL OPERATION DATE

- 2.1 This Agreement shall become effective upon execution by both Parties ("Effective Date").
- 2.2 Time is of the essence of this Agreement, and Seller's ability to meet certain requirements prior to the Commercial Operation Date and to complete all requirements to establish the Commercial Operation Date is critically important. Therefore,

| be       |                               | By<br>deliveries of Net                                  | [date to be determent of the content | mined by the                       | Seller] Seller                  | shall            |
|----------|-------------------------------|--|--|------------------------------------|---------------------------------|------------------|
|          | ompleted a                    |  | date to be determir<br>under Section 1.4   |                                    |                                 |                  |
| ca<br>sh | 2.1 and 2. alculating the pro | 2.2, Seller shall<br>ne Lost Energy \<br>rated and appli | eller is unable to not pay damages equivalue for use in this led to the period specified in 2.2.1.   | ual to the Los<br>s section, the I | st Energy Valu<br>Minimum Net 0 | ie. In<br>Dutput |
| by Selle | er], up to 2                  | 20 years from  | terminate on<br>the Effective Date<br>ction 10 or 12.2, v  | e, or the date                     | e the Agreem                    | ent is           |
|          | SEC                           | CTION 3: REPR  | RESENTATIONS A   | ND WARRAN                          | TIES                            |                  |
| 3.       | 1 Seller                      | and PGE repre  | sent, covenant, and  | d warrant as fo                    | ollows:                         |                  |
| of_      | 3.1.1                         |  | s it is a  | duly organ                         | ized under the                  | ) laws           |
|          | oes not co                    | ontravene any  | s that the executio<br>provision of, or<br>er material agreem  | constitute a                       | default under                   | , any            |

- 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-

UM\_\_\_ / PGE / Exhibit 104 CREA-NIPPC-REC/202

Sanger/7

Macfarlane Schedule 211

Standard Renewable In System Non-Variable Power Purchase Agreement

| • | •  | • • • | ٠.  |   | _ | • | .a. | _ | ٠. | ٠. | _ |  |
|---|----|-------|-----|---|---|---|-----|---|----|----|---|--|
| Ε | ff | ec    | tiν | e |   |   |     |   |    |    |   |  |

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
- 3.1.9 Seller estimates that the average annual Net Output to be delivered by the Facility to PGE is \_\_\_\_\_ kilowatt-hours ("kWh"), which amount PGE will include in its resource planning.
- Seller will deliver from the Facility to PGE at the Point of Delivery 3.1.10 Net Output not to exceed a maximum of kWh of Net Output during each Contract Year ("Maximum Net Output").
- 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 Buyer 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. Buyer 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 Buyer 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 renewable energy credits associated with Net Output to be issued, monitored, accounted for, and transferred by and through the Western

UM\_\_\_ / PGE / Exhibit 104 Macfarlane Page 8 Schedule 211

Standard Renewable In System Non-Variable Power Purchase Agreement

| enewable in System Non-variable i Swer i di | chase Agreement |
|---|-----------------|
| Effect                                      | tive            |

Renewable Energy Generation System consistent with the provisions of OAR 330-160-0005 through OAR 330-160-0050.

#### SECTION 4: DELIVERY OF POWER AND ENVIRONMENTAL ATTRIBUTES

- 4.1 Commencing on the Effective Date and continuing through the Term of this Agreement, Seller shall sell to PGE the entire Net Output delivered from the Facility at the Point of Delivery.
- Provided Seller has elected the Contract Price options in Section 5.1, 5.2. 4.2 or 5.3, Seller shall 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. PGE shall pay Seller the Contract Price for all delivered Net Output.
- 4.3 Provided Seller has elected the Contract Price options in Section 5.1, 5.2, or 5.3, Seller agrees that if Seller does not deliver the Minimum Net Output each Contract Year, 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 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.

 $\frac{\text{CREA-NIPPC-REC/202}}{\text{Sanger/9}} \\ \frac{\text{UM}\_\_/\text{PGE/Exhibit 104}}{\text{Macfarlane}} \\ \frac{\text{Page 9}}{\text{Schedule 211}} \\ \text{Standard Renewable In System Non-Variable Power Purchase Agreement} \\ \text{Effective} \\ \\$ 

- 4.5 To the extent not otherwise provided in the Generation Interconnection Agreement, all costs associated with the modifications to PGE's interconnection facilities or electric system occasioned by or related to the interconnection of the Facility with PGE's system, or any increase in generating capability of the Facility, or any increase of delivery of Net Dependable Capacity from the Facility, shall be borne by Seller.
- 4.6 Commencing on the Effective Date and continuing through the Term of this Agreement, Seller shall provide and PGE shall acquire the Environmental Attributes for the Contract Years specified in the Schedule. The Contract Price includes full payment for the Net Output and any Environmental Attributes transferred to PGE under this Agreement. With respect to Environmental Attributes not transferred to PGE under this Agreement ("Seller-Retained RECs") 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 RECs, and PGE shall not report under such program that such Seller-Retained RECs belong to it. With respect to Environmental 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: CONTRACT PRICE**

PGE shall pay Seller for the price options 5.1, 5.2, 5.3 or 5.4, as selected below, pursuant to the Schedule. Seller shall indicate which price option it chooses by marking its choice below with an X. If Seller chooses the option in Section 5.1, it must mark below with a second X, a single second option from Section 5.2, 5.3, or 5.4 for all Contract Years in excess of 15 until the end of the Term. Except as provided herein, Sellers selection is for the Term and shall not be changed during the Term.

| 5.1 | <br>Renewable Fixed Price for Non-Variable Resources |
|-----|--|
| 5.2 | <br>Deadband Index Gas Price                         |
| 5.3 | <br>Index Gas Price                                  |
| 5.4 | Mid-C Index Rate Price                               |
|     |  |

#### **SECTION 6: OPERATION AND CONTROL**

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

\_ / PGE / Exhibit 104 Macfarlane Page 10 Schedule 211

Standard Renewable In System Non-Variable Power Purchase Agreement

|           | _ |  |
|-----------|---|--|
| Effective |   |  |

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.

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

#### SECTION 7: CREDITWORTHINESS

In the event Seller: a) is unable to represent or warrant as required by Section 3 that it has not been a debtor in any bankruptcy proceeding within the past two (2) years; b) becomes such a debtor during the Term; or c) is not or will not be current on all its financial obligations, Seller shall immediately notify PGE and shall promptly (and in no less than 10 days after notifying PGE) provide default security in an amount reasonably acceptable to PGE in one of the following forms: Senior Lien, Step-in Rights, a Cash Escrow or Letter of Credit. The amount of such default security that shall be acceptable to PGE shall be equal to: (annual On Peak Hours) X (On Peak Price – Off Peak Price) X (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 8: METERING**

- 8.1 PGE shall design, furnish, install, own, inspect, test, maintain and replace all metering equipment at Seller's cost and as required pursuant to the Generation Interconnection Agreement.
- 8.2 Metering shall be performed at the location and in a manner consistent with this Agreement and as specified in the Generation Interconnection Agreement. All Net Output purchased hereunder shall be adjusted to account for electrical losses, if any, between the point of metering and the Point of Delivery, so that he purchased amount reflects the net amount of power flowing into PGE's system at the Point of Delivery.
- 8.3 PGE shall periodically inspect, test, repair and replace the metering equipment as provided in the Generation Interconnection Agreement. If any of the inspections or tests discloses an error exceeding two (2%) percent of the actual energy

UM\_\_\_ / PGE / Exhibit 104 Macfarlane Page 11 Schedule 211

Standard Renewable In System Non-Variable Power Purchase Agreement

Effective

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

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

#### SECTION 9: BILLINGS, COMPUTATIONS AND PAYMENTS

- 9.1 On or before the thirtieth (30th) day following the end of each Billing Period, PGE shall send to Seller payment for Seller's deliveries of Net Output to PGE, together with computations supporting such payment. PGE may offset any such payment to reflect amounts owing from Seller to PGE pursuant to this Agreement, the Generation Interconnection Agreement, and any other agreement related to the Facility between the Parties or otherwise.
- 9.2 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 10: DEFAULT, REMEDIES AND TERMINATION

- 10.1 In addition to any other event that may constitute a default under this Agreement, the following events shall constitute defaults under this Agreement:
- 10.1.1 Breach by Seller or PGE of a representation or warranty, except for Section 3.1.4, set forth in this Agreement.
- 10.1.2 Seller's failure to provide default security, if required by Section 7, prior to delivery of any Net Output to PGE or within 10 days of notice.
- 10.1.3 Seller's failure to deliver the Minimum Net Output for two consecutive Contract Years.
  - 10.1.4 If Seller is no longer a Qualifying Facility.
- 10.1.5 Failure of PGE to make any required payment pursuant to Section 9.1.

UM\_\_\_ / PGE / Exhibit 104 Macfarlane Page 12 Schedule 211

Standard Renewable In System Non-Variable Power Purchase Agreement

Effective

10.2 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 10.1.3 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 21.1. The rights provided in this Section 10 are cumulative such that the exercise of one or more rights shall not constitute a waiver of any other rights.

- 10.3 If this Agreement is terminated as provided in this Section 10 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.
- 10.4 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. Accounts owed by Seller pursuant to this paragraph shall be due within five (5) business days after any invoice from PGE for the same.
- 10.5 In the event PGE terminates this Agreement pursuant to this Section 10, 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.
- 10.6 Sections 10.1 10.3 10.4 10.5, 11, and 20.2 shall survive termination of this Agreement.

### **SECTION 11: INDEMNIFICATION AND LIABILITY**

- 11.1 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.
- 11.2 PGE agrees to defend, indemnify and hold harmless Seller, its directors, officers, agents, and representatives against and from any and all loss, claims, actions

UM\_\_\_ / PGE / Exhibit 104 Macfarlane Page 13 Schedule 211

Standard Renewable In System Non-Variable Power Purchase Agreement

Effective

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.

- 11.3 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.
- 11.4 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 12: INSURANCE**

- 12.1 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 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.
- 12.2 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

UM\_\_\_ / PGE / Exhibit 104 Macfarlane Page 14 Schedule 211

Standard Renewable In System Non-Variable Power Purchase Agreement

|           | - |  |
|-----------|---|--|
| Effective |   |  |

written notice from Seller. Seller shall waive its insurers' rights of subrogation against PGE regarding Facility property losses.

12.3 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 13: FORCE MAJEURE

- 13.1 As used in this Agreement, "Force Majeure" or "an event of Force Majeure" means any cause beyond the reasonable control of the Seller or of PGE which, despite the exercise of due diligence, such Party is unable to prevent or overcome. By way of example, Force Majeure may include but is not limited to acts of God, fire, flood, storms, wars, hostilities, civil strife, strikes, and other labor disturbances, earthquakes, fires, lightning, epidemics, sabotage, restraint by court order or other delay or failure in the performance as a result of any action or inaction on behalf of a public authority which by the exercise of reasonable foresight such Party could not reasonably have been expected to avoid and by the exercise of due diligence, it shall be unable to overcome, subject, in each case, to the requirements of the first sentence of this paragraph. Force Majeure, however, specifically excludes the cost or availability of resources to operate the Facility, changes in market conditions that affect the price of energy or transmission, wind or water droughts, and obligations for the payment of money when due.
- 13.2 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:
- 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
- the suspension of performance shall be of no greater scope and of 13.2.2 no longer duration than is required by the Force Majeure; and
- the non-performing Party uses its best efforts to remedy its inability 13.2.3 to perform its obligations under this Agreement.

 $\frac{\text{CREA-NIPPC-REC/202}}{\text{Sanger/15}} \frac{\text{UM}\_\_/\text{ PGE / Exhibit 104}}{\text{Macfarlane}} \\ \frac{\text{Sanger/15}}{\text{Schedule 211}} \\ \text{Standard Renewable In System Non-Variable Power Purchase Agreement} \\ \text{Effective} \\ \\$ 

- 13.3 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.
- 13.4 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 14: 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 15: 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 16: PARTIAL INVALIDITY AND PURPA REPEAL

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

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

#### **SECTION 17: 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 18: 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

UM\_\_\_ / PGE / Exhibit 104 Macfarlane Schedule 211

Standard Renewable In System Non-Variable Power Purchase Agreement

Effective

required by law for the construction, operation and maintenance of the Facility, and shall provide upon request copies of the same to PGE.

# SECTION 19: SUCCESSORS AND ASSIGNS

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

#### SECTION 20: ENTIRE AGREEMENT

- 20.1 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.
- 20.2 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 21: NOTICES

21.1 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:      |                         |  |
|-----------------|-------------------------|--|
|                 |                         |  |
|                 |                         |  |
|                 |                         |  |
|                 |                         |  |
|                 |                         |  |
| with a copy to: |                         |  |
|                 |                         |  |
|                 |                         |  |
|                 |                         |  |
|                 |                         |  |
| To PGE:         | Contracts Manager       |  |
|                 | QF Contracts, 3WTCBR06  |  |
|                 | PGE - 121 SW Salmon St. |  |
|                 | Portland, Oregon 97204  |  |
|                 | i diddid, diogon di 20- |  |

 $\frac{\text{CREA-NIPPC-REC/202}}{\text{Sanger/17}} \frac{\text{UM}\_\_/\text{PGE/Exhibit 104}}{\text{Macfarlane}} \\ \frac{\text{Sanger/17}}{\text{Schedule 211}} \\ \text{Standard Renewable In System Non-Variable Power Purchase Agreement} \\ \text{Effective} \_\_\_\_\_\_$ 

21.2 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 21.

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

| By:           |  |    |
|---------------|--|----|
| Name:         |  |    |
| Title:        |  |    |
| Date:         |  |    |
|               |  | _• |
| (Name Seller) |  |    |
| By:           |  |    |
| Name:         |  |    |
| Title:        |  |    |
| Date:         |  |    |

**PGE** 

 $\frac{\text{CREA-NIPPC-REC/202}}{\text{Sanger/18}} \\ \frac{\text{UM}\_\_/ \text{ PGE / Exhibit 104}}{\text{Macfarlane}} \\ \frac{\text{Page 18}}{\text{Schedule 211}} \\ \text{Standard Renewable In-System Non-Variable Power Purchase Agreement} \\ \frac{\text{Effective}\_\_\_\_}{\text{Effective}} \\ \frac{\text{CREA-NIPPC-REC/202}}{\text{Nacfarlane}} \\ \frac{\text{Nacfarlane}}{\text{Schedule 211}} \\ \frac{\text{CREA-NIPPC-REC/202}}{\text{Nacfarlane}} \\ \frac{\text{Nacfarlane}}{\text{Schedule 211}} \\$ 

# 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

[Seller to Complete]

 $CREA-NIPPC-REC/202 \\ Sanger/20 \\ Standard Renewable In System Non-Variable Power Purchase Agreement \\ Effective \_\_\_\_\_$ 

# EXHIBIT C REQUIRED FACILITY DOCUMENTS

# [Seller list all permits and authorizations required for this project]

Sellers Generation Interconnection Agreement

CREA-NIPPC-REC/202

Sanger/21

UM\_\_\_ / PGE / Exhibit 104 Macfarlane Page 21 Schedule 211

Standard Renewable In System Non-Variable Power Purchase Agreement Effective

#### EXHIBIT D START-UP TESTING

#### [Seller identify appropriate tests]

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

- 1. Pressure tests of all steam system equipment;
- 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;
- 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
[Attach currently in-effect Schedule 211]

UM\_\_\_ / PGE / Exhibit 104 Macfarlane Schedule 211

Standard Renewable Off System Non-Variable Power Purchase Agreement

| i aronaco | • | .g. comon |
|-----------|---|-----------|
| Effective |   |           |

# STANDARD RENEWABLE OFF SYSTEM NON-VARIABLE POWER PURCHASE

#### **AGREEMENT**

| THIS AGREEMENT, entered into this content of the content of | and Portland General       |                                   |
|---|----------------------------|-----------------------------------|
| <u>RECITALS</u>   |                            |                                   |
| Seller intends to construct, own, operate and material for the generation of electric power located in the generation with a Nameplate Capacity Rating of ("kW"), as further described in Exhibit B ("Facility"); and   | in                         | facility<br>County,<br>_ kilowati |
| Seller intends to operate the Facility as a "Quadefined in Section 3.1.3, below.  | alifying Facility," as suc | h term is                         |
| Seller shall sell and PGE shall purchase the endefined in Section 1.19, below, from the Facility in a 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:

- "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.
- "Billing Period" means a period between PGE's readings of its power purchase billing meter at the Facility in the normal course of PGE's business. Such periods typically vary and may not coincide with calendar months.
- "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.
- "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:

UM\_\_\_ / PGE / Exhibit 104 Macfarlane Page 24 Schedule 211

Standard Renewable Off System Non-Variable Power Purchase Agreement

| Effective |  |
|-----------|--|

- 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 1.27;
- 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 Transmission Agreement.
- 1.5. "Contract Price" means the applicable price, including on-peak and offpeak prices, as selected by Seller in Section 5 and as specified in the Schedule.
- "Contract Year" means each twelve (12) month period commencing upon 1.6. 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.
  - "Effective Date" has the meaning set forth in Section 2.1. 1.7.
- "Environmental Attributes" means any and all current or future credits, benefits, emissions reductions, environmental air quality credits, emissions reduction

CREA-NIPPC-REC/202

Sanger/25

Page 25 Schedule 211

Macfarlane

Standard Renewable Off System Non-Variable Power Purchase Agreement

|           | , .g | • |
|-----------|------|---|
| Effective |      |   |

UM\_\_\_ / PGE / Exhibit 104

credits, offsets and allowances, howsoever entitled, resulting from the avoidance of the emission of any gas, chemical or other substance attributable to the Facility during the Term, or otherwise attributable to the generation, purchase, sale or use of energy from or by the Facility during the Term, including without limitation any of the same arising out of legislation or regulation concerned with oxides of nitrogen, sulfur or carbon, with particulate matter, soot or mercury, or implementing the United Nations Framework Convention on Climate Change (the "UNFCCC") or the Kyoto Protocol to the UNFCCC or crediting "early action" emissions reduction, or laws or regulations involving or administered by the Clean Air Markets Division of the Environmental Protection Agency or successor administrator, or any State or federal entity given jurisdiction over a program involving transferability of Environmental Attributes, including the Oregon Renewable Portfolio Standard, and any Green Tag Reporting Rights to such Environmental Attributes.

- "Facility" has the meaning set forth in the Recitals. 1.9.
- 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 Dow Jones 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 \_\_\_\_\_ 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, unless the Net Output is less than Minimum Net Output and the mean Dow Jones Mid C Index Price is greater than the Contract Price, in which case Lost Energy Value equals: (Minimum Net Output - Net Output) X (the lower of the mean Contract Price or the mean Dow Jones

# CREA-NIPPC-REC/202

UM / PGE / Exhibit 104 Macfarlane Sanger/26 Schedule 211

Standard Renewable Off System Non-Variable Power Purchase Agreement

Effective

Mid C Index Price - mean Contract Price) minus Transmission Curtailment Replacement Energy Cost if any for like period.

- 1.15. "Mid-Columbia" means an area which includes points at any of the switchyards associated with the following four hydro projects: Rocky Reach, Rock Island, Wanapum and Priest Rapids. These switchyards include: Rocky Reach, Rock Island, Wanapum, McKenzie, Valhalla, Columbia, Midway and Vantage. Mid-Columbia shall also include points in the "Northwest Hub," as defined by Bonneville Power Administration. For scheduling purposes, the footprint described above shall dictate the delivery point name for the then current Western Electricity Coordinating Council ("WECC") scheduling protocols. If the footprint changes during the Term, a mutually agreed upon footprint that describes an area containing the most liquidity for trading purposes shall apply.
- 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. Net Output does not include any environmental attributes imbalance power, or power from an integrating entity.
  - 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 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

UM\_\_\_ / PGE / Exhibit 104 Macfarlane Page 27 Schedule 211

Standard Renewable Off System Non-Variable Power Purchase Agreement

Effective

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. "Senior Lien" means a prior lien which has precedence as to the property under the lien over another lien or encumbrance.
- 1.27. "Start-Up Testing" means the completion of applicable required factory and start-up tests as set forth in Exhibit D.
- 1.28. "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.
- 1.29. "Schedule" shall mean PGE Schedule 211 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. In the event of a conflict between this Agreement and the Schedule, this Agreement shall apply.
- 1.30. "Term" shall mean the period beginning on the Effective Date and ending on the Termination Date.
- 1.31. "Test Period" shall mean a period of sixty (60) days or a commercially reasonable period determined by the Seller.
- 1.32. "Transmission Agreement" means an agreement executed by the Seller and the Transmission Provider(s) for Transmission Services.
- 1.33. "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 or a generating facility limitation by a Transmission Provider (for any reason other than Force Majeure).
- 1.34. "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.

UM / PGE / Exhibit 104 Macfarlane Schedule 211

Standard Renewable Off System Non-Variable Power Purchase Agreement

Effective

- 1.35. "Transmission Provider(s)" means the signatory (other than the Seller) to the Transmission Agreement.
- 1.36. "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.
- 1.37. References to Recitals, Sections, and Exhibits are to be the recitals, sections and exhibits of this Agreement.

# SECTION 2: TERM; COMMERCIAL OPERATION DATE

- 2.1 This Agreement shall become effective upon execution by both Parties ("Effective Date").
- 2.2 Time is of the essence of this Agreement, and Seller's ability to meet certain requirements prior to the Commercial Operation Date and to complete all requirements to establish the Commercial Operation Date is critically important. Therefore,
  - By \_\_\_\_\_ [date to be determined by the Seller] Seller shall 2.2.1 begin initial deliveries of Net Output; and
  - 2.2.2 By \_\_\_\_\_ [date to be determined by the Seller] Seller shall have completed all requirements under Section 1.4 and shall have established the Commercial Operation Date.
  - In the event Seller is unable to meet the requirements of Sections 2.2.3 2.2.1 and 2.2.2, Seller shall pay damages equal to the Lost Energy Value. In calculating the Lost Energy Value for use in this section, the Minimum Net Output shall be prorated and applied to the period of time between the Commercial Operation date and the date specified in 2.2.1.
- This Agreement shall terminate on \_\_\_\_\_\_, \_\_\_\_ [date to be chosen by Seller, up to 20 years from the Effective Date, or the date the Agreement is terminated in accordance with Section 9 or 12.2, whichever is earlier ("Termination Date").

# **SECTION 3: REPRESENTATIONS AND WARRANTIES**

- 3.1 Seller and PGE represent, covenant, and warrant as follows:
- Seller warrants it is a \_\_\_\_\_ duly organized under the laws 3.1.1 of \_\_\_\_\_.
- Seller warrants that the execution and delivery of this Agreement 3.1.2 does not contravene any provision of, or constitute a default under, any indenture, mortgage, or other material agreement binding on Seller or any valid

\_ / PGE / Exhibit 104 Macfarlane Page 29 Schedule 211

UM

Standard Renewable Off System Non-Variable Power Purchase Agreement Effective

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 \_\_\_\_\_ kW.
- 3.1.9 Seller estimates that the average annual Net Output to be delivered by the Facility to PGE is \_\_\_\_\_ 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 \_\_\_\_\_\_ 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 Seller has entered into a Generation Interconnection Agreement for a term not less than the term of this Agreement.

UM\_\_\_ / PGE / Exhibit 104 Macfarlane Page 30 Schedule 211

Standard Renewable Off System Non-Variable Power Purchase Agreement Effective

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 (i) the Facility satisfies the eligibility requirements specified in the Definition of a Small Cogeneration Facility or Small Power Production Facility Eligible to Receive the Standard Renewable Rates and Standard Renewable PPA in PGE's Schedule and (ii) Seller will not make any changes in its ownership, control or management during the term of this Agreement that would cause it to not be in compliance with the Definition of a Small Cogeneration Facility or Small Power Production Facility Eligible to Receive the Standard Renewable Rates and Standard Renewable PPA in PGE's Schedule. Seller will provide, upon request by Buyer 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. Buyer 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 Buyer will provide all such confidential information to the Public Utility Commission of Oregon upon the Commission's request.
- 3.1.14 Seller warrants that it will comply with all requirements necessary for all renewable energy credits 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.

#### SECTION 4: DELIVERY OF POWER 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.
- 4.2 Provided Seller has elected the Contract Price options in Section 5.1, 5.2, or 5.3, 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. PGE shall pay Seller the Contract Price for all scheduled and delivered Net Output.
- 4.3 Provided Seller has elected the Contract Price options in Section 5.1, 5.2, or 5.3, Seller agrees that if Seller does not deliver the Minimum Net Output each

UM\_\_\_ / PGE / Exhibit 104 Macfarlane Page 31 Schedule 211

Standard Renewable Off System Non-Variable Power Purchase Agreement

Effective

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.
- All energy shall be scheduled according to the most current North America 4.5 Energy Reliability Corporation (NERC) and Western Electricity Coordinating Council (WECC) scheduling rules and practices. The Parties' respective representatives shall maintain hourly real-time schedule 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. Deliveries shall not be made on a dynamic basis, and Seller shall insure that all deliveries of energy under this Agreement will be equal on an hourly basis to the amounts scheduled in the final schedule. Seller shall bear the cost of any transmission services, including but not limited to imbalance services, necessary to insure that energy deliveries under this Agreement are equal on an hourly basis to the amount of energy scheduled for each hour in the final schedule. The final schedule shall be provided by Seller to PGE no later than 20 minutes prior to delivery for the first 30 minutes of an hour (e.g., 1:00 to 1:30) and 15 minutes prior to delivery for the second 30 minutes of the hour (e.g., 1:30 to 2:00). The final E-Tag shall be the controlling evidence of the Parties' final schedule. 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.

 $CREA-NIPPC-REC/202 \\ Sanger/32 \\ Standard Renewable Off System Non-Variable Power Purchase Agreement Effective \\ UM\___/ PGE / Exhibit 104 \\ Macfarlane Page 32 \\ Schedule 211$ 

4.6 Commencing on the Effective Date and continuing through the Term of this Agreement, Seller shall provide and PGE shall acquire the Environmental Attributes for the Contract Years specified in the Schedule. The Contract Price includes full payment for the Net Output and any Environmental Attributes transferred to PGE under this Agreement. With respect to Environmental Attributes not transferred to PGE under this Agreement ("Seller-Retained RECs") 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 RECs, and PGE shall not report under such program that such Seller-Retained RECs belong to it. With respect to Environmental 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: CONTRACT PRICE**

PGE shall pay Seller for the price options 5.1, 5.2, 5.3 or 5.4, as selected below, pursuant to the Schedule. Seller shall indicate which price option it chooses by marking its choice below with an X. If Seller chooses the option in Section 5.1, it must mark below with a second X a single second option from Section 5.2, 5.3, or 5.4 for all Contract Years in excess of 15 until the end of the Term. Except as provided herein, Sellers selection is for the Term and shall not be changed during the Term.

| 5.1 |       | Renewable Fixed Price Non Variable or Integrated Variable |
|-----|-------|---|
|     | Resou | ırce  |
| 5.2 |       | Deadband Index Gas Price                                  |
| 5.3 |       | Index Gas Price   |
| 5.4 |       | Mid-C Index Rate Price                                    |
|     |       |   |

# **SECTION 6: OPERATION AND CONTROL**

- 6.1 Seller shall operate and maintain the Facility in a safe manner in accordance with the Generation Interconnection Agreement, and Prudent Electrical Practices. PGE shall have no obligation to purchase Net Output from the Facility to the extent the interconnection of the Facility 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.
- 6.2 Seller agrees to provide sixty (60) days advance written notice of any scheduled maintenance that would require shut down of the Facility for any period of time.

Standard Renewable Off System Non-Variable Power Purchase Agreement Effective

6.3 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 7: 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 8: BILLINGS, COMPUTATIONS AND PAYMENTS

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

#### SECTION 9: DEFAULT, REMEDIES AND TERMINATION

- 9.1 In addition to any other event that may constitute a default under this Agreement, the following events shall constitute defaults under this Agreement:
  - 9.1.1 Breach by Seller or PGE of a representation or warranty, except for Section 3.1.4, set forth in this Agreement.
  - 9.1.2 Seller's failure to provide default security, if required by Section 7, prior to delivery of any Net Output to PGE or within ten (10) days of notice.

\_ / PGE / Exhibit 104 Macfarlane Schedule 211

Standard Renewable Off System Non-Variable Power Purchase Agreement

Effective

- 9.1.3 Seller's failure to deliver the Minimum Net Output for two consecutive Contract Years.
  - 9.1.4 If Seller is no longer a Qualifying Facility.
- 9.1.5 Failure of PGE to make any required payment pursuant to Section 8.1.
- 9.1.6 Seller's failure to accurately schedule Net Output, as required by Section 4.5, where there is a demonstrated pattern of scheduling errors. Scheduling errors may include: scheduled energy that differs from Net Output by more than 10% for multiple monthly periods, or in cases where net deviations result in demonstrated excess payments by PGE to the Seller.
- 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 9.1.3, 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 21.1. The rights provided in this Section 9 are cumulative such that the exercise of one or more rights shall not constitute a waiver of any other rights.
- If this Agreement is terminated as provided in this Section 9, PGE shall make all payments, within thirty (30) days, that, pursuant to the terms of this Agreement, are owed to Seller as of the time of receipt of notice of default. PGE shall not be required to pay Seller for any Net Output delivered by Seller after such notice of default.
- 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.
- 9.5 In the event PGE terminates this Agreement pursuant to this Section 9. and Seller wishes to again sell Net Output to PGE following such termination, PGE in its sole discretion may require that Seller shall do so subject to the terms of this Agreement, including but not limited to the Contract Price until the Term of this Agreement (as set forth in Section 2.3) would have run in due course had the Agreement remained in effect. At such time Seller and PGE agree to execute a written document ratifying the terms of this Agreement.

 $\frac{\text{CREA-NIPPC-REC/202}}{\text{Sanger/35}} \\ \frac{\text{UM}\_\_/\text{ PGE / Exhibit 104}}{\text{Macfarlane}} \\ \frac{\text{Page 35}}{\text{Schedule 211}} \\ \text{Standard Renewable Off System Non-Variable Power Purchase Agreement} \\ \text{Effective} \\ \\$ 

9.6 Sections 9.1, 9.3, 9.4, 9.5, 11, and 20.2 shall survive termination of this Agreement.

#### SECTION 10: TRANSMISSION CURTAILMENTS

- 10.1 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.
- 10.2 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 11: INDEMNIFICATION AND LIABILITY

- 11.1 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.
- 11.2 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.
- 11.3 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.

VM\_\_\_ / PGE / Exhibit 104 /202 Macfarlane Page 36 Schedule 211

Standard Renewable Off System Non-Variable Power Purchase Agreement Effective

11.4 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 12: INSURANCE**

- 12.1 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 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.
- 12.2 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.
- 12.3 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 13: FORCE MAJEURE** 

UM\_\_\_ / PGE / Exhibit 104 Macfarlane Page 37 Schedule 211

Standard Renewable Off System Non-Variable Power Purchase Agreement

Effective

13.1 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.

- 13.2 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:
  - 13.2.1 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
  - 13.2.2 the suspension of performance shall be of no greater scope and of no longer duration than is required by the Force Majeure; and
  - 13.2.3 the non-performing Party uses its best efforts to remedy its inability to perform its obligations under this Agreement.
- 13.3 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.
- 13.4 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 14: 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.

UM\_\_\_ / PGE / Exhibit 104 Macfarlane Page 38 Schedule 211

Standard Renewable Off System Non-Variable Power Purchase Agreement Effective

#### SECTION 15: 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 16: 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 17: 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 18: 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 19: SUCCESSORS AND ASSIGNS

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

#### SECTION 20: ENTIRE AGREEMENT

20.1 This Agreement supersedes all prior agreements, proposals, representations, negotiations, discussions or letters, whether oral or in writing, regarding

/ PGE / Exhibit 104 Macfarlane Page 39 Schedule 211

Standard Renewable Off System Non-Variable Power Purchase Agreement

|           | _ |  |
|-----------|---|--|
| Effective |   |  |
|           |   |  |

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.

20.2 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 21: NOTICES**

21.1 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       | :  |
|-----------------|--|
| with a cop      | py to:   |
| To PGE:         | Contracts Manager QF Contracts, 3WTCBR06 PGE - 121 SW Salmon St. Portland, Oregon 97204  |
|                 | e Parties may change the person to whom such notices are addressed, es, by providing written notices thereof in accordance with this Section |
|                 | ESS WHEREOF, the Parties hereto have caused this Agreement to be r respective names as of the Effective Date.                                |
| PGE             |  |
| Name:<br>Title: |  |

 $CREA-NIPPC-REC/202 & UM\___ / PGE / Exhibit 104\\ CREA-NIPPC-REC/202 & Macfarlane\\ Sanger/40 & Schedule 211\\ Standard Renewable Off System Non-Variable Power Purchase Agreement\\ Effective \_____$ 

| (Name Seller) |  |  |
|---------------|--|--|
| Ву:           |  |  |
| Name:         |  |  |
| Title:        |  |  |
| Data:         |  |  |

 $\frac{\text{CREA-NIPPC-REC/202}}{\text{Sanger/41}} \frac{\text{UM}\_\_/\text{PGE/Exhibit 104}}{\text{Macfarlane}} \\ \frac{\text{Sanger/41}}{\text{Schedule 211}}$  Standard Renewable Off System Non-Variable Power Purchase Agreement}

Effective \_\_\_\_\_

### 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.

 $CREA-NIPPC-REC/202 & UM\___ / PGE / Exhibit 104\\ CREA-NIPPC-REC/202 & Macfarlane\\ Sanger/42 & Schedule 211\\ Standard Renewable Off System Non-Variable Power Purchase Agreement\\ Effective \_____$ 

### EXHIBIT B DESCRIPTION OF SELLER'S FACILITY

[Seller to Complete]

 $CREA-NIPPC-REC/202 \\ Sanger/43 \\ Schedule 211 \\ Standard Renewable Off System Non-Variable Power Purchase Agreement \\ Effective \_\_\_\____$ 

### EXHIBIT C REQUIRED FACILITY DOCUMENTS

#### [Seller list all permits and authorizations required for this project]

Sellers Generation Interconnection Agreement with interconnecting utility

Firm Transmission Agreement between Seller and Transmission Provider

CREA-NIPPC-REC/202

Sanger/44

UM\_\_\_ / PGE / Exhibit 104 Macfarlane Schedule 211

Standard Renewable Off System Non-Variable Power Purchase Agreement Effective

#### EXHIBIT D START-UP TESTING

#### [Seller identify appropriate tests]

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

- 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:
- Alarms, signals, and fail-safe or system shutdown control tests: 4.
- 5. Insulation resistance and point-to-point continuity tests;
- 6. Bench tests of all protective devices;
- Tests required by manufacturer of equipment; and 7.
- 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;
- Synchronizing tests (manual and auto); 5.
- 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;
- Open circuit and short circuit; saturation tests; 12.
- 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.

CREA-NIPPC-REC/202

Sanger/45

Standard Renewable Off System Non-Variable Power Purchase Agreement Effective \_\_\_\_\_\_

EXHIBIT E
SCHEDULE
[Attach currently in-effect Schedule 211]

UM\_\_\_ / PGE / Exhibit 104 Macfarlane Page 46 Schedule 211

Standard Renewable In System Variable Resource Power Purchase Agreement Effective

#### STANDARD RENEWABLE IN SYSTEM VARIABLE RESOURCE POWER

#### **PURCHASE AGREEMENT**

| THIS AGREEMENT, entered into this day, 201 between ("Seller") and Portland General Company ("PGE") (hereinafter each a "Party" or collectively, "Parties").  | , is<br>Electric                  |
|--|-----------------------------------|
| RECITALS   |                                   |
| Seller intends to construct, own, operate and maintain a  for the generation of electric power located in with a Nameplate Capacity Rating of  ("kW"), as further described in Exhibit A ("Facility"); and | _ facility<br>County,<br>kilowati |
| Seller intends to operate the Facility as a "Qualifying Facility," as such defined in Section 3.1.3, below.  | term is                           |
| Seller shall sell and PGE shall purchase the entire Net Output, as such defined in Section 1.17, below, from the Facility in accordance with the ter conditions of this Agreement.                         |                                   |

#### <u>AGREEMENT</u>

NOW, THEREFORE, the Parties mutually agree as follows:

#### **SECTION 1: DEFINITIONS**

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

- 1.1. "As-built Supplement" means the supplement to Exhibit A provided by Seller in accordance with Section 4.3 following completion of construction of the Facility, describing the Facility as actually built.
- 1.2. "Base Hours" is defined as the total number of hours in each Contract Year (8,760 or 8,784 for leap year).
- 1.3. "Billing Period" means a period between PGE's readings of its power purchase billing meter at the Facility in the normal course of PGE's business. Such periods typically vary and may not coincide with calendar months.
- 1.4. "Cash Escrow" means an agreement by two parties to place money into the custody of a third party for delivery to a grantee only after the fulfillment of the conditions specified.

| Standard Renewable In System Variable | Resource Power Purchase Agreemer |
|---------------------------------------|----------------------------------|
|                                       | Effective                        |

- 1.5. "Commercial Operation Date" means the date that the Facility is deemed by PGE to be fully operational and reliable. PGE may, at its discretion, require, among other things, that all of the following events have occurred:
  - 1.5.1. (facilities with nameplate under 500 kW exempt from following requirement) PGE has received a certificate addressed to PGE from a Licensed Professional Engineer ("LPE") acceptable to PGE in its reasonable judgment stating that the Facility is able to generate electric power reliably in accordance with the terms and conditions of this Agreement (certifications required under this Section 1.5 can be provided by one or more LPEs);
  - 1.5.2. (facilities with nameplate under 500 kW exempt from following requirement) Start-Up Testing of the Facility has been completed in accordance with Section 1.26:
  - 1.5.3. (facilities with nameplate under 500 kW exempt from following requirement) After PGE has received notice of completion of Start-Up Testing, PGE has received a certificate addressed to PGE from an LPE stating that the Facility has operated for testing purposes under this Agreement 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;
  - 1.5.4. (facilities with nameplate under 500 kW exempt from following requirement) PGE has received a certificate addressed to PGE from an LPE stating that in accordance with the Generation Interconnection Agreement, all required interconnection facilities have been constructed all required interconnection tests have been completed; and the Facility is physically interconnected with PGE's electric system.
  - 1.5.5. PGE has received a certificate addressed to PGE from an LPE stating that Seller has obtained all Required Facility Documents and, if requested by PGE in writing, has provided copies of any or all such requested Required Facility Documents;
- 1.6. "Contract Price" means the applicable price, including on-peak and offpeak prices, as selected by Seller in Section 5 and as specified in the Schedule.
- 1.7. "Contract Year" means each twelve (12) month period during the Term commencing upon the Commercial Operation Date or its anniversary during the Term, except the final contract year will be the period from the last anniversary of the Commercial Operation Date during the Term until the end of the Term.
  - 1.8. "Effective Date" has the meaning set forth in Section 2.1.

UM\_\_\_ / PGE / Exhibit 104 Macfarlane Schedule 211

Standard Renewable In System Variable Resource Power Purchase Agreement

Effective

- "Environmental Attributes" means any and all current or future credits, 1.9. benefits, emissions reductions, environmental air quality credits, emissions reduction credits, offsets and allowances, howsoever entitled, resulting from the avoidance of the emission of any gas, chemical or other substance attributable to the Facility during the Term, or otherwise attributable to the generation, purchase, sale or use of energy from or by the Facility during the Term, including without limitation any of the same arising out of legislation or regulation concerned with oxides of nitrogen, sulfur or carbon, with particulate matter, soot or mercury, or implementing the United Nations Framework Convention on Climate Change (the "UNFCCC") or the Kyoto Protocol to the UNFCCC or crediting "early action" emissions reduction, or laws or regulations involving or administered by the Clean Air Markets Division of the Environmental Protection Agency or successor administrator, or any State or federal entity given jurisdiction over a program involving transferability of Environmental Attributes, including the Oregon Renewable Portfolio Standard, and any Green Tag Reporting Rights to such Environmental Attributes.
  - 1.10. "Facility" has the meaning set forth in the Recitals.
- 1.11. "Generation Interconnection Agreement" means the interconnection agreement to be entered into separately between Seller and PGE, providing for the construction, operation, and maintenance of PGE's interconnection facilities required to accommodate deliveries of Seller's Net Output.
- 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. "Mechanical Availability Percentage" or "MAP" shall mean that percentage for any Contract Year for the Facility calculated in accordance with the following formula:

#### MAP = 100 X (Operational Hours) / (Base Hours)

- 1.15. "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.
- 1.16. "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.

Standard Renewable In System Variable Resource Power Purchase Agreement Effective

- 1.17. "Net Output" means all energy expressed in kWhs produced by the Facility, less station and other onsite use and less transformation and transmission losses. Net Output does not include any environmental attributes, imbalance power, or power from an integrating entity.
  - 1.18. "Off-Peak Hours" has the meaning provided in the Schedule.
  - 1.19. "On-Peak Hours" has the meaning provided in the Schedule.
- 1.20. "Operational Hours" for the Facility means the number of hours the Facility is potentially capable of producing power at its Nameplate Capacity Rating regardless of actual weather or seasonal conditions and the time of day or night, without any mechanical operating constraint or restriction, and potentially capable of delivering such power to the Point of Delivery. Hours during which an event of Force Majeure exists that prevent the Facility from producing or delivering power shall be considered Operational Hours.
- 1.21. "Point of Delivery" means the high side of the generation step up transformer(s) located at the point of interconnection between the Facility and PGE's distribution or transmission system, as specified in the Generation Interconnection Agreement.
- 1.22. "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.
- 1.23. "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.
- 1.24. "Required Facility Documents" means all licenses, permits, authorizations, and agreements necessary for construction, operation, interconnection, and maintenance of the Facility including without limitation those set forth in Exhibit B.

Standard Renewable In System Variable Resource Power Purchase Agreement Effective

- 1.25. "Senior Lien" means a prior lien which has precedence as to the property under the lien over another lien or encumbrance.
- 1.26. "Start-Up Testing" means the completion of applicable required factory and start-up tests as set forth in Exhibit C.
- 1.27. "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.
- 1.28. "Schedule" shall mean PGE Schedule 211 filed with the Oregon Public Utilities Commission ("Commission") in effect on the Effective Date of this Agreement and attached hereto as Exhibit D, the terms of which are hereby incorporated by reference. In the event of a conflict between this Agreement and the Schedule, this Agreement shall apply.
- 1.29. "Term" shall mean the period beginning on the Effective Date and ending on the Termination Date.
- 1.30. "Test Period" shall mean a period of sixty (60) days or a commercially reasonable period determined by the Seller.

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

#### SECTION 2: TERM; COMMERCIAL OPERATION DATE

- 2.1 This Agreement shall become effective upon execution by both Parties ("Effective Date").
- 2.2 Time is of the essence of this Agreement, and Seller's ability to meet certain requirements prior to the Commercial Operation Date and to complete all requirements to establish the Commercial Operation Date is critically important. Therefore,
  - 2.2.1 By \_\_\_\_\_ [date to be determined by the Seller] Seller shall begin initial deliveries of Net Output; and
  - 2.2.2 By \_\_\_\_\_ [date to be determined by the Seller] Seller shall have completed all requirements under Section 1.5 and shall have established the Commercial Operation Date.
  - 2.2.3 In the event Seller is unable to meet the requirements of Sections 2.2.1 and 2.2.2, PGE may terminate this agreement in accordance with Section 10.
- 2.3 This Agreement shall terminate on \_\_\_\_\_\_, \_\_\_\_ [date to be chosen by Seller], up to 20 years from the Effective Date, or the date the Agreement is

UM\_\_\_ / PGE / Exhibit 104 Macfarlane Page 51 Schedule 211

Standard Renewable In System Variable Resource Power Purchase Agreement

| <br> | - , | <br>      | 3 |
|------|-----|-----------|---|
|      |     | Effective |   |
|      |     |           |   |

terminated in accordance with Section 10 or 12, whichever is earlier ("Termination Date").

#### **SECTION 3: REPRESENTATIONS AND WARRANTIES**

Seller and PGE represent, covenant, and warrant as follows:

3.1

|       | _                       |                               |
|-------|-------------------------|-------------------------------|
| 3.1.1 | Seller warrants it is a | duly organized under the laws |
| of    |                         | , ,                           |

- 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 kW.

UM / PGE / Exhibit 104 Macfarlane Schedule 211

Standard Renewable In System Variable Resource Power Purchase Agreement Effective

| 3.1.9        | Seller estimates | that the | average a   | annua  | l Net Ou  | utput to | be d | elivere | ec |
|--------------|------------------|----------|-------------|--------|-----------|----------|------|---------|----|
| v the Feeili | ty to DCE io     |          | kilovyott b | aura / | ("L\\/b"\ | which    |      | int DC  | ٦, |

- by the Facility to PGE is \_\_\_\_\_ kilowatt-hours ("kWh"), which amount PGE will include in its resource planning.
- Seller represents and warrants that the Facility shall achieve the following Mechanical Availability Percentages ("Guarantee of Mechanical Availability"):
  - 3.1.10.1 Ninety-one percent (91%) for the first Contract Year; and
  - Ninety-five percent (95%) beginning Contract Year 3.1.10.2 two and extending throughout the remainder of the Term.
  - 3.1.10.3 Annually, within 90 days of the end of each Contract Year Seller shall send to PGE a detailed written report demonstrating and providing evidence of the actual MAP for the previous Contract Year.
- Seller will deliver from the Facility to PGE at the Point of Delivery 3.1.11 Net Output not to exceed a maximum of kWh of Net Output during each Contract Year ("Maximum Net Output").
- 3.1.12 Seller has entered into a Generation Interconnection Agreement for a term not less than the term of this Agreement.
- 3.1.13 PGE warrants that it has not within the past two (2) years been the debtor in any bankruptcy proceeding, and PGE is and will continue to be for the Term of this Agreement current on all of its financial obligations.
- 3.1.14 Seller warrants that (i) the Facility satisfies the eligibility requirements specified in the Definition of a Small Cogeneration Facility or Small Power Production Facility Eligible to Receive the Standard Renewable Rates and Standard Renewable PPA in PGE's Schedule and (ii) Seller will not make any changes in its ownership, control or management during the term of this Agreement that would cause it to not be in compliance with the Definition of a Small Cogeneration Facility or Small Power Production Facility Eligible to Receive the Standard Renewable Rates and Standard Renewable PPA in PGE's Schedule. Seller will provide, upon request by Buyer 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. Buyer 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 Buyer will provide all such confidential information to the Public Utility Commission of Oregon upon the Commission's request.
- 3.1.15 Seller warrants that it will comply with all requirements necessary for all renewable energy credits associated with Net Output to be issued, monitored, accounted for, and transferred by and through the Western

UM\_\_\_/ PGE / Exhibit 104 Macfarlane Page 53 Schedule 211

Standard Renewable In System Variable Resource Power Purchase Agreement Effective

Renewable Energy Generation Information System consistent with the provisions

#### SECTION 4: DELIVERY OF POWER AND ENVIRONMENTAL ATTRIBUTES

of OAR 330-160-0005 through OAR 330-160-0050.

- 4.1 Commencing on the Effective Date and continuing through the Term of this Agreement, Seller shall sell to PGE the entire Net Output delivered from the Facility at the Point of Delivery.
  - 4.2 PGE shall pay Seller the Contract Price for all delivered Net Output.
- 4.3 Upon completion of construction of the Facility, Seller shall provide PGE an As-built Supplement to specify the actual Facility as built. Seller shall not increase the Nameplate Capacity Rating above that specified in Exhibit A or increase the ability of the Facility to deliver Net Output in quantities in excess of the Net Dependable Capacity, or the Maximum Net Output as described in Section 3.1.11 above, through any means including, but not limited to, replacement, modification, or addition of existing equipment, except with prior written notice to PGE. In the event Seller increases the Nameplate Capacity Rating of the Facility to no more than 10,000 kW pursuant to this section, PGE shall pay the Contract Price for the additional delivered Net Output. In the event Seller increases the Nameplate Capacity Rating to greater than 10,000 kW, then Seller shall be required to enter into a new power purchase agreement for all delivered Net Output proportionally related to the increase of Nameplate Capacity above 10,000 kW.
- 4.4 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 Parties' respective representatives shall maintain accurate dynamic schedule coordination; provided, however, that in the absence of such coordination, the schedule established by the exchange of preschedules shall be considered final. The final schedule shall be provided by Seller to PGE no later than 20 minutes prior to delivery for the first 30 minutes of an hour (e.g., 1:00 to 1:30) and 15 minutes prior to delivery for the second 30 minutes of the hour (e.g., 1:30 to 2:00). Seller and PGE shall maintain records of energy schedules for delivery for accounting and operating purposes. The final E-Tag shall be the controlling evidence of the Parties' schedule. Seller shall be obligated to meet a certain minimum scheduling accuracy level which shall measure the level of variation between the final schedule(s) for the applicable interval and the Net Output delivered for that same interval. The actual final schedules provided by Seller shall meet or exceed the scheduling accuracy level of 30-Minute Persistence Scheduling. For purposes of this section, the accuracy level of 30-Minute Persistence Scheduling is the accuracy level that would be achieved if Seller's final schedule(s) for the next schedule interval is the Seller's instantaneous actual generation from the Facility 30 minutes prior. For example, under 30-Minute Persistence Scheduling, the Seller's schedule for 2:00 to 2:30 is the Seller's Facility's actual instantaneous generation at 1:30 and the Seller's schedule for 2:30 to 3:00 is the Seller's Facility's actual instantaneous generation at 2:00. Seller shall maintain a minimum of two years records of Net Output and shall agree to allow PGE to have access to such records.

 $\frac{\text{CREA-NIPPC-REC/202}}{\text{Sanger/54}} \\ \frac{\text{Sanger/54}}{\text{Schedule 211}} \\ \text{Standard Renewable In System Variable Resource Power Purchase Agreement Effective} \\ \\ \frac{\text{UM}_{-}}{\text{Page 54}} \\ \text{Schedule 211} \\ \text{Schedule 211} \\ \text{Effective} \\ \\ \\ \text{Sanger/54} \\ \text{Schedule 211} \\ \text{Sanger/54} \\$ 

- 4.5 To the extent not otherwise provided in the Generation Interconnection Agreement, all costs associated with the modifications to PGE's interconnection facilities or electric system occasioned by or related to the interconnection of the Facility with PGE's system, or any increase in generating capability of the Facility, or any increase of delivery of Net Dependable Capacity from the Facility, shall be borne by Seller.
- 4.6 Commencing on the Effective Date and continuing through the Term of this Agreement, Seller shall provide and PGE shall acquire the Environmental Attributes for the Contract Years specified in the Schedule. The Contract Price includes full payment for the Net Output and any Environmental Attributes transferred to PGE under this Agreement. With respect to Environmental Attributes not transferred to PGE under this Agreement ("Seller-Retained RECs") 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 RECs, and PGE shall not report under such program that such Seller-Retained RECs belong to it. With respect to Environmental 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: CONTRACT PRICE**

PGE shall pay Seller for the price options 5.1, 5.2, 5.3 or 5.4, as selected below, pursuant to the Schedule. Seller shall indicate which price option it chooses by marking its choice below with an X. If Seller chooses the option in Section 5.1, it must mark below with a second X a single second option from Section 5.2, 5.3, or 5.4 for all Contract Years in excess of 15 until the end of the Term. Except as provided herein, Sellers selection is for the Term and shall not be changed during the Term.

| 5.1 Renewable Fixed Price for Varia | able Resources |
|-------------------------------------|----------------|
| 5.2 Deadband Index Gas Price        |                |
| 5.3 Index Gas Price                 |                |
| 5.4 Mid-C Index Rate Price          |                |

2 Macfarlane
5 Schedule 211

Standard Renewable In System Variable Resource Power Purchase Agreement Effective

#### **SECTION 6: OPERATION AND CONTROL**

- 6.1 Seller shall operate and maintain the Facility in a safe manner in accordance with the Generation Interconnection Agreement, and Prudent Electrical Practices. PGE shall have no obligation to purchase Net Output from the Facility to the extent the interconnection of the Facility to PGE's electric system is disconnected, suspended or interrupted, in whole or in part, pursuant to the Generation Interconnection Agreement, or to the extent generation curtailment is required as a result of Seller's noncompliance with the Generation Interconnection Agreement. Seller is solely responsible for the operation and maintenance of the Facility. PGE shall not, by reason of its decision to inspect or not to inspect the Facility, or by any action or inaction taken with respect to any such inspection, assume or be held responsible for any liability or occurrence arising from the operation and maintenance by Seller of the Facility.
- 6.2 Seller agrees to provide sixty (60) days advance written notice of any scheduled maintenance that would require shut down of the Facility for any period of time.
- 6.3 If the Facility ceases operation for unscheduled maintenance, Seller immediately shall notify PGE of the necessity of such unscheduled maintenance, the time when such maintenance has occurred or will occur, and the anticipated duration of such maintenance. Seller shall take all reasonable measures and exercise its best efforts to avoid unscheduled maintenance, to limit the duration of such unscheduled maintenance, and to perform unscheduled maintenance during Off-Peak hours.

#### SECTION 7: CREDITWORTHINESS

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

UM\_\_\_ / PGE / Exhibit 104 Macfarlane Page 56 Schedule 211

Standard Renewable In System Variable Resource Power Purchase Agreement Effective

#### **SECTION 8: METERING**

- 8.1 PGE shall design, furnish, install, own, inspect, test, maintain and replace all metering equipment at Seller's cost and as required pursuant to the Generation Interconnection Agreement.
- 8.2 Metering shall be performed at the location and in a manner consistent with this Agreement and as specified in the Generation Interconnection Agreement. All Net Output purchased hereunder shall be adjusted to account for electrical losses, if any, between the point of metering and the Point of Delivery, so that the purchased amount reflects the net amount of power flowing into PGE's system at the Point of Delivery.
- 8.3 PGE shall periodically inspect, test, repair and replace the metering equipment as provided in the Generation Interconnection Agreement. If any of the inspections or tests discloses an error exceeding two (2%) percent of the actual energy delivery, either fast or slow, proper correction, based upon the inaccuracy found, shall be made of previous readings for the actual period during which the metering equipment rendered inaccurate measurements if that period can be ascertained. If the actual period cannot be ascertained, the proper correction shall be made to the measurements taken during the time the metering equipment was in service since last tested, but not exceeding three (3) months, in the amount the metering equipment shall have been shown to be in error by such test. Any correction in billings or payments resulting from a correction in the meter records shall be made in the next monthly billing or payment rendered. Such correction, when made, shall constitute full adjustment of any claim between Seller and PGE arising out of such inaccuracy of metering equipment.
- 8.4 To the extent not otherwise provided in the Generation Interconnection Agreement, all of PGE's costs relating to all metering equipment installed to accommodate Seller's Facility shall be borne by Seller.

#### SECTION 9: BILLINGS, COMPUTATIONS AND PAYMENTS

- 9.1 On or before the thirtieth (30th) day following the end of each Billing Period, PGE shall send to Seller payment for Seller's deliveries of Net Output to PGE, together with computations supporting such payment. PGE may offset any such payment to reflect amounts owing from Seller to PGE pursuant to this Agreement, the Generation Interconnection Agreement, and any other agreement related to the Facility between the Parties or otherwise.
- 9.2 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.

UM\_\_\_ / PGE / Exhibit 104 Macfarlane Page 57 Schedule 211

Standard Renewable In System Variable Resource Power Purchase Agreement Effective

#### SECTION 10: DEFAULT, REMEDIES AND TERMINATION

- 10.1 In addition to any other event that may constitute a default under this Agreement, the following events shall constitute defaults under this Agreement:
  - 10.1.1 Breach by Seller or PGE of a representation or warranty, except for Section 3.1.4, set forth in this Agreement.
  - 10.1.2 Seller's failure to provide default security, if required by Section 7, prior to delivery of any Net Output to PGE or within 10 days of notice.
  - 10.1.3 Seller's failure to meet the MAP established in Section 3.1.10 Guarantee of Mechanical Availability for any single Contract Year or Seller's failure to provide any written report required by that section.
    - 10.1.4 If Seller is no longer a Qualifying Facility.
  - 10.1.5 Failure of PGE to make any required payment pursuant to Section 9.1.
- 10.2 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 10.1.3 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 21. The rights provided in this Section 10 are cumulative such that the exercise of one or more rights shall not constitute a waiver of any other rights.
- 10.3 If this Agreement is terminated as provided in this Section 10 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.
- 10.4 In the event PGE terminates this Agreement pursuant to this Section 10, 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.
- 10.5 Sections 10.1, 10.3, 10.4, 11, and 20.2 shall survive termination of this Agreement.

#### SECTION 11: INDEMNIFICATION AND LIABILITY

UM\_\_\_ / PGE / Exhibit 104 Macfarlane Page 58 Schedule 211

Standard Renewable In System Variable Resource Power Purchase Agreement

| ٠. | • | ۵.  | 011400 | • | ٠9. | - | • • • | ٠. | ••• |
|----|---|-----|--------|---|-----|---|-------|----|-----|
|    | E | ffe | ctive  |   |     |   |       |    |     |

- Seller agrees to defend, indemnify and hold harmless PGE, its directors, 11.1 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.
- 11.2 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.
- 11.3 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.
- 11.4 NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR SPECIAL, PUNITIVE, INDIRECT OR CONSEQUENTIAL DAMAGES, WHETHER ARISING FROM CONTRACT. TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY OTHERWISE.

#### **SECTION 12: INSURANCE**

Prior to the connection of the Facility to PGE's electric system, provided 12.1 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 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

UM / PGE / Exhibit 104 Macfarlane Page 59 Schedule 211

Standard Renewable In System Variable Resource Power Purchase Agreement

| • |      |        | • | .a. | _ | • | • • • | <br>• |
|---|------|--------|---|-----|---|---|-------|-------|
|   | Effe | ective |   |     |   |   |       |       |

be required to be increased or decreased by PGE as PGE determines in its reasonable judgment economic conditions or claims experience may warrant.

- 12.2 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.
- 12.3 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 13: FORCE MAJEURE

- 13.1 As used in this Agreement, "Force Majeure" or "an event of Force Majeure" means any cause beyond the reasonable control of the Seller or of PGE which, despite the exercise of due diligence, such Party is unable to prevent or overcome. By way of example, Force Majeure may include but is not limited to acts of God, fire, flood, storms, wars, hostilities, civil strife, strikes, and other labor disturbances, earthquakes, fires, lightning, epidemics, sabotage, restraint by court order or other delay or failure in the performance as a result of any action or inaction on behalf of a public authority which by the exercise of reasonable foresight such Party could not reasonably have been expected to avoid and by the exercise of due diligence, it shall be unable to overcome, subject, in each case, to the requirements of the first sentence of this paragraph. Force Majeure, however, specifically excludes the cost or availability of resources to operate the Facility, changes in market conditions that affect the price of energy or transmission, wind or water droughts, and obligations for the payment of money when due.
- 13.2 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

UM\_\_\_ / PGE / Exhibit 104 Macfarlane Page 60 Schedule 211

Standard Renewable In System Variable Resource Power Purchase Agreement

| Effective |  |
|-----------|--|

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:

- 13.2.1 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
- 13.2.2 the suspension of performance shall be of no greater scope and of no longer duration than is required by the Force Majeure; and
- 13.2.3 the non-performing Party uses its best efforts to remedy its inability to perform its obligations under this Agreement.
- 13.3 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.
- 13.4 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 14: 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 15: 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 16: 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.

UM\_\_\_ / PGE / Exhibit 104 Macfarlane Page 61 Schedule 211

Standard Renewable In System Variable Resource Power Purchase Agreement

| Effective |  |
|-----------|--|

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

#### **SECTION 17: 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 18: 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 19: SUCCESSORS AND ASSIGNS

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

#### **SECTION 20: ENTIRE AGREEMENT**

- 20.1 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.
- 20.2 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 21: NOTICES**

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:

UM\_\_\_ / PGE / Exhibit 104 Page 62

CREA-NIPPC-REC/202 Macfarlane Schedule 211 Sanger/62 Standard Renewable In System Variable Resource Power Purchase Agreement Effective \_\_\_\_\_ with a copy to: To PGE: Contracts Manager QF Contracts, 3WTCBR06 PGE - 121 SW Salmon St. Portland, Oregon 97204 21.2 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 IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed in their respective names as of the Effective Date.

**PGE** Name: \_\_\_\_\_ Title: Date: (Name Seller) By: \_\_\_\_\_ Name: \_\_\_\_\_ Title:

21.

## EXHIBIT A DESCRIPTION OF SELLER'S FACILITY

[Seller to Complete]

 $CREA-NIPPC-REC/202 & UM\___/ PGE / Exhibit 104\\ Sanger/64 & Sanger/64 & Schedule 211\\ Standard Renewable In System Variable Resource Power Purchase Agreement Effective _______$ 

### EXHIBIT B REQUIRED FACILITY DOCUMENTS

#### [Seller list all permits and authorizations required for this project]

Sellers Generation Interconnection Agreement

UM\_\_\_ / PGE / Exhibit 104 Macfarlane Schedule 211

Standard Renewable In System Variable Resource Power Purchase Agreement

| • |      |        | • | .a. | _ | • | • • • | <br>• |
|---|------|--------|---|-----|---|---|-------|-------|
|   | Effe | ective |   |     |   |   |       |       |

#### **EXHIBIT C** START-UP TESTING

#### [Seller identify appropriate tests]

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

- 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:
- Alarms, signals, and fail-safe or system shutdown control tests: 4.
- 5. Insulation resistance and point-to-point continuity tests;
- 6. Bench tests of all protective devices;
- Tests required by manufacturer of equipment; and 7.
- 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;
- Synchronizing tests (manual and auto); 5.
- 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;
- Governor system steady state stability test; 13.
- Phase angle and magnitude of all PT and CT secondary voltages and 14. currents to protective relays, indicating instruments and metering;
- 15. Auto stop/start sequence:
- Level control system tests; and 16.
- 17. Completion of all state and federal environmental testing requirements

 $CREA-NIPPC-REC/202 & UM\___ / PGE / Exhibit 104\\ CREA-NIPPC-REC/202 & Macfarlane\\ Sanger/66 & Schedule 211\\ Standard Renewable In System Variable Resource Power Purchase Agreement Effective <math>\_\_\_$ 

EXHIBIT D SCHEDULE [Attach currently in-effect Schedule 211]

CREA-NIPPC-REC/202

Sanger/67

UM\_\_\_ / PGE / Exhibit 104 Macfarlane Page 67 Schedule 211

Standard Renewable Off System Integrated Variable Resource Power Purchase Agreement

### Effective \_\_\_\_\_

# STANDARD RENEWABLE OFF SYSTEM INTEGRATED VARIABLE RESOURCE POWER PURCHASE AGREEMENT

| THIS AGREEMENT, entered into this day, 201_between ("Seller") and Portland General E Company ("PGE") (hereinafter each a "Party" or collectively, "Parties").                         | , is<br>Electric                |
|---|---------------------------------|
| RECITALS  |                                 |
| for the generation of electric power located inC  | facility<br>County,<br>kilowatt |
| Seller intends to operate the Facility as a "Qualifying Facility," as such t defined in Section 3.1.3, below.   | erm is                          |
| Seller shall sell and PGE shall purchase the entire Net Output, as such t defined in Section 1.17, below, from the Facility in accordance with the term conditions of this Agreement. |                                 |

#### <u>AGREEMENT</u>

NOW, THEREFORE, the Parties mutually agree as follows:

#### **SECTION 1: DEFINITIONS**

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

- 1.1. "As-built Supplement" means the supplement to Exhibit A provided by Seller in accordance with Section 4.3 following completion of construction of the Facility, describing the Facility as actually built.
- 1.2. "Base Hours" is defined as the total number of hours in each Contract Year (8,760 or 8,784 for leap year).
- 1.3. "Billing Period" means a period between PGE's readings of its power purchase billing meter at the Facility in the normal course of PGE's business. Such periods typically vary and may not coincide with calendar months.
- 1.4. "Cash Escrow" means an agreement by two parties to place money into the custody of a third party for delivery to a grantee only after the fulfillment of the conditions specified.

Standard Renewable Off System Integrated Variable Resource Power Purchase Agreement Effective

1.5. "Commercial Operation Date" means the date that the Facility is deemed by PGE to be fully operational and reliable. PGE may, at its discretion require, among other things, that all of the following events have occurred:

- 1.5.1. (facilities with nameplate under 500 kW exempt from following requirement) PGE has received a certificate addressed to PGE from a Licensed Professional Engineer ("LPE") acceptable to PGE in its reasonable judgment stating that the Facility is able to generate electric power reliably in accordance with the terms and conditions of this Agreement (certifications required under this Section 1.5 can be provided by one or more LPEs);
- 1.5.2. Start-Up Testing of the Facility has been completed in accordance with Section 1.26;
- 1.5.3. (facilities with nameplate under 500 kW exempt from following requirement) After PGE has received notice of completion of Start-Up Testing, PGE has received a certificate addressed to PGE from an LPE stating that the Facility has operated for testing purposes under this Agreement 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;
- 1.5.4. (facilities with nameplate under 500 kW exempt from following requirement) PGE has received a certificate addressed to PGE from an LPE stating that all required interconnection facilities have been constructed and all required interconnection tests have been completed;
- 1.5.5. 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;
  - 1.5.6. PGE has received a copy of the Transmission Agreement.
- 1.6. "Contract Price" means the applicable price, including on-peak and offpeak prices, as selected by Seller in Section 5 and as specified in the Schedule.
- 1.7. "Contract Year" means each twelve (12) month period commencing upon the Commercial Operation Date or its anniversary during the Term, except the final contract year will be the period from the last anniversary of the Commercial Operation Date during the Term until the end of the Term.
  - 1.8. "Effective Date" has the meaning set forth in Section 2.1.

CREA-NIPPC-REC/202 Macfarlane
Sanger/69 Schedule 211

UM\_\_\_\_ / PGE / Exhibit 104

Standard Renewable Off System Integrated Variable Resource Power Purch

| dard Renewable Oil System Integrated | variable Resource Power | Purchase Agreement |
|--------------------------------------|-------------------------|--------------------|
|                                      |                         | Effective          |

- "Environmental Attributes" means any and all current or future credits, 1.9. benefits, emissions reductions, environmental air quality credits, emissions reduction credits, offsets and allowances, howsoever entitled, resulting from the avoidance of the emission of any gas, chemical or other substance attributable to the Facility during the Term, or otherwise attributable to the generation, purchase, sale or use of energy from or by the Facility during the Term, including without limitation any of the same arising out of legislation or regulation concerned with oxides of nitrogen, sulfur or carbon, with particulate matter, soot or mercury, or implementing the United Nations Framework Convention on Climate Change (the "UNFCCC") or the Kyoto Protocol to the UNFCCC or crediting "early action" emissions reduction, or laws or regulations involving or administered by the Clean Air Markets Division of the Environmental Protection Agency or successor administrator, or any State or federal entity given jurisdiction over a program involving transferability of Environmental Attributes, including the Oregon Renewable Portfolio Standard, and any Green Tag Reporting Rights to such Environmental Attributes.
  - 1.10. "Facility" has the meaning set forth in the Recitals.
- 1.11. "Generation Interconnection Agreement" means an agreement governing the interconnection of the Facility with \_\_\_\_\_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. "Mechanical Availability Percentage" or "MAP" shall mean that percentage for any Contract Year for the Facility calculated in accordance with the following formula:

#### MAP = 100 X (Operational Hours) / (Base Hours)

- 1.15. "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.
- 1.16. "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.
- 1.17. "Net Output" means all energy expressed in kWhs produced by the Facility, less station and other onsite use and less transformation and transmission

UM\_\_\_ / PGE / Exhibit 104 Macfarlane Schedule 211

Standard Renewable Off System Integrated Variable Resource Power Purchase Agreement

Effective

losses. Net Output does not include any environmental attributes, imbalance power, or power from an integrating entity.

- 1.18. "Off-Peak Hours" has the meaning provided in the Schedule.
- 1.19. "On-Peak Hours" has the meaning provided in the Schedule.
- 1.20. "Operational Hours" for the Facility means the number of hours the Facility is potentially capable of producing power at its Nameplate Capacity Rating regardless of actual weather conditions, season and the time of day or night, without any mechanical operating constraint or restriction, and potentially capable of delivering such power to the Point of Delivery. Hours during which an event of Force Majeure exists that prevent the Facility from producing or delivering power shall be considered Operational Hours.
  - 1.21. "Point of Delivery" means the PGE System.
- 1.22. "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.
- 1.23. "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.
- 1.24. "Required Facility Documents" means all licenses, permits, authorizations. and agreements necessary for construction, operation, interconnection, maintenance of the Facility including without limitation those set forth in Exhibit B.
- 1.25. "Senior Lien" means a prior lien which has precedence as to the property under the lien over another lien or encumbrance.
- 1.26. "Start-Up Testing" means the completion of applicable required factory and start-up tests as set forth in Exhibit C.

UM\_\_\_ / PGE / Exhibit 104 Macfarlane Schedule 211

Standard Renewable Off System Integrated Variable Resource Power Purchase Agreement

Effective

- 1.27. "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.
- 1.28. "Schedule" shall mean PGE Schedule 211 filed with the Oregon Public Utilities Commission ("Commission") in effect on the Effective Date of this Agreement and attached hereto as Exhibit D, the terms of which are hereby incorporated by reference. In the event of a conflict between this Agreement and the Schedule, this Agreement shall apply.
- 1.29. "Term" shall mean the period beginning on the Effective Date and ending on the Termination Date.
- 1.30. "Test Period" shall mean a period of sixty (60) days or a commercially reasonable period determined by the Seller.
- 1.31. "Transmission Agreement" means an agreement executed by the Seller and the Transmission Provider(s) for Transmission Services.
- 1.32. "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 or a generating facility limitation by a Transmission Provider (for any reason other than Force Majeure).
- 1.33. "Transmission Curtailment Replacement Energy Cost" means the greater of zero or the amount calculated as: ((Dow Jones Mid C Index Price - Contract Price) X curtailed energy) for periods of Transmission Curtailment.
- 1.34. "Transmission Provider(s)" means the signatory (other than the Seller) to the Transmission Agreement.
- 1.35. "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.

#### SECTION 2: TERM; COMMERCIAL OPERATION DATE

2.1 This Agreement shall become effective upon execution by both Parties ("Effective Date").

UM\_\_\_ / PGE / Exhibit 104 Macfarlane Page 72 Schedule 211

Standard Renewable Off System Integrated Variable Resource Power Purchase Agreement Effective \_\_\_\_\_

| 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 [date to be determined by the Seller] Seller shall begin initial deliveries of Net Output; and  |
| 2.2.2 By [date to be determined by the Seller] Seller shall have completed all requirements under Section 1.5 and shall have established the Commercial Operation Date.  |
| 2.2.3 In the event Seller is unable to meet the requirements of Sections 2.2.1 and 2.2.2, PGE may terminate this agreement in accordance with Section 9.   |
| 2.3 This Agreement shall terminate on, [date to be chosen by Seller], up to 20 years from the Effective Date, or the date the Agreement is terminated in accordance with Section 9 or 12, 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 duly organized under the laws of   |
| 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 |

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.

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.

/ PGE / Exhibit 104 UM CREA-NIPPC-REC/202 Macfarlane Schedule 211

Effective

Sanger/73 Standard Renewable Off System Integrated Variable Resource Power Purchase Agreement

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 thirdparty 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
- 3.1.9 Seller estimates that the average annual Net Output to be delivered by the Facility to PGE is \_\_\_\_\_ kilowatt-hours ("kWh"), which amount PGE will include in its resource planning.
- Seller represents and warrants that the Facility shall achieve the 3.1.10 following Mechanical Availability Percentages ("Guarantee of Mechanical Availability"):
  - 3.1.10.1 Ninety-one percent (91%) for the first Contract Year; and
  - 3.1.10.2 Ninety-five percent (95%) beginning Contract Year two and extending throughout the remainder of the Term.
  - 3.1.10.3 Annually, within 90 days of the end of each Contract Year, Seller shall send to PGE a detailed written report demonstrating and providing evidence of the actual MAP for the previous Contract Year.
- Seller will deliver from the Facility to PGE at the Point of Delivery Net Output not to exceed a maximum of \_\_\_\_\_ 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.
- Seller has entered into a Generation Interconnection Agreement for a term not less than the term of this Agreement.
- 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.

UM\_\_\_ / PGE / Exhibit 104 Macfarlane Page 74 Schedule 211

Standard Renewable Off System Integrated Variable Resource Power Purchase Agreement

3.1.14 Seller warrants that (i) the Facility satisfies the eligibility

- requirements specified in the Definition of a Small Cogeneration Facility or Small Power Production Facility Eligible to Receive the Standard Renewable Rates and Standard Renewable PPA in PGE's Schedule and (ii) Seller will not make any changes in its ownership, control or management during the term of this Agreement that would cause it to not be in compliance with the Definition of a Small Cogeneration Facility or Small Power Production Facility Eligible to Receive the Standard Renewable Rates and Standard Renewable PPA in PGE's Schedule. Seller will provide, upon request by Buyer 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. Buyer 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 Buyer will provide all such confidential information to the Public Utility Commission of Oregon upon the Commission's request.
- 3.1.15 Seller warrants that it will comply with all requirements necessary for all renewable energy credits associated with Net Output to be issued, monitored, accounted for, and transferred by and through the Western Renewable Energy Generation Information System consistent with the provisions of OAR 330-160-0005 through OAR 330-160-0050.

### SECTION 4: DELIVERY OF POWER AND ENVIRONMENTAL ATTRIBUTES

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

UM\_\_\_ / PGE / Exhibit 104 Macfarlane Page 75 Schedule 211

Standard Renewable Off System Integrated Variable Resource Power Purchase Agreement

| • |           | • | .g |  |
|---|-----------|---|----|--|
|   | Effective |   |    |  |

- 4.4 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 Parties' respective representatives shall maintain hourly real-time schedule coordination; provided, however, that in the absence of such coordination, the schedule established by the exchange of preschedules shall be considered final. Seller and PGE shall maintain records of energy schedules for accounting and operating purposes. Deliveries shall not be made on a dynamic basis, and Seller shall insure that all deliveries of energy under this Agreement will be equal on an hourly basis to the amounts scheduled in the final schedule. Seller shall bear the cost of any transmission services, including but not limited to imbalance services, necessary to insure that energy deliveries under this Agreement are equal on an hourly basis to the amount of energy scheduled for each hour in the final schedule. The final schedule shall be provided by Seller to PGE no later than 20 minutes prior to delivery for the first 30 minutes of an hour (e.g., 1:00 to 1:30) and 15 minutes prior to delivery for the second 30 minutes of the hour (e.g. 1:30 to 2:00). The final E-Tag shall be the controlling evidence of the Parties' final schedule. 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.
- 4.5 Commencing on the Effective Date and continuing through the Term of this Agreement, Seller shall provide and PGE shall acquire the Environmental Attributes for the Contract Years specified in the Schedule. The Contract Price includes full payment for the Net Output and any Environmental Attributes transferred to PGE under this Agreement. With respect to Environmental Attributes not transferred to PGE under this Agreement ("Seller-Retained RECs") 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 RECs, and PGE shall not report under such program that such Seller-Retained RECs belong to it. With respect to Environmental 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: CONTRACT PRICE**

PGE shall pay Seller for the price options 5.1, 5.2, 5.3 or 5.4, as selected below, pursuant to the Schedule. Seller shall indicate which price option it chooses by marking its choice below with an X. If Seller chooses the option in Section 5.1, it must mark below with a second X a single second option from Section 5.2, 5.3, or 5.4 for all Contract Years in excess of 15 until the end of the Term. Except as provided herein, Sellers selection is for the Term and shall not be changed during the Term.

| 5.1       | <br>Renewable Fix | ced Price fo | or Non | Variable o | r Integrated | Variable |
|-----------|-------------------|--------------|--------|------------|--------------|----------|
| Resources |                   |              |        |            |              |          |

UM\_\_\_ / PGE / Exhibit 104 Macfarlane Page 76 Schedule 211

Standard Renewable Off System Integrated Variable Resource Power Purchase Agreement Effective

| 5.2 | Deadband Index Gas Price |
|-----|--------------------------|
| 5.3 | Index Gas Price          |
| 5.4 | Mid-C Index Rate Price   |

#### SECTION 6: OPERATION AND CONTROL

- 6.1 Seller shall operate and maintain the Facility in a safe manner in accordance with the Generation Interconnection Agreement, and Prudent Electrical Practices. PGE shall have no obligation to purchase Net Output from the Facility to the extent the interconnection of the Facility to PGE's electric system is disconnected, suspended or interrupted, in whole or in part, pursuant to the Generation Interconnection Agreement, or to the extent generation curtailment is required as a result of Seller's noncompliance with the Generation Interconnection Agreement. Seller is solely responsible for the operation and maintenance of the Facility. PGE shall not, by reason of its decision to inspect or not to inspect the Facility, or by any action or inaction taken with respect to any such inspection, assume or be held responsible for any liability or occurrence arising from the operation and maintenance by Seller of the Facility.
- 6.2 Seller agrees to provide sixty (60) days advance written notice of any scheduled maintenance that would require shut down of the Facility for any period of time.
- 6.3 If the Facility ceases operation for unscheduled maintenance, Seller immediately shall notify PGE of the necessity of such unscheduled maintenance, the time when such maintenance has occurred or will occur, and the anticipated duration of such maintenance. Seller shall take all reasonable measures and exercise its best efforts to avoid unscheduled maintenance, to limit the duration of such unscheduled maintenance, and to perform unscheduled maintenance during Off-Peak hours.

UM\_\_\_ / PGE / Exhibit 104 Macfarlane Page 77 Schedule 211

Standard Renewable Off System Integrated Variable Resource Power Purchase Agreement Effective

#### SECTION 7: CREDITWORTHINESS

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

#### SECTION 8: BILLINGS, COMPUTATIONS AND PAYMENTS

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

#### SECTION 9: DEFAULT, REMEDIES AND TERMINATION

- 9.1 In addition to any other event that may constitute a default under this Agreement, the following events shall constitute defaults under this Agreement:
  - 9.1.1 Breach by Seller or PGE of a representation or warranty, except for Section 3.1.4, set forth in this Agreement.
  - 9.1.2 Seller's failure to provide default security, if required by Section 7, prior to delivery of any Net Output to PGE or within 10 days of notice.
  - 9.1.3 Seller's failure to meet the MAP established in Section 3.1.10 Guarantee of Mechanical Availability for any single Contract Year or Seller's failure to provide any written report required by that section.
    - 9.1.4 If Seller is no longer a Qualifying Facility.
  - 9.1.5 Failure of PGE to make any required payment pursuant to Section 8.1.

\_ / PGE / Exhibit 104 Macfarlane Page 78 Schedule 211

Standard Renewable Off System Integrated Variable Resource Power Purchase Agreement

Effective

UM\_\_

- In the event of a default hereunder, the non-defaulting party may 9.2 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 9.1.3 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 21. The rights provided in this Section 9 are cumulative such that the exercise of one or more rights shall not constitute a waiver of any other rights.
- If this Agreement is terminated as provided in this Section 9, PGE shall make all payments, within thirty (30) days, that, pursuant to the terms of this Agreement, are owed to Seller as of the time of receipt of notice of default. PGE shall not be required to pay Seller for any Net Output delivered by Seller after such notice of default.
- In the event PGE terminates this Agreement pursuant to this Section 9, and Seller wishes to again sell Net Output to PGE following such termination, PGE in its sole discretion may require that Seller shall do so subject to the terms of this Agreement, including but not limited to the Contract Price until the Term of this Agreement (as set forth in Section 2.3) would have run in due course had the Agreement remained in effect. At such time Seller and PGE agree to execute a written document ratifying the terms of this Agreement.
- 9.5 Sections 9.1, 9.3, 9.4, 11, and 20.2 shall survive termination of this Agreement.

#### SECTION 10: TRANSMISSION CURTAILMENTS

- 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 4.4 of this Agreement.
- 10.2 If as the result of a Transmission Curtailment, Seller does not deliver any portion of energy (including real-time adjustments), scheduled pursuant to Section 4.4 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.

UM\_\_\_/ PGE / Exhibit 104 2 Macfarlane 9 Page 79 Schedule 211

Standard Renewable Off System Integrated Variable Resource Power Purchase Agreement Effective

#### SECTION 11: INDEMNIFICATION AND LIABILITY

- 11.1 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.
- 11.2 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.
- 11.3 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.
- 11.4 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 12: INSURANCE**

12.1 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 maintained by PGE is excess and not contributory insurance with the insurance required hereunder; a cross-liability or severability of insurance interest

UM\_\_\_ / PGE / Exhibit 104 Macfarlane Page 80 Schedule 211

Standard Renewable Off System Integrated Variable Resource Power Purchase Agreement

Effective \_\_\_\_\_

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.

- 12.2 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.
- 12.3 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 13: FORCE MAJEURE**

13.1 As used in this Agreement, "Force Majeure" or "an event of Force Majeure" means any cause beyond the reasonable control of the Seller or of PGE which, despite the exercise of due diligence, such Party is unable to prevent or overcome. By way of example, Force Majeure may include but is not limited to acts of God, fire, flood, storms, wars, hostilities, civil strife, strikes, and other labor disturbances, earthquakes, fires, lightning, epidemics, sabotage, restraint by court order or other delay or failure in the performance as a result of any action or inaction on behalf of a public authority which by the exercise of reasonable foresight such Party could not reasonably have been expected to avoid and by the exercise of due diligence, it shall be unable to overcome, subject, in each case, to the requirements of the first sentence of this paragraph. Force Majeure, however, specifically excludes the cost or availability of resources to operate the Facility, changes in market conditions that affect the price of energy or transmission, wind or water droughts, and obligations for the payment of money when due.

# CREA-NIPPC-REC/202

Sanger/81

UM\_\_\_ / PGE / Exhibit 104 Macfarlane Page 81 Schedule 211

Standard Renewable Off System Integrated Variable Resource Power Purchase Agreement Effective

13.2 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:

- 13.2.1 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
- 13.2.2 the suspension of performance shall be of no greater scope and of no longer duration than is required by the Force Majeure; and
- 13.2.3 the non-performing Party uses its best efforts to remedy its inability to perform its obligations under this Agreement.
- 13.3 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.
- 13.4 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 14: 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 15: 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 16: 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.

UM\_\_\_ / PGE / Exhibit 104 Macfarlane Page 82 Schedule 211

Standard Renewable Off System Integrated Variable Resource Power Purchase Agreement

Effective

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

#### **SECTION 17: 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 18: 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 19: SUCCESSORS AND ASSIGNS

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

#### SECTION 20: ENTIRE AGREEMENT

- Agreement supersedes all prior agreements, 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.
- 20.2 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 21: NOTICES**

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: _ |  |  |  |
|--------------|--|--|--|
|--------------|--|--|--|

CREA-NIPPC-REC/202 Macfarlane Sanger/83

UM\_\_\_ / PGE / Exhibit 104 Page 83 Schedule 211

Standard Renewable Off System Integrated Variable Resource Power Purchase Agreement Effective \_\_\_\_\_ with a copy to: To PGE: Contracts Manager QF Contracts, 3WTCBR06 PGE - 121 SW Salmon St. Portland, Oregon 97204 21.2 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 IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed in their respective names as of the Effective Date. Name: \_\_\_\_\_ Title: Date: (Name Seller) By: \_\_\_\_\_ Name: \_\_\_\_\_ Title: \_\_\_\_\_

21.

**PGE** 

Date:\_\_\_\_\_

CREA-NIPPC-REC/202
Sanger/84
Standard Renewable Off System Integrated Variable Power Purchase Agreement Effective \_\_\_\_\_\_

# EXHIBIT A DESCRIPTION OF SELLER'S FACILITY

[Seller to Complete]

 $\frac{\text{CREA-NIPPC-REC/202}}{\text{Sanger/85}} \frac{\text{UM}\_\_/ \text{PGE / Exhibit 104}}{\text{Macfarlane}} \\ \text{Sanger/85} \\ \text{Schedule 211} \\ \text{Standard Renewable Off System Integrated Variable Resource Power Purchase Agreement} \\ \text{Effective} \_\_\_\_\_$ 

# EXHIBIT B REQUIRED FACILITY DOCUMENTS

# [Seller list all permits and authorizations required for this project]

Sellers Generation Interconnection Agreement

CREA-NIPPC-REC/202

UM\_\_\_ / PGE / Exhibit 104 Macfarlane Sanger/86 Schedule 211

Standard Renewable Off System Integrated Variable Resource Power Purchase Agreement

|           | <br>Э. | - | <br>• • • • | • |
|-----------|--------|---|-------------|---|
| Effective |        |   |             |   |

#### **EXHIBIT C** START-UP TESTING

#### [Seller identify appropriate tests]

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

- 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:
- Alarms, signals, and fail-safe or system shutdown control tests: 4.
- 5. Insulation resistance and point-to-point continuity tests;
- 6. Bench tests of all protective devices;
- Tests required by manufacturer of equipment; and 7.
- 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;
- Synchronizing tests (manual and auto); 5.
- 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;
- Open circuit and short circuit; saturation tests; 12.
- 13. Governor system steady state stability test;
- Phase angle and magnitude of all PT and CT secondary voltages and 14. currents to protective relays, indicating instruments and metering;
- 15. Auto stop/start sequence:
- Level control system tests; and 16.
- 17. Completion of all state and federal environmental testing requirements.

> EXHIBIT D SCHEDULE [Attach currently in-effect Schedule 211]

# BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

## **UM 1931**

| PORTLAND GENERAL ELECTRIC COMPANY, | > |
|------------------------------------|---|
| Complainant,                       | )                                       |
| v.                                 | )                                       |
| ALFALFA SOLAR I LLC, et al.        | )                                       |
| Defendants.                        | )                                       |

## **EXHIBIT CREA-NIPPC-REC/203**

# DAVID WHITE EMAIL ON DECEMBER 17, 2012 (WITHOUT ALL ATTACHMENTS)

**December 28, 2018** 

From: David White <David.White@pgn.com>
Sent: Monday, December 17, 2012 4:28 PM

**To:** dockets@idahopower.com; oregondockets@pacificorp.com; Greg Adams; da@thenescogroup.com;

stephanie.andrus@state.or.us; wcarey@hoodriverattorneys.com; PGE OPUC Filings; Richard George;

bob@oregoncub.org; matt.krumenauer@state.or.us; dlokting@stollberne.com;

jravenesanmarcos@yahoo.com; catriona@oregoncub.org; glenn@oseia.org; nelson@thnelson.com;

elaine.prause@energytrust.org; janet.prewitt@doj.state.or.us; dockets@mcd-law.com; Peter

Richardson; ias@dvclaw.com; vijay.a.satyal@state.or.us; dws@r-c-s-inc.com;

john.volkman@energytrust.org; dwalker@idahopower.com; mary.wiencke@pacificorp.com;

pwoodin@communityrenewables.org

**Cc:** Rob Macfarlane; mary.wiencke@pacificorp.com

Subject: UM 1396

**Attachments:** Schedule 212 Avoided Cost Stip.doc; Schedule 211 Avoided Cost Stip.doc; Schedule 202 Avoided

Cost Stip.doc; Schedule 201 Avoided Cost Stip.doc; Schedule 201 In System Firm Non-Variable.doc; Schedule 201 In System Variable.doc; Schedule 201 Off System Integrated Variable.doc; Schedule 201 Off System Non-Variable.doc; Schedule 211 In System Variable.doc; Schedule 211 Off System Integrated.doc; Schedule 211 Off System Non-Variable.doc

Attached please find PGE's proposed schedules 201, 202, 211, and 212, that will be exhibits to the UM 1396 stipulation. We are also attaching the standards contracts for schedule 201 and 211 that will also be exhibits to the stipulation. Please let us know if there are any comments on the schedules or contracts.

#### **David White | Portland General Electric Company**

503-464-7701 | C. 503-781-5837 david.white@pgn.com

This e-mail, including any attachments, is the property of Portland General Electric Company and because it is a communication by its Legal Department may contain attorney privileged or confidential information. The review, disclosure, distribution, or copying of this message by or to anyone other than the named addressee(s) is strictly prohibited. If you have received this message in error, please immediately notify the sender by reply email and delete the original e-mail and all copies of the message. Thank you.

!SIG:50cfb9ba110666355021051!

# STANDARD RENEWABLE OFF SYSTEM INTEGRATED VARIABLE RESOURCE POWER PURCHASE AGREEMENT

| THIS AGREEMENT, entered into this  | day,                                  | , 201, is         |
|--|---------------------------------------|-------------------|
| petween  | ("Seller") and Portland               | General Electric  |
| Company ("PGE") (hereinafter each a "Party   | or collectively, "Parties").          |                   |
| RECIT  | <u>rals</u>                           |                   |
| Seller intends to construct, own, open   | ate and maintain a                    | facility          |
| or the generation of electric power  | located in                            | County,           |
| with a Nameplate Capacity  | · · · · · · · · · · · · · · · · · · · | kilowatt          |
| ("kW"), as further described in Exhibit A ("Fa   | cility"); and                         |                   |
| Seller intends to operate the Facility defined in Section 3.1.3, below.                                      | as a "Qualifying Facility,"           | ' as such term is |
| Seller shall sell and PGE shall purch defined in Section 1.17, below, from the conditions of this Agreement. | •                                     | •                 |
|  |                                       |                   |

#### <u>AGREEMENT</u>

NOW, THEREFORE, the Parties mutually agree as follows:

#### SECTION 1: DEFINITIONS

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

- 1.1. "As-built Supplement" means the supplement to Exhibit A provided by Seller in accordance with Section 4.3 following completion of construction of the Facility, describing the Facility as actually built.
- 1.2. "Base Hours" is defined as the total number of hours in each Contract Year (8,760 or 8,784 for leap year).
- 1.3. "Billing Period" means a period between PGE's readings of its power purchase billing meter at the Facility in the normal course of PGE's business. Such periods typically vary and may not coincide with calendar months.
- 1.4. "Cash Escrow" means an agreement by two parties to place money into the custody of a third party for delivery to a grantee only after the fulfillment of the conditions specified.

- 1.5. "Commercial Operation Date" means the date that the Facility is deemed by PGE to be fully operational and reliable. PGE may, at its discretion require, among other things, that all of the following events have occurred:
  - 1.5.1. (facilities with nameplate under 500 kW exempt from following requirement) PGE has received a certificate addressed to PGE from a Licensed Professional Engineer ("LPE") acceptable to PGE in its reasonable judgment stating that the Facility is able to generate electric power reliably in accordance with the terms and conditions of this Agreement (certifications required under this Section 1.5 can be provided by one or more LPEs);
  - 1.5.2. Start-Up Testing of the Facility has been completed in accordance with Section 1.26;
  - 1.5.3. (facilities with nameplate under 500 kW exempt from following requirement) After PGE has received notice of completion of Start-Up Testing, PGE has received a certificate addressed to PGE from an LPE stating that the Facility has operated for testing purposes under this Agreement 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;
  - 1.5.4. (facilities with nameplate under 500 kW exempt from following requirement) PGE has received a certificate addressed to PGE from an LPE stating that all required interconnection facilities have been constructed and all required interconnection tests have been completed;
  - 1.5.5. 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;
    - 1.5.6. PGE has received a copy of the Transmission Agreement.
  - 1.6. "Contract Price" has the meaning set forth in Section 5.2.
- 1.7. "Contract Year" means each twelve (12) month period commencing upon the Commercial Operation Date or its anniversary during the Term, except the final contract year will be the period from the last anniversary of the Commercial Operation Date during the Term until the end of the Term.
  - 1.8. "Effective Date" has the meaning set forth in Section 2.1.

- "Environmental Attributes" means any and all current or future credits, 1.9. benefits, emissions reductions, environmental air quality credits, emissions reduction credits, offsets and allowances, howsoever entitled, resulting from the avoidance of the emission of any gas, chemical or other substance attributable to the Facility during the Term, or otherwise attributable to the generation, purchase, sale or use of energy from or by the Facility during the Term, including without limitation any of the same arising out of legislation or regulation concerned with oxides of nitrogen, sulfur or carbon, with particulate matter, soot or mercury, or implementing the United Nations Framework Convention on Climate Change (the "UNFCCC") or the Kyoto Protocol to the UNFCCC or crediting "early action" emissions reduction, or laws or regulations involving or administered by the Clean Air Markets Division of the Environmental Protection Agency or successor administrator, or any State or federal entity given jurisdiction over a program involving transferability of Environmental Attributes, including the Oregon Renewable Portfolio Standard, and any Green Tag Reporting Rights to such Environmental Attributes.
  - 1.10. "Facility" has the meaning set forth in the Recitals.
- 1.11. "Generation Interconnection Agreement" means an agreement governing the interconnection of the Facility with \_\_\_\_\_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. "Mechanical Availability Percentage" or "MAP" shall mean that percentage for any Contract Year for the Facility calculated in accordance with the following formula:

## MAP = 100 X (Operational Hours) /(Base Hours)

- 1.15. "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.
- 1.16. "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.
- 1.17. "Net Output" means all energy expressed in kWhs produced by the Facility, less station and other onsite use and less transformation and transmission

losses. Net Output does not include any environmental attributes, imbalance power, or power from an integrating entity.

- 1.18. "Off-Peak Hours" has the meaning provided in the Schedule 211.
- 1.19. "On-Peak Hours" has the meaning provided in the Schedule 211.
- 1.20. "Operational Hours" for the Facility means the number of hours the Facility is potentially capable of producing power at its Nameplate Capacity Rating regardless of actual weather conditions, season and the time of day or night, without any mechanical operating constraint or restriction, and potentially capable of delivering such power to the Point of Delivery. Hours during which an event of Force Majeure exists that prevent the Facility from producing or delivering power shall be considered Operational Hours.
  - 1.21. "Point of Delivery" means the PGE System.
- 1.22. "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.
- 1.23. "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.
- 1.24. "Required Facility Documents" means all licenses, permits, authorizations, and agreements necessary for construction, operation, interconnection, and maintenance of the Facility including without limitation those set forth in Exhibit B.
- 1.25. "Senior Lien" means a prior lien which has precedence as to the property under the lien over another lien or encumbrance.

- 1.26. "Start-Up Testing" means the completion of applicable required factory and start-up tests as set forth in Exhibit C.
- 1.27. "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.
- 1.28. "Schedule 211" shall mean PGE Schedule 211 filed with the Oregon Public Utilities Commission ("Commission") in effect on the Effective Date of this Agreement and attached hereto as Exhibit D, the terms of which are hereby incorporated by reference. In the event of a conflict between this Agreement and Schedule 211, this Agreement shall apply.
- 1.29. "Schedule 201" shall mean PGE Schedule 201 filed with the Oregon Public Utilities Commission ("Commission") in effect on the Effective Date of this Agreement, the applicable portion of which is attached hereto as Exhibit E.
- 1.30. "Term" shall mean the period beginning on the Effective Date and ending on the Termination Date.
- 1.31. "Test Period" shall mean a period of sixty (60) days or a commercially reasonable period determined by the Seller.
- 1.32. "Transmission Agreement" means an agreement executed by the Seller and the Transmission Provider(s) for Transmission Services.
- 1.33. "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 or a generating facility limitation by a Transmission Provider (for any reason other than Force Majeure).
- 1.34. "Transmission Curtailment Replacement Energy Cost" means the greater of zero or the amount calculated as: ((Dow Jones Mid C Index Price Contract Price) X curtailed energy) for periods of Transmission Curtailment.
- 1.35. "Transmission Provider(s)" means the signatory (other than the Seller) to the Transmission Agreement.
- 1.36. "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.

#### 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 [date to be determined by the Seller] Seller shall begin initial deliveries of Net Output; and  |
| 2.2.2 By [date to be determined by the Seller] Seller shall have completed all requirements under Section 1.5 and shall have established the Commercial Operation Date.  |
| 2.2.3 In the event Seller is unable to meet the requirements of Sections 2.2.1 and 2.2.2, PGE may terminate this agreement in accordance with Section 9.   |
| 2.3 This Agreement shall terminate on, [date to be chosen by Seller], or the date the Agreement is terminated in accordance with Section 9 or 12, 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 duly organized under the laws  |

- 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 \_\_\_\_\_ kW.
- 3.1.9 Seller estimates that the average annual Net Output to be delivered by the Facility to PGE is \_\_\_\_\_ kilowatt-hours ("kWh"), which amount PGE will include in its resource planning.
- 3.1.10 Seller represents and warrants that the Facility shall achieve the following Mechanical Availability Percentages ("Guarantee of Mechanical Availability"):
  - 3.1.10.1 Ninety-one percent (91%) for the first Contract Year; and
  - 3.1.10.2 Ninety-five percent (95%) beginning Contract Year two and extending throughout the remainder of the Term.
  - 3.1.10.3 Annually, within 90 days of the end of each Contract Year, Seller shall send to PGE a detailed written report demonstrating and providing evidence of the actual MAP for the previous Contract Year.
- 3.1.11 Seller will deliver from the Facility to PGE at the Point of Delivery Net Output not to exceed a maximum of \_\_\_\_\_ 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.
- 3.1.12 Seller has entered into a Generation Interconnection Agreement for a term not less than the term of this Agreement.

- 3.1.13 PGE warrants that it has not within the past two (2) years been the debtor in any bankruptcy proceeding, and PGE is and will continue to be for the Term of this Agreement current on all of its financial obligations.
- 3.1.14 Seller warrants that (i) the Facility satisfies the eligibility requirements specified in the Definition of a Small Cogeneration Facility or Small Power Production Facility Eligible to Receive the Standard Renewable Rates and Standard Renewable PPA in PGE's Schedule 211 and (ii) Seller will not make any changes in its ownership, control or management during the term of this Agreement that would cause it to not be in compliance with the Definition of a Small Cogeneration Facility or Small Power Production Facility Eligible to Receive the Standard Renewable Rates and Standard Renewable PPA in PGE's Schedule 211. Seller will provide, upon request by Buyer 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. Buyer 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 Buyer will provide all such confidential information to the Public Utility Commission of Oregon upon the Commission's request.
- 3.1.15 Seller warrants that it will comply with all requirements necessary for all renewable energy credits associated with Net Output to be issued, monitored, accounted for, and transferred by and through the Western Renewable Energy Generation Information System consistent with the provisions of OAR 330-160-0005 through OAR 330-160-0050.

#### SECTION 4: DELIVERY OF POWER AND ENVIRONMENTAL ATTRIBUTES

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

agreement for all delivered Net Output proportionally related to the increase of Nameplate Capacity above 10,000 kW.

- All energy shall be scheduled according to the most current North 4.4 America Energy Reliability Corporation (NERC) and Western Electricity Coordinating Council (WECC) scheduling rules and practices. The Parties' representatives shall maintain hourly real-time schedule coordination; provided, however, that in the absence of such coordination, the schedule established by the exchange of preschedules shall be considered final. Seller and PGE shall maintain records of energy schedules for accounting and operating purposes. Deliveries shall not be made on a dynamic basis, and Seller shall insure that all deliveries of energy under this Agreement will be equal on an hourly basis to the amounts scheduled in the final schedule. Seller shall bear the cost of any transmission services, including but not limited to imbalance services, necessary to insure that energy deliveries under this Agreement are equal on an hourly basis to the amount of energy scheduled for each hour in the final schedule. The final schedule shall be provided by Seller to PGE no later than 20 minutes prior to delivery for the first 30 minutes of an hour (e.g., 1:00 to 1:30) and 15 minutes prior to delivery for the second 30 minutes of the hour (e.g. 1:30 to 2:00). The final E-Tag shall be the controlling evidence of the Parties' final schedule. 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.
- 4.5 Commencing on the Effective Date and continuing through the Term of this Agreement, Seller shall provide and PGE shall acquire the Environmental Attributes for the Contract Years specified in the Schedule 211. The Contract Price includes full payment for the Net Output and any Environmental Attributes transferred to PGE under this Agreement. With respect to Environmental Attributes not transferred to PGE under this Agreement ("Seller-Retained RECs") 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 RECs, and PGE shall not report under such program that such Seller-Retained RECs belong to it. With respect to Environmental 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: CONTRACT PRICE**

5.1 PGE shall pay Seller the Contract Price for the Net Output delivered to PGE under this Agreement. For the period prior to the 15<sup>th</sup> anniversary of the Effective Date, the Contract Price is equal to the Fixed Price Non Variable or Integrated Resource as set forth in Schedule 211 and as adjusted pursuant to Section 5.2 below. For the period (if any) from the 15<sup>th</sup> anniversary of the Effective Date until the end of the Term, Seller has the price options listed below as adjusted pursuant to the terms of Section 5.2 below. The price for the price options listed below shall be established

pursuant to the terms of Schedule 201. Seller shall indicate which price option it chooses by marking its choice below with an X, if applicable.

| 1. | Deadband Index Gas Price |  |
|----|--------------------------|--|
| 2. | Index Gas Price          |  |
| 3. | Mid-C Index Rate Price   |  |

5.2 The Contract Price is equal to the price as specified in Section 5.1 plus the following variable energy integration cost:

|      | Variable Energy Integration Cost |      |      |      |      |  |
|------|----------------------------------|------|------|------|------|--|
| Year |                                  | Year |      | Year |      |  |
| 2015 | 5.75                             | 2024 | 6.78 | 2033 | 7.99 |  |
| 2016 | 5.86                             | 2025 | 6.90 | 2034 | 8.13 |  |
| 2017 | 5.96                             | 2026 | 7.03 | 2035 | 8.28 |  |
| 2018 | 6.07                             | 2027 | 7.16 | 2036 | 8.43 |  |
| 2019 | 6.19                             | 2028 | 7.29 | 2037 | 8.59 |  |
| 2020 | 6.30                             | 2029 | 7.42 | 2038 | 8.75 |  |
| 2021 | 6.42                             | 2030 | 7.56 | 2039 | 8.91 |  |
| 2022 | 6.53                             | 2031 | 7.70 | 2040 | 9.07 |  |
| 2023 | 6.65                             | 2032 | 7.84 | 2041 | 9.24 |  |

## SECTION 6: OPERATION AND CONTROL

- 6.1 Seller shall operate and maintain the Facility in a safe manner in accordance with the Generation Interconnection Agreement, and Prudent Electrical Practices. PGE shall have no obligation to purchase Net Output from the Facility to the extent the interconnection of the Facility to PGE's electric system is disconnected, suspended or interrupted, in whole or in part, pursuant to the Generation Interconnection Agreement, or to the extent generation curtailment is required as a result of Seller's noncompliance with the Generation Interconnection Agreement. Seller is solely responsible for the operation and maintenance of the Facility. PGE shall not, by reason of its decision to inspect or not to inspect the Facility, or by any action or inaction taken with respect to any such inspection, assume or be held responsible for any liability or occurrence arising from the operation and maintenance by Seller of the Facility.
- 6.2 Seller agrees to provide sixty (60) days advance written notice of any scheduled maintenance that would require shut down of the Facility for any period of time.
- 6.3 If the Facility ceases operation for unscheduled maintenance, Seller immediately shall notify PGE of the necessity of such unscheduled maintenance, the time when such maintenance has occurred or will occur, and the anticipated duration of such maintenance. Seller shall take all reasonable measures and exercise its best

efforts to avoid unscheduled maintenance, to limit the duration of such unscheduled maintenance, and to perform unscheduled maintenance during Off-Peak hours.

#### SECTION 7: CREDITWORTHINESS

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

#### SECTION 8: BILLINGS, COMPUTATIONS AND PAYMENTS

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

#### SECTION 9: DEFAULT, REMEDIES AND TERMINATION

- 9.1 In addition to any other event that may constitute a default under this Agreement, the following events shall constitute defaults under this Agreement:
  - 9.1.1 Breach by Seller or PGE of a representation or warranty, except for Section 3.1.4, set forth in this Agreement.
  - 9.1.2 Seller's failure to provide default security, if required by Section 7, prior to delivery of any Net Output to PGE or within 10 days of notice.
  - 9.1.3 Seller's failure to meet the MAP established in Section 3.1.10 Guarantee of Mechanical Availability for any single Contract Year or Seller's failure to provide any written report required by that section.
    - 9.1.4If Seller is no longer a Qualifying Facility.

- 9.1.5 Failure of PGE to make any required payment pursuant to Section 8.1.
- 9.2 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 9.1.3 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 21. The rights provided in this Section 9 are cumulative such that the exercise of one or more rights shall not constitute a waiver of any other rights.
- 9.3 If this Agreement is terminated as provided in this Section 9, PGE shall make all payments, within thirty (30) days, that, pursuant to the terms of this Agreement, are owed to Seller as of the time of receipt of notice of default. PGE shall not be required to pay Seller for any Net Output delivered by Seller after such notice of default.
- 9.4 In the event PGE terminates this Agreement pursuant to this Section 9, and Seller wishes to again sell Net Output to PGE following such termination, PGE in its sole discretion may require that Seller shall do so subject to the terms of this Agreement, including but not limited to the Contract Price until the Term of this Agreement (as set forth in Section 2.3) would have run in due course had the Agreement remained in effect. At such time Seller and PGE agree to execute a written document ratifying the terms of this Agreement.
- 9.5 Sections 9.1, 9.3, 9.4, 11, and 20.2 shall survive termination of this Agreement.

#### **SECTION 10: TRANSMISSION CURTAILMENTS**

- 10.1 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 4.4 of this Agreement.
- 10.2 If as the result of a Transmission Curtailment, Seller does not deliver any portion of energy (including real-time adjustments), scheduled pursuant to Section 4.4 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 11: INDEMNIFICATION AND LIABILITY

- 11.1 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.
- 11.2 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.
- 11.3 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.
- 11.4 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 12: INSURANCE**

12.1 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 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.

- 12.2 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.
- 12.3 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 13: FORCE MAJEURE**

13.1 As used in this Agreement, "Force Majeure" or "an event of Force Majeure" means any cause beyond the reasonable control of the Seller or of PGE which, despite the exercise of due diligence, such Party is unable to prevent or overcome. By way of example, Force Majeure may include but is not limited to acts of God, fire, flood, storms, wars, hostilities, civil strife, strikes, and other labor disturbances, earthquakes, fires, lightning, epidemics, sabotage, restraint by court order or other delay or failure in the performance as a result of any action or inaction on behalf of a public authority which by the exercise of reasonable foresight such Party could not reasonably have been expected to avoid and by the exercise of due diligence, it shall be unable to overcome, subject, in each case, to the requirements of the first sentence of this paragraph. Force Majeure, however, specifically excludes the cost or availability of resources to operate the Facility, changes in market conditions that affect the price of energy or transmission, wind or water droughts, and obligations for the payment of money when due.

- 13.2 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:
  - 13.2.1 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
  - 13.2.2 the suspension of performance shall be of no greater scope and of no longer duration than is required by the Force Majeure; and
  - 13.2.3 the non-performing Party uses its best efforts to remedy its inability to perform its obligations under this Agreement.
- 13.3 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.
- 13.4 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 14: 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 15: 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 16: PARTIAL INVALIDITY AND PURPA REPEAL

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

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

#### **SECTION 17: 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 18: 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 19: SUCCESSORS AND ASSIGNS

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

## SECTION 20: ENTIRE AGREEMENT

- 20.1 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.
- 20.2 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 21: NOTICES**

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:       |  |
|---------|---------------|--|
| wi      | th a copy to: |  |
| To      |               | Contracts Manager QF Contracts, 3WTCBR06 PGE - 121 SW Salmon St. Portland, Oregon 97204                                  |
|         |               | nay change the person to whom such notices are addressed, viding written notices thereof in accordance with this Section |
|         |               | REOF, the Parties hereto have caused this Agreement to be names as of the Effective Date.                                |
| PGE     |               |  |
| Зу:     |               |  |
| Name:   |               |  |
| Title:  |               |  |
| Jaie    |               |  |
| (Name S | eller)        |  |
| 3v·     |               |  |
| Name:   |               |  |
| Title:  |               |  |
| Jate:   |               |  |
|         |               |  |

# EXHIBIT A DESCRIPTION OF SELLER'S FACILITY

[Seller to Complete]

# EXHIBIT B REQUIRED FACILITY DOCUMENTS

# [Seller list all permits and authorizations required for this project]

Sellers Generation Interconnection Agreement

#### EXHIBIT C START-UP TESTING

#### [Seller identify appropriate tests]

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

- 1. Pressure tests of all steam system equipment;
- 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 D SCHEDULE 211 [Attach currently in-effect Schedule 211]

# EXHIBIT E SCHEDULE 201 [Attach applicable portion of currently in-effect schedule 201]

# BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

# **UM 1931**

| PORTLAND GENERAL ELECTRIC COMPANY, | ) |
|------------------------------------|---|
| Complainant,                       | ) |
| v.                                 | ) |
| ALFALFA SOLAR I LLC, et al.        | ) |
| Defendants.                        | ) |
|                                    | ) |

# **EXHIBIT CREA-NIPPC-REC/204**

# BLESS ADAM EMAIL ON JANUARY 31, 2013 (WITHOUT ALL ATTACHMENTS)

**December 28, 2018** 

From: BLESS Adam <adam.bless@state.or.us>
Sent: Thursday, January 31, 2013 4:18 PM

**To:** BLESS Adam; bob@oregoncub.org; ANDRUS Brittany; catriona@oregoncub.org;

da@thenescogroup.com; David White; dlokting@stollberne.com; dockets@idahopower.com;

dockets@mcd-law.com; dwalker@idahopower.com; dws@r-c-s-inc.com;

elaine.prause@energytrust.org; glenn@oseia.org; Greg Adams; ias@dvclaw.com;

john.volkman@energytrust.org; jravenesanmarcos@yahoo.com; mary.wiencke@pacificorp.com; KRUMENAUER Matt; GALBRAITH Maury; nelson@thnelson.com; oregondockets@pacificorp.com; Peter Richardson; pge.opuc.filings@pgn.com; renee.m.france@state.or.us; richard.george@pgn.com;

Rob Macfarlane; ANDRUS Stephanie; SATYAL Vijay A; wcarey@hoodriverattorneys.com

Attachments: Staffedits on PGE InSystem Firm PPA for 1396.docx; Staff edits- PGE 202 for UM 1396.docx; Staff

edits -PGE\_Off-systemNonVariable PPA for um 1396.DOCX; Staff edits to -PGE\_Schedule201\_for 1396 stipulation.DOC; Staff edits-PGE InSystemVariable PPA for 1396.docx; Staff edits-PGE OffSystem Int

Var PPA for um 1396.docx; Staff -UM\_1396\_Stipulation\_Edits.DOCX

Parties in UM 1396:

Staff is responding to the email thread of December 2012 regarding the stipulation in UM 1396.

We have reviewed the schedules 201, 202, 211 and 212 and associated power purchase agreements that PGE attached to its draft stipulation. Staff also reviewed CREA's proposed edits and our own notes from the July 10, 2012 settlement conference.

Our notes show that at the July 10 meeting, we did allow certain changes standard (nonrenewable) schedules in order to assure consistency with the new renewable price schedules. In particular, we agreed that PacifiCorp could change its forward looking market price to a Mid-C price.

We also agreed that PGE should remove integration costs from the avoided cost calculation in its renewable price schedules and account for those costs somewhere else.

PGE agreed to do this but stated that it should be allowed to make the same change in its Standard avoided costs, for consistency. No one objected at the time.

Below you will the proposed stipulation with CREA's edits and staff's comments.

You will also find the schedule 201, 202 and associated PPA's submitted by PGE, with staff comments.

We see that PGE proposed a number of language changes that it states are not substantive but rather are clarifications of its current language.

Staff reviewed the changes proposed by PGE and placed them in three categories:

1. HOUSEKEEPING: language changes that are substantively consistent with the currently approved schedules or make changes that are so minor that they are not substantive changes from the currently approved schedule.

CREA-NIPPC-REC/204

Sanger/2

- 2. SUBSTANTIVE CHANGES: changes that are inconsistent with the currently approved schedule and outside the scope of the July 10, 2012 settlement meeting. Staff recommends that PGE retract these changes.
- 3. SUBSTANTIVE BUT ALLOWED: Changes that substantively change the current schedules but are consistent with the discussion at the July 10, 2012 settlement meeting. Staff recommends that these be allowed.

We ask you to review these documents. UM 1610 testimony will take up everyone's time, including ours. For that reason, we ask that parties in UM 1396 reply to this message by Thursday February 8, with either comments or an estimate of when you might be able to make comments.

If there are no objections to the stipulation and associated schedules, then we can bring this to the Commission at a public meeting.

If there are objections then Staff will look for a date to hold an in-person meeting to go over the changes and finalize the stipulation.

Thanks, all.

Adam Bless

503-378-6638

<<Staffedits on PGE InSystem Firm PPA for 1396.docx>> <<Staff edits- PGE 202 for UM 1396.docx>> <<Staff edits - PGE\_Off-systemNonVariable PPA for um 1396.DOCX>> <<Staff edits to -PGE\_Schedule201\_for 1396 stipulation.DOC>> <<Staff edits-PGE InSystemVariable PPA for 1396.docx>> <<Staff edits-PGE OffSystem Int Var PPA for um 1396.docx>> <<Staff -UM\_1396\_Stipulation\_Edits.DOCX>>

!SIG:510b09e8312422875611389!

Sheet No. 201-1

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

#### **PURPOSE**

To provide information about Avoided Costs, Standard <u>Power Purchase Agreements (PPA)</u> and <u>Negotiated PPAs</u>, 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 meet the definition of QF, in 18 Code of Federal Regulations (CFR) Section 292, meet the eligibility requirements described herein and make energy available for Company purchase and deliver to the Company's system 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 as deemed sufficient by the Company as set out 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 out in this schedule and the Commission's Rules as applicable, the Company will purchase Net Output from Seller. Net Output shall mean the Energy no greater than the Nameplate Rating expressed in kWhs produced by the Facility, less station and other onsite use and less transformation and transmission losses. Net Output does not include any environmental attributes, imbalance power, or power from an integrating entity.

A Seller must execute a Power Purchase Agreement 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.

on and after January 19, 2013

Deleted: Contracts

Deleted: negotiated

**Deleted:** Power Purchase Agreements

Deleted: are

Deleted: s as defined

Deleted: tha

Commented [AS1]: Housekeeping.

**Deleted:** where the energy is delivered to the Company's system and made available for Company purchase

Deleted: Contract Power Purchase Agreement

Deleted: Contract Power Purchase Agreement (Standard

Deleted: ¶

Deleted: Contract

Deleted: POWER PURCHASE AGREEMENT

**Commented [AS2]:** Substantive, but consistent with July meeting.

**Deleted:** 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.

Deleted: Contract

Sheet No. 201-2

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

#### PPA (Continued)

Any Seller may elect to negotiate a <u>PPA</u> 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 <u>may use the applicable filed Avoided Costs in effect at that time as a starting point for negotiations.</u>

Avoided Costs for Negotiated PPAs may be updated and will not be final until execution of a PPA.

#### 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 Resource Power Purchase Agreement, and Standard Off System Integrated Variable Resource 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 <u>ELECTING STANDARD PPA</u>**

In order 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 <u>PPA</u>. 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 <u>PPA</u>.

When both parties are in full agreement as to all terms and conditions of the draft Standard <u>PPA</u>, 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, a completely executed copy will be returned to the Seller. Prices and other terms and conditions in the <u>PPA</u> will not be final and binding until the Standard <u>PPA</u> has been executed by both parties.

Deleted: Power Purchase Agreement

Deleted: will be based on

**Commented [AS3]:** SUBSTANTIVE. Guideline 2.a of Order 07-360 says the applicable avoided cost "should" be used as a starting point, and gives more parameters on deviations.

Deleted: CONTRACTS

Deleted: Contract

Deleted: Contract

Deleted: (Appendix 1 to this schedule)

Deleted: Contract

Deleted: Contracts

Deleted: Contract

Deleted: Contract

Deleted: Contract

Deleted: for Intermittent

Deleted: Resources

Deleted: and

Deleted: Contract for

Deleted: Intermittent

Deleted: Resources

Commented [AS4]: Housekeeping.

Deleted: Contracts

Deleted: Intermittent

Deleted: Contract

**Deleted:** power purchase agreement

Deleted: Contract

Sheet No. 201-3

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

#### 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 set forth above and making the arrangements necessary for transmission of power to the Company's system. Off System PPAs are available for non-variable resources and variable resources for which the QF provides or pays a third party to provide integration to the Company's service territory. PGE is not responsible for Seller's transmission costs, including ancillary services such as imbalance service or integration costs provided by Seller or a third party.

#### **BASIS FOR POWER PURCHASE PRICE**

#### **AVOIDED COST SUMMARY**

The power purchase rates are based on the Company's Avoided Costs. 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 facilities, such utility would generate itself or purchase from another source."

The Avoided Costs as listed in Tables 1 and 2 below include monthly On- and Off-Peak prices.

#### **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.

Avoided Costs are based on forward market price estimates through December 2015, the period of time during which the Company's Avoided Costs are associated with incremental purchases of Energy and capacity from the market. For the period 2016 through 2032, the 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.

#### PRICING OPTIONS FOR STANDARD PPA

Pricing options represent 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 Net Output of the QF in any hour

The Standard PPA pricing will be based on the Avoided Cost in effect at the time the agreement is executed.

#### Deleted: OWER PURCHASE AGREEMENT

Deleted: power purchase agreement

Deleted: s

Deleted: n

Deleted: contract

Commented [AS5]: Substantive, but consistent with July 10 meeting.

Deleted: CONTRACTS

Deleted: Contract

Commented [AS6]: Substantive, but consistent with status quo.

Deleted: nameplate rating

**Deleted:** Any Energy delivered in excess of the nameplate rating will be purchased at the applicable Off-Peak Prices for the selected pricing option.

Deleted: Contract

Deleted: ¶

Sheet No. 201-4

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

PRICING OPTIONS FOR STANDARD PPA (Continued)

Four pricing options are available for Standard <u>PPAs</u>. The pricing options include one Fixed Rate Option and three Market Based Options.

#### 1) Fixed Price Option

The Fixed Price Option is based on Avoided Costs including forecasted natural gas prices.

This option is available for a maximum period of 15 years immediately following the effective date of the Standard PPA. Sellers with a PPA term exceeding 15 years will make a one time election at execution to select a Market-Based Option for all years up to five after of the initial 15 years immediately following the effective date of the Standard PPA. Under the Fixed Price Option, prices will be as established at the time the Standard PPA is executed and will be equal to the Avoided Costs in Tables 1 and 2 effective at execution for a period of up to 15 years immediately following the effective date of the Standard PPA.

|      |     |     |     |     |         | TABLE 1  |         |     |     |     |     |     |
|------|-----|-----|-----|-----|---------|----------|---------|-----|-----|-----|-----|-----|
|      |     |     |     |     |         | oided Co |         |     |     |     |     |     |
|      |     |     |     |     |         | Price O  |         |     |     |     |     |     |
|      |     | 1   |     | (   | On-Peak | Forecast | (\$/MWH | )   |     |     |     |     |
| Year | Jan | Feb | Mar | Apr | May     | Jun      | Jul     | Aug | Sep | Oct | Nov | Dec |
| 2013 |     |     |     |     |         |          |         |     |     |     |     |     |
| 2014 |     |     |     |     |         |          |         |     |     |     |     |     |
| 2015 |     |     |     |     |         |          |         |     |     |     |     |     |
| 2016 |     |     |     |     |         |          |         |     |     |     |     |     |
| 2017 |     |     |     |     |         |          |         |     |     |     |     |     |
| 2018 |     |     |     |     |         |          |         |     |     |     |     |     |
| 2019 |     |     |     |     |         |          |         |     |     |     |     |     |
| 2020 |     |     |     |     |         |          |         |     |     |     |     |     |
| 2021 |     |     |     |     |         |          |         |     |     |     |     |     |
| 2022 |     |     |     |     |         |          |         |     |     |     |     |     |
| 2023 |     |     |     |     |         |          |         |     |     |     |     |     |
| 2024 |     |     |     |     |         |          |         |     |     |     |     |     |
| 2025 |     |     |     |     |         |          |         |     |     |     |     |     |
| 2026 |     |     |     |     |         |          |         |     |     |     |     |     |
| 2027 |     |     |     |     |         |          |         |     |     |     |     |     |
| 2028 |     |     |     |     |         |          |         |     |     |     |     |     |
| 2029 |     |     |     |     |         |          |         |     |     |     |     |     |
| 2030 |     |     |     |     |         |          |         |     |     |     |     |     |
| 2031 |     |     |     |     |         |          |         |     |     |     |     |     |
| 2032 |     |     |     |     |         |          |         |     |     |     |     |     |

Deleted: CONTRACTS

Deleted: Contracts

Deleted: ¶

Deleted: term

Deleted: contracts

Deleted: in excess

Deleted: Contract

Deleted: 2

Formatted: Not Highlight

Deleted: term

**Commented [AS7]:** SUBSTANTIVE. The topic of contract term and when the 15 year period starts is a UM 1610 issue, and was not part of Order 11-505 or the July settlement meeting. Should be removed.

Deleted: ¶

Effective for service

on and after January 19, 2013

Deleted: CONTRACTS

#### **Portland General Electric Company**

Sheet No. 201-5

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

PRICING OPTIONS FOR STANDARD PPA (Continued)
FIXED PRICE OPTION (Continued)

TABLE 2 **Avoided Costs Fixed Price Option** Off-Peak Forecast (\$/MWH) Year Jan Feb Mar Apr May Jun Sep Oct Nov Dec 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031

Under the Fixed Price Option, the Company will pay Seller the Off-Peak Avoided Cost pursuant to Table 2 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; and (d) Net Output delivered in the Off-Peak Period. The Company will pay the Seller the On-Peak Avoided Cost pursuant to Table 1 for all other delivered Net Output. (See the Standard PPA for defined terms.)

Deleted: 2

Deleted: Contract

Deleted: Contract

Deleted: ; and (e) deliveries above the nameplate capacity in

any hour.

Commented [AS8]: HOUSEKEEPING. Consistent with the

status quo.

Deleted: output

Deleted: Appendix 1,

Deleted: Contract

Sheet No. 201-6

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

PRICING OPTIONS FOR STANDARD PPA (Continued)

Deleted: CONTRACTS

Deleted:

#### MARKET BASED PRICE OPTIONS;

Market Based Price Options include Option 2, Deadband Index Gas Price; Option 3, Index Gas Price; and Option 4, Dow Jones Mid-Columbia Daily On- and Off-Peak Electricity Firm Price Index (DJ-Mid-C Firm Index). The price components for pricing Options 2 and 3 are defined as follows:

On Peak Price: P<sub>Peak</sub>

Off Peak Price: Poff

Variable Operating and Maintenance, VFG

Fixed Costs, and Gas Transportation (Table 6):

Capacity Value (Table 7):

Heat Rate: HR = 6,732 BTU/kWh

Losses: 1.9%

Forecasted Gas Price (Table 5): GP<sub>F</sub>

First of Month\* Northwest Pipeline Corp. Canadian Border Index as Reported in <u>Platts</u>

Inside FERC's Gas Market Report GP<sub>Sumas</sub>

First of Month\* one-month spot price averages for AECO/NIT transactions as Reported in

Canadian Gas Price Reporter

Natural Gas Market Report (in US dollars): GPAECO

Monthly Indexed Gas Price:  $GP_{Sumas} + GP_{AECO}$  )/2

Deadband Gas Index: GP<sub>DB</sub>

Where:

If GP<sub>MI</sub>>GP<sub>F</sub>

 $GP_{DB} = Minimum of (GP_{MI} or 1.1*GP_F)$ 

Otherwise

 $GP_{DB} = Maximum of (GP_{MI} or .9*GP_F)$ 

<sup>&</sup>quot;First of Month" means the first such monthly issuance.

Deleted: CONTRACTS

#### **Portland General Electric Company**

Sheet No. 201-7

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

PRICING OPTIONS FOR STANDARD PPA (Continued)
MARKET BASED PRICE OPTIONS (Continued)

Tables 3 and 4 below list applicable rates for Options 2 (Deadband Index Gas Price Option) and 3 (Index Gas Price Option) for the period through 2015. The monthly On- and Off-Peak prices will be applied for all Market Based Price Options.

|      | TABLE 3                                    |     |     |     |     |     |     |     |     |     |     |     |
|------|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|      | Avoided Costs                              |     |     |     |     |     |     |     |     |     |     |     |
|      | On-Peak Resource Sufficiency Rate (\$/MWH) |     |     |     |     |     |     |     |     |     |     |     |
|      |  |     |     |     |     |     |     |     |     |     |     |     |
| Year | Jan  | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| 2013 |  |     |     |     |     |     |     |     |     |     |     |     |
| 2014 |  |     |     |     |     |     |     |     |     |     |     |     |
| 2015 |  |     |     |     |     |     |     |     |     |     |     |     |

|      | TABLE 4                                     |     |     |     |     |     |     |     |     |     |     |     |
|------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|      | Avoided Costs                               |     |     |     |     |     |     |     |     |     |     |     |
|      | Off-Peak Resource Sufficiency Rate (\$/MWH) |     |     |     |     |     |     |     |     |     |     |     |
|      |   |     |     |     |     |     |     |     |     |     |     |     |
| Year | Jan   | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| 2013 |   |     |     |     |     |     |     |     |     |     |     |     |
| 2014 |   |     |     |     |     |     |     |     |     |     |     |     |
| 2015 |   |     |     |     |     |     |     |     |     |     |     |     |

### 2) Index Gas Price Option

The Index Gas Price Option is the simple average of the First of Month gas indices for Sumas and AECO trading hubs used in establishing the Avoided Costs. The Sumas Gas Index will be as reported in <a href="Platts Inside FERC's Gas Market Report">Platts Inside FERC's Gas Market Report</a>. The AECO Gas Index will be as reported in the <a href="Canadian Gas Price Reporter Natural Gas Market Report">Canadian Gas Price Reporter Natural Gas Market Report</a> (in US dollars).

The price paid per MWh will be:

 $P_{Peak} = GP_{MI}*HR/1,000/(1-Losses) + VFG + C$  $P_{Off} = GP_{MI}*HR/1,000/(1-Losses) + VFG$ 

Under the Index Gas Price, the Company will pay Seller the Off-Peak Prices for: (a) for 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; and (d) for Net Output delivered in the Off-Peak Period. All other purchases of Net Output will be at On-Peak prices. (See the Standard PPA for defined terms.)

#### 3) Mid C Index Price Option

Under this option, prices paid per MWh will be based on the DJ-Mid-C Firm Index plus 0.211 ¢ per kWh for wholesale wheeling.

Deleted: 99CONTRACTS

Deleted: Contract

Deleted: Contract

**Deleted:** ; and (e) deliveries above the nameplate capacity in any hour. All other purchas

Deleted: Appendix 1,

Deleted: Contract

Sheet No. 201-8

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

PRICING OPTIONS FOR STANDARD PPA (Continued)

MARKET BASED PRICE OPTIONS (Continued)

Table 5 contains the gas pricing components for Option 1 (Fixed Price Option) and Option 2 (Deadband Index Gas Price Option).

|      | TABLE 5 |     |           |           |                      |          |           |          |           |     |     |     |
|------|---------|-----|-----------|-----------|----------------------|----------|-----------|----------|-----------|-----|-----|-----|
|      |         | Fo  | orecasted | d Gas Pri | ce - GP <sub>F</sub> | (\$/MMBT | U) - With | out Tran | sportatio | n   |     |     |
|      |         |     |           |           |                      |          |           |          |           |     |     |     |
| Year | Jan     | Feb | Mar       | Apr       | May                  | Jun      | Jul       | Aug      | Sep       | Oct | Nov | Dec |
| 2016 |         |     |           |           |                      |          |           |          |           |     |     |     |
| 2017 |         |     |           |           |                      |          |           |          |           |     |     |     |
| 2018 |         |     |           |           |                      |          |           |          |           |     |     |     |
| 2019 |         |     |           |           |                      |          |           |          |           |     |     |     |
| 2020 |         |     |           |           |                      |          |           |          |           |     |     |     |
| 2021 |         |     |           |           |                      |          |           |          |           |     |     |     |
| 2022 |         |     |           |           |                      |          |           |          |           |     |     |     |
| 2023 |         |     |           |           |                      |          |           |          |           |     |     |     |
| 2024 |         |     |           |           |                      |          |           |          |           |     |     |     |
| 2025 |         |     |           |           |                      |          |           |          |           |     |     |     |
| 2026 |         |     |           |           |                      |          |           |          |           |     |     |     |
| 2027 |         |     |           |           |                      |          |           |          |           |     |     |     |
| 2028 |         |     |           |           |                      |          |           |          |           |     |     |     |
| 2029 |         |     |           |           |                      |          |           |          |           |     |     |     |
| 2030 |         |     |           |           |                      |          |           |          |           |     |     |     |
| 2031 |         |     |           |           |                      |          |           |          |           |     |     |     |
| 2032 |         |     |           |           |                      |          |           |          |           |     |     |     |

Deleted: CONTRACTS

Deleted: CONTRACTS

#### **Portland General Electric Company**

Sheet No. 201-9

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

PRICING OPTIONS FOR STANDARD PPA (Continued)
MARKET BASED PRICE OPTIONS (Continued)

Table 6 contains the Variable O&M and Fixed Costs that are derived from a natural gas-fired CCCT.

|      |     |          |          |          |           | TABLE 6  |           |         |           |         |     |     |
|------|-----|----------|----------|----------|-----------|----------|-----------|---------|-----------|---------|-----|-----|
|      |     | Variable | e O&M, F | ixed Cos | sts and G | as Trans | portation | Forecas | t - VFG ( | \$/MWH) |     |     |
|      |     |          |          |          |           |          |           |         |           |         |     |     |
| Year | Jan | Feb      | Mar      | Apr      | May       | Jun      | Jul       | Aug     | Sep       | Oct     | Nov | Dec |
| 2016 |     |          |          |          |           |          |           |         |           |         |     |     |
| 2017 |     |          |          |          |           |          |           |         |           |         |     |     |
| 2018 |     |          |          |          |           |          |           |         |           |         |     |     |
| 2019 |     |          |          |          |           |          |           |         |           |         |     |     |
| 2020 |     |          |          |          |           |          |           |         |           |         |     |     |
| 2021 |     |          |          |          |           |          |           |         |           |         |     |     |
| 2022 |     |          |          |          |           |          |           |         |           |         |     |     |
| 2023 |     |          |          |          |           |          |           |         |           |         |     |     |
| 2024 |     |          |          |          |           |          |           |         |           |         |     |     |
| 2025 |     |          |          |          |           |          |           |         |           |         |     |     |
| 2026 |     |          |          |          |           |          |           |         |           |         |     |     |
| 2027 |     |          |          |          |           |          |           |         |           |         |     |     |
| 2028 |     |          |          |          |           |          |           |         |           |         |     |     |
| 2029 |     |          |          |          |           |          |           |         |           |         |     |     |
| 2030 |     |          |          |          |           |          |           |         |           |         |     |     |
| 2031 |     |          |          |          |           |          |           |         |           |         |     |     |
| 2032 |     |          |          |          |           |          |           |         |           |         |     |     |

Deleted: CONTRACTS

#### **Portland General Electric Company**

Sheet No. 201-10

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

PRICING OPTIONS FOR STANDARD PPA (Continued)
MARKET BASED PRICE OPTIONS (Continued)

Table 7 represents the variable C in the formulas for Option 2 (Deadband Index Gas Price Option) and Option 3 (Index Gas Price Option).

|      | TABLE 7 |     |     |      |         |           |         |     |     |       |      |     |
|------|---------|-----|-----|------|---------|-----------|---------|-----|-----|-------|------|-----|
|      |         | 1   |     | C    | apacity | Value - C | (\$/MWH | )   |     |       |      |     |
| Year | Jan     | Feb | Mar | Apr  | May     | Jun       | Jul     | Aug | Sep | Oct   | Nov  | Dec |
| 2016 | oun     | 105 | mai | 7.01 | may     | oun       | - Oui   | Aug | ОСР | - 001 | 1101 |     |
| 2017 |         |     |     |      |         |           |         |     |     |       |      |     |
| 2018 |         |     |     |      |         |           |         |     |     |       |      |     |
| 2019 |         |     |     |      |         |           |         |     |     |       |      |     |
| 2020 |         |     |     |      |         |           |         |     |     |       |      |     |
| 2021 |         |     |     |      |         |           |         |     |     |       |      |     |
| 2022 |         |     |     |      |         |           |         |     |     |       |      |     |
| 2023 |         |     |     |      |         |           |         |     |     |       |      |     |
| 2024 |         |     |     |      |         |           |         |     |     |       |      |     |
| 2025 |         |     |     |      |         |           |         |     |     |       |      |     |
| 2026 |         |     |     |      |         |           |         |     |     |       |      |     |
| 2027 |         |     |     |      |         |           |         |     |     |       |      |     |
| 2028 |         |     |     |      |         |           |         |     |     |       |      |     |
| 2029 |         |     |     |      |         |           |         |     |     |       |      |     |
| 2030 |         |     |     |      |         |           |         |     |     |       |      |     |
| 2031 |         |     |     |      |         |           |         |     |     |       |      |     |
| 2032 |         |     |     |      |         |           |         |     |     |       |      |     |

#### 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 economic conditions or claims experience may warrant.

Deleted: ¶
¶
¶
¶

Deleted: Contract

#### Sheet No. 201-11

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

#### INSURANCE REQUIREMENTS (CONTINUED)

- 2) 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 his/her 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, including third party charges for ancillary services such as imbalance service or integration, as applicable.

#### 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 must 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.

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.

#### **METERING DATA**

Seller shall maintain a minimum of two years records of scheduled and metered Net Output and shall allow PGE to have access to such records and to imbalance information kept by the Transmission Provider as applicable. Seller shall take all required actions and grant permissions as necessary to allow PGE access to such information.

**Commented [AS9]:** SUBSTANTIVE, but consistent with the July meeting.

Commented [AS10]: Housekeeping.

Deleted: will

Commented [AS11]: Housekeeping.

| Portland General Electric Compa |
|---------------------------------|
|---------------------------------|

Sheet No. 201-12

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

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

Deleted: Contract

Deleted: CONTRACT

A QF will be eligible to receive the standard rates and 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.

#### **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. A unit of Oregon local government may also be a "passive investor" 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 the standard rates and Standard <u>PPA</u> 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 the standard rates and standard <u>PPA</u> is sought.

#### Shared Interconnection and Infrastructure

QFs otherwise meeting the above-described separate ownership test and thereby qualified for entitlement to the standard rates and 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 the standard rates and 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.

Deleted: Contract

Deleted: contract

Deleted: Contract

Deleted: Contract

Deleted: contract

Deleted: Contract

#### Sheet No. 201-13

#### **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 the standard rates and Standard PPA. Any dispute concerning a QF's entitlement to the standard rates and Standard PPA may be presented to the Commission for resolution.

#### **SPECIAL CONDITIONS**

- Delivery of energy by Seller will be at a voltage, phase, frequency, and power factor as specified by the Company.
- 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.
- The Seller may enter into only one PPA at any given time per facility with the Company for power sales. All sales must commence within 12 months of execution of a PPA.
- PPAs entered into pursuant to this schedule will not terminate prior to the Standard or Negotiated PPA's termination date if the 1978 Public Utility Regulatory Policies Act (PURPA) is repealed.

#### **TERM OF AGREEMENT**

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

Deleted: Dispute Resolution

Formatted: Indent: Left: 0", Tab stops: 7", Left

Formatted: Indent: Left: 0"

Deleted: Contract

Deleted: Contract

Deleted: will

Formatted: List Paragraph, Left, No bullets or numbering

Commented [AS12]: Housekeeping.

Commented [AS13]: SUBSTANTIVE and Outside the scope of our July meeting. The 12 month deadline to start delivery is a UM 1610 phase 1 issue.

Deleted: Contracts

Deleted: n

Deleted: contract's

# BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

# **UM 1931**

| PORTLAND GENERAL ELECTRIC COMPANY, | > |
|------------------------------------|---|
| Complainant,                       | )                                       |
| v.                                 | )                                       |
| ALFALFA SOLAR I LLC, et al.        | )                                       |
| Defendants.                        | )                                       |

# **EXHIBIT CREA-NIPPC-REC/205**

# **RICHARD GEORGE EMAIL ON JULY 22, 2014**

**December 28, 2018** 

From: Richard George <Richard.George@pgn.com>

**Sent:** Tuesday, July 22, 2014 4:21 PM

**To:** Greg Adams **Cc:** 'Irion Sanger'

**Subject:** RE: Follow-up UM 1610 PGE Avoided Cost Workshop July 23

Greg, there is no prior effective renewable PPA to redline against. Were you looking for a redline against the comparable non-renewable agreement? We used the 1396 filing as a base, which started with the non-renewable agreement and added terms to make it renewable. Most of the material differences were in the schedule and pricing, not in the contract. Just the REC transfer provision (which we will modify to reflect non-Gen envir. attributes).

Sent with Good (www.good.com)

----Original Message-----

From: Greg Adams [Greg@richardsonadams.com]

Sent: Tuesday, July 22, 2014 03:57 PM Pacific Standard Time

**To:** Richard George **Cc:** Irion Sanger

Subject: RE: Follow-up UM 1610 PGE Avoided Cost Workshop July 23

Ok, it doesn't appear that we ever received a redline of the renewable PPA, so it will be difficult to determine whether the standard terms are consistent with those of the existing standard contract. I'm not trying to be difficult but it's hard to evaluate these changes without a redline.

#### **Greg Adams**

Richardson Adams, PLLC 515 N. 27th Street, 83702 P.O. Box 7218, 83707 Boise, Idaho

Voice: 208.938.2236 Facsimile: 208.938.7904

Information contained in this electronic message and in any attachments hereto may contain information that is confidential, protected by the attorney/client privilege and/or attorney work product doctrine. This email is intended only for the use of the individual or entity named above. Inadvertent disclosure of the contents of this email or its attachments to unintended recipients is not intended to and does not constitute a waiver of the attorney/client privilege and/or attorney work product doctrine. This transmission is further covered by the Electronic Communication Privacy Act, 18 U.S.C. §§ 2510-2521.

If you have received this email in error, immediately notify the sender of the erroneous receipt and destroy this email and any attachments of the same either electronic or printed. Any disclosure, dissemination, distribution, copying or use of the contents or information received in error is strictly prohibited.

Thank you.

**From:** Richard George [mailto:Richard.George@pgn.com]

**Sent:** Tuesday, July 22, 2014 4:02 PM

**To:** Greg Adams **Cc:** Irion Sanger

Subject: RE: Follow-up UM 1610 PGE Avoided Cost Workshop July 23

Hi Greg. Sorry for any errors.

I'll send this to the rates guys. I handled the contracts and they handled the schedules. It is always possible that the link is not correct, also!

Rich

**From:** Greg Adams [mailto:Greg@richardsonadams.com]

Sent: Tuesday, July 22, 2014 2:58 PM

**To:** Richard George **Cc:** Irion Sanger

Subject: FW: Follow-up UM 1610 PGE Avoided Cost Workshop July 23

Rich, In reviewing the corrected materials, it appears that we still have errors in the redlined version of Schedule 201. I believe that there are changes that are not redlined compared to what is currently in effect. The link to the current schedule 201 is here

http://www.portlandgeneral.com/renewables efficiency/generate power/business/docs/sched 201.pdf

If you turn to page 3-4 of the redline version filed in UM 1610 and compare to the same language in that link, it appears that there are changes that have been made that are not redlined.

It would be useful if we had a correct redline for the meeting tomorrow, if possible.

#### Greg Adams

Richardson Adams, PLLC 515 N. 27th Street, 83702 P.O. Box 7218, 83707 Boise, Idaho

Voice: 208.938.2236 Facsimile: 208.938.7904

Information contained in this electronic message and in any attachments hereto may contain information that is confidential, protected by the attorney/client privilege and/or attorney work product doctrine. This email is intended only for the use of the individual or entity named above. Inadvertent disclosure of the contents of this email or its attachments to unintended recipients is not intended to and does not constitute a waiver of the attorney/client privilege and/or attorney work product doctrine. This transmission is further covered by the Electronic Communication Privacy Act, 18 U.S.C. §§ 2510-2521.

If you have received this email in error, immediately notify the sender of the erroneous receipt and destroy this email and any attachments of the same either electronic or printed. Any disclosure, dissemination, distribution, copying or use of the contents or information received in error is strictly prohibited.

Thank you.

**From:** Barbara Parr [mailto:Barbara.Parr@pqn.com]

**Sent:** Tuesday, July 22, 2014 11:51 AM

**To:** dockets@oregoncub.org; dockets@oseia.org; oregondockets@pacificorp.com; dockets@renewablenw.org; paul.ackerman@constellation.com; Greg Adams; da@thenescogroup.com; brittany.andrus@state.or.us; stephanie.andrus@state.or.us; james@utilityadvocates.org; adam.bless@state.or.us; kacia.brockman@state.or.us; dbrown@obsidianfinance.com; wcarey@gorge.net; bryce.dalley@pacificorp.com; megan@renewablenw.org; bill@oneenergyrenewables.com; dlchain@wvi.com; renee.m.france@doj.state.or.us; Richard George;

Sanger/3

tgregory@obsidianrenewables.com; john.harvey@exeloncorp.com; dhenkels@cleantechlawpartners.com; jhilton@idahopower.com; bob@oregoncub.org; kaufmann@lklaw.com; matt.krumenauer@state.or.us; dlokting@stollberne.com; rlorenz@cablehuston.com; lovinger@lklaw.com; jravenesanmarcos@yahoo.com; mmcarthur@aocweb.org; catriona@oregoncub.org; nelson@thnelson.com; k.a.newman@frontier.com; mpengilly@gmail.com; tcp@dvclaw.com; dockets@mcd-law.com; Peter Richardson; thad.roth@energytrust.org; tmroush@wvi.com; irion@sanger-law.com; cstokes@cablehuston.com; dustin.till@pacificorp.com; PGE OPUC Filings; david.tooze@portlandoregon.gov; bvc@dvclaw.com; john.volkman@energytrust.org; dwalker@idahopower.com

Cc: Rob Macfarlane; Mihir Desu; Colin Wright

Subject: Follow-up UM 1610 PGE Avoided Cost Workshop July 23

Attached please find an overview of PGE's PPA and Schedule 201 matrix changes for PGE's follow-up UM 1610 workshop scheduled for **Wednesday**, **July 23 from 1:30 p.m. to 4:30 p.m**. in 1WTC 13<sup>th</sup> floor, Legal A Conference Room.

**Telephone call-in**: All participants must dial (503) 464-2220 and enter conference meeting ID 1110 and # (pound) upon prompt. Do not begin call before scheduled time, you will receive an error message. Meeting will begin at 1:30 p.m.

## **Portland General Electric Company Address:**

World Trade Center Building 1 (WTC1) 121 SW Salmon Street – 13<sup>th</sup> Floor Portland, Oregon 97204

Barbara Parr | Legal Assistant to Richard George, Assistant General Counsel and Denise Saunders, Associate General Counsel. Portland General Electric Company, 121 SW Salmon St, 1WTC1301| Portland, Oregon 97204 | ☎: 503.464-8872 | 憑: 503.464-2200 | ⊠: barbara.parr@pgn.com

Think G

Think Green, please print only if necessary and recycle.

# BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

# **UM 1931**

| PORTLAND GENERAL ELECTRIC COMPANY, | ) |
|------------------------------------|---|
| Complainant,                       | ) |
| v.                                 | ) |
| ALFALFA SOLAR I LLC, et al.        | ) |
| Defendants.                        | ) |
|                                    | ) |

# **EXHIBIT CREA-NIPPC-REC/206**

# ROB MCFARLANE EMAIL ON JULY 29, 2014 (WITHOUT ALL ATTACHMENTS)

**December 28, 2018** 

From: Rob Macfarlane <Rob.Macfarlane@pgn.com>

**Sent:** Tuesday, July 29, 2014 11:42 AM

To: Greq Adams; brittany.andrus@state.or.us; stephanie.andrus@state.or.us; kacia.brockman@state.or.us;

dbrown@obsidianfinance.com; irion@sanger-law.com

**Cc:** Richard George; Mihir Desu; Colin Wright **Subject:** UM 1610 PGE Avoided Cost Documents

Attachments: 201407291120.pdf; PGE UM 1610 Schedule 201 Avoided Cost Update\_Sch 201\_Final\_05.30.14.doc;

Doc 1-Off System Integrated Variable PPA\_Final 05.30.14.doc; Doc 2-In System Firm Non-Variable PPA\_Final 05.30.14.doc; Doc 3-Off System Non Variable PPA\_Final 05.30.14.doc; Doc 4-In System

Variable PPA\_Final 05.30.15.doc; Doc 5-RENEWABLE Off System Non-Variable PPA\_Final

05.30.14.doc; Doc 6-RENEWABLE Off System Integrated PPA\_Final 05.30.14.doc; Doc 7-RENEWABLE In System Variable PPA\_Final 05.30.14.doc; Doc 8-RENEWABLE In System Non-Variable PPA.DOC; August 29 IRP Stakeholder Presentation.08.28final.pdf; Wind Capacity 06.25.13.pdf; WindCC\_2013 IRP

Report.pdf

All,

Clean Word versions of Schedule 201 and the associated PPAs are attached. Also attached are the handouts from today's workshop.

Regards,

Rob

**Rob Macfarlane** | Rate Case Project Manager, Rates and Regulatory Affairs | Portland General Electric 121 SW Salmon St, 1WTC0702 | Portland, Oregon 97204

**☎**: 503.464.8954 | ⊠: <u>rob.macfarlane@pgn.com</u>

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

#### **PURPOSE**

To provide information about 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's generation.

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.

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 the filed Avoided Costs in effect at that time.

Sheet No. 201-2

## SCHEDULE 201 (Continued)

## 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 Resources Power Purchase Agreement
- Standard Off System Integrated Variable Resources 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 Resources Power Purchase Agreement
- Standard Renewable Off System Integrated Variable Resources 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 rates are based on the Company's Avoided Costs. 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."

The Avoided Costs as listed in Tables 1 and 2 below include monthly On- and Off-Peak prices.

#### **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.

Avoided Costs are based on forward market price estimates through December 2014, the period of time during which the Company's Avoided Costs are associated with incremental purchases of Energy and capacity from the market. For the period 2015 through 2030, the 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.

#### PRICING FOR STANDARD PPA

Pricing represent 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 the Avoided Cost in effect at the time the agreement is executed.

The Company will pay Seller the Off-Peak Avoided Cost pursuant to Tables 1b, 2b, 3b, 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 Contract; (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 the On-Peak Avoided Cost pursuant to Table 1a, 2a, 3a, 4a, 5a, or 6a for all other Net Output. (See the PPA for defined terms.)

Sheet No. 201-4

### SCHEDULE 201 (Continued)

PRICING FOR STANDARD PPA (Continued)

## 1) Standard Fixed Price Option

The Standard Fixed Price Option is based on 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 Avoided Costs in Tables 1a and 1b, 2a and 2b, or 3a and 3c, depending on the type of QF, effective at execution.

The capacity contribution to peak for the avoided proxy resource on which Avoided Costs for the Standard Fixed Price Option are based and Base Load QF resources (Tables 1a and 1b) is assumed to be 100%.

The Standard Fixed Avoided Cost Price for Wind QFs (Tables 2a and 2b) includes integration costs and integration charges, both at \$3.99/MWh (\$2018), for a net zero effect. If the Wind QF is off system, the Seller is paid the integration charges in Table 7 in addition to the prices listed in Tables 2a and 2b.

Sellers with contracts 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   |          |         |        |        |        |        |
|------|--------|--------|--------|----------|-----------|-----------|----------|---------|--------|--------|--------|--------|
|      |        |        |        |          | Avo       | ided Cos  | ts       |         |        |        |        |        |
|      |        |        | St     | andard F | ixed Pric | e Option  | for Base | Load QF |        |        |        |        |
|      |        |        |        | 0        | n-Peak F  | orecast ( | \$/MWH)  |         |        |        |        |        |
|      |        |        |        |          |           |           |          |         |        |        |        |        |
| Year | Jan    | Feb    | Mar    | Apr      | May       | Jun       | Jul      | Aug     | Sep    | Oct    | Nov    | Dec    |
| 2014 | 48.13  | 56.88  | 48.63  | 30.38    | 30.88     | 31.03     | 45.53    | 54.78   | 50.38  | 46.88  | 48.63  | 54.38  |
| 2015 | 50.13  | 47.79  | 42.72  | 36.07    | 30.77     | 28.80     | 44.64    | 50.90   | 45.10  | 43.25  | 44.68  | 48.21  |
| 2016 | 49.77  | 47.46  | 42.45  | 35.88    | 30.65     | 28.70     | 44.34    | 50.53   | 44.80  | 42.97  | 44.38  | 47.87  |
| 2017 | 52.43  | 49.99  | 44.70  | 37.76    | 32.23     | 30.17     | 46.70    | 53.23   | 47.18  | 45.25  | 46.74  | 50.42  |
| 2018 | 56.37  | 53.74  | 48.04  | 40.57    | 34.61     | 32.40     | 50.20    | 57.24   | 50.72  | 48.64  | 50.25  | 54.21  |
| 2019 | 59.33  | 56.56  | 50.56  | 42.69    | 36.42     | 34.09     | 52.83    | 60.24   | 53.38  | 51.19  | 52.88  | 57.06  |
| 2020 | 61.12  | 58.27  | 52.09  | 43.99    | 37.53     | 35.13     | 54.43    | 62.06   | 55.00  | 52.74  | 54.48  | 58.78  |
| 2021 | 83.08  | 82.73  | 81.25  | 79.21    | 79.28     | 79.32     | 79.11    | 79.15   | 79.34  | 79.80  | 83.82  | 85.55  |
| 2022 | 86.66  | 86.03  | 84.34  | 82.31    | 82.46     | 82.52     | 82.71    | 82.73   | 82.93  | 83.42  | 88.08  | 90.31  |
| 2023 | 91.20  | 90.41  | 88.76  | 86.86    | 86.34     | 86.36     | 86.66    | 86.48   | 86.85  | 87.37  | 92.37  | 95.36  |
| 2024 | 96.86  | 95.81  | 93.35  | 91.39    | 90.70     | 90.78     | 91.16    | 91.09   | 91.49  | 92.15  | 95.30  | 98.71  |
| 2025 | 99.69  | 97.48  | 94.10  | 92.12    | 92.10     | 92.18     | 92.56    | 92.48   | 92.85  | 93.52  | 96.54  | 100.08 |
| 2026 | 100.47 | 99.38  | 96.00  | 93.83    | 93.32     | 93.40     | 93.80    | 93.72   | 94.12  | 94.68  | 98.25  | 101.90 |
| 2027 | 101.02 | 99.29  | 96.15  | 93.26    | 93.22     | 93.29     | 93.66    | 93.56   | 93.97  | 94.55  | 99.45  | 102.71 |
| 2028 | 101.10 | 99.49  | 95.85  | 93.39    | 93.31     | 93.37     | 93.58    | 93.64   | 93.87  | 94.58  | 102.56 | 105.58 |
| 2029 | 107.98 | 107.22 | 103.29 | 100.04   | 100.08    | 100.00    | 100.54   | 100.64  | 100.90 | 101.50 | 107.20 | 110.79 |
| 2030 | 112.59 | 109.12 | 104.07 | 99.81    | 99.56     | 99.58     | 100.09   | 100.18  | 100.44 | 101.29 | 110.03 | 113.81 |
| 2031 | 115.26 | 111.15 | 106.88 | 103.09   | 103.23    | 103.23    | 104.04   | 104.14  | 104.41 | 105.06 | 111.68 | 115.10 |
| 2032 | 117.17 | 112.98 | 108.63 | 104.76   | 104.90    | 104.90    | 105.73   | 105.83  | 106.11 | 106.77 | 113.52 | 117.00 |
| 2033 | 119.82 | 115.54 | 111.10 | 107.17   | 107.31    | 107.31    | 108.16   | 108.26  | 108.54 | 109.21 | 116.10 | 119.64 |
| 2034 | 122.26 | 117.90 | 113.38 | 109.36   | 109.51    | 109.51    | 110.37   | 110.48  | 110.77 | 111.45 | 118.47 | 122.08 |

|      |       |       |       |          | т.         | ABLE 1b  |               |         |       |       |       |       |
|------|-------|-------|-------|----------|------------|----------|---------------|---------|-------|-------|-------|-------|
|      |       |       |       |          |            | ided Cos | ts            |         |       |       |       |       |
|      |       |       | Sta   | andard F | ixed Price |          |               | Load QF | •     |       |       |       |
|      |       |       |       |          | ff-Peak F  |          | -             |         |       |       |       |       |
|      |       |       |       |          |            |          | <del>,,</del> |         |       |       |       |       |
| Year | Jan   | Feb   | Mar   | Apr      | May        | Jun      | Jul           | Aug     | Sep   | Oct   | Nov   | Dec   |
| 2014 | 38.13 | 51.38 | 42.88 | 15.23    | 9.88       | 9.38     | 21.78         | 37.03   | 40.53 | 39.63 | 41.38 | 47.38 |
| 2015 | 43.19 | 41.41 | 36.99 | 23.85    | 16.69      | 12.34    | 24.12         | 36.59   | 34.18 | 37.49 | 38.44 | 41.46 |
| 2016 | 43.43 | 41.65 | 37.23 | 24.08    | 16.92      | 12.57    | 24.35         | 36.83   | 34.42 | 37.73 | 38.68 | 41.70 |
| 2017 | 45.56 | 43.69 | 39.04 | 25.21    | 17.67      | 13.09    | 25.49         | 38.61   | 36.08 | 39.56 | 40.56 | 43.74 |
| 2018 | 48.40 | 46.40 | 41.45 | 26.74    | 18.73      | 13.86    | 27.05         | 41.01   | 38.31 | 42.01 | 43.08 | 46.46 |
| 2019 | 51.44 | 49.32 | 44.06 | 28.40    | 19.87      | 14.69    | 28.72         | 43.58   | 40.71 | 44.65 | 45.79 | 49.38 |
| 2020 | 53.92 | 51.66 | 46.15 | 31.05    | 22.57      | 17.61    | 32.64         | 46.96   | 43.50 | 46.77 | 48.01 | 51.78 |
| 2021 | 43.71 | 43.36 | 41.88 | 39.84    | 39.91      | 39.95    | 39.74         | 39.78   | 39.97 | 40.43 | 44.45 | 46.18 |
| 2022 | 46.52 | 45.90 | 44.20 | 42.18    | 42.33      | 42.38    | 42.58         | 42.60   | 42.80 | 43.29 | 47.95 | 50.18 |
| 2023 | 50.16 | 49.37 | 47.72 | 45.82    | 45.30      | 45.32    | 45.62         | 45.44   | 45.81 | 46.33 | 51.34 | 54.32 |
| 2024 | 55.29 | 54.25 | 51.79 | 49.83    | 49.14      | 49.22    | 49.60         | 49.52   | 49.92 | 50.59 | 53.74 | 57.15 |
| 2025 | 57.19 | 54.98 | 51.60 | 49.62    | 49.59      | 49.67    | 50.06         | 49.98   | 50.35 | 51.02 | 54.04 | 57.58 |
| 2026 | 57.15 | 56.06 | 52.68 | 50.51    | 50.00      | 50.08    | 50.48         | 50.40   | 50.80 | 51.36 | 54.93 | 58.58 |
| 2027 | 56.86 | 55.13 | 51.99 | 49.10    | 49.07      | 49.13    | 49.50         | 49.41   | 49.81 | 50.39 | 55.29 | 58.55 |
| 2028 | 56.09 | 54.48 | 50.84 | 48.38    | 48.30      | 48.36    | 48.57         | 48.63   | 48.86 | 49.57 | 57.55 | 60.57 |
| 2029 | 62.10 | 61.34 | 57.41 | 54.16    | 54.20      | 54.12    | 54.66         | 54.76   | 55.02 | 55.62 | 61.33 | 64.92 |
| 2030 | 65.82 | 62.35 | 57.31 | 53.05    | 52.79      | 52.82    | 53.33         | 53.42   | 53.68 | 54.53 | 63.27 | 67.05 |
| 2031 | 67.60 | 63.48 | 59.21 | 55.42    | 55.56      | 55.56    | 56.37         | 56.47   | 56.75 | 57.39 | 64.02 | 67.43 |
| 2032 | 68.90 | 64.70 | 60.35 | 56.48    | 56.63      | 56.63    | 57.46         | 57.56   | 57.84 | 58.49 | 65.24 | 68.73 |
| 2033 | 70.29 | 66.02 | 61.58 | 57.64    | 57.79      | 57.79    | 58.63         | 58.73   | 59.02 | 59.69 | 66.57 | 70.12 |
| 2034 | 71.62 | 67.26 | 62.74 | 58.72    | 58.87      | 58.87    | 59.73         | 59.84   | 60.13 | 60.81 | 67.83 | 71.44 |

|      |       |       |       |          | т        | ABLE 2a  |                   |       |       |       |       |       |
|------|-------|-------|-------|----------|----------|----------|-------------------|-------|-------|-------|-------|-------|
|      |       |       |       |          |          | ided Cos | ·e                |       |       |       |       |       |
|      |       |       |       | Standard |          |          | on for Wi         | nd QF |       |       |       |       |
|      |       |       |       |          | n-Peak F |          |                   |       |       |       |       |       |
|      |       |       |       |          |          |          | <del>••••••</del> |       |       |       |       |       |
| Year | Jan   | Feb   | Mar   | Apr      | May      | Jun      | Jul               | Aug   | Sep   | Oct   | Nov   | Dec   |
| 2014 | 44.43 | 53.18 | 44.93 | 26.68    | 27.18    | 27.33    | 41.83             | 51.08 | 46.68 | 43.18 | 44.93 | 50.68 |
| 2015 | 46.36 | 44.02 | 38.95 | 32.30    | 27.00    | 25.03    | 40.87             | 47.13 | 41.33 | 39.48 | 40.91 | 44.44 |
| 2016 | 45.93 | 43.62 | 38.61 | 32.04    | 26.81    | 24.86    | 40.50             | 46.69 | 40.96 | 39.13 | 40.54 | 44.03 |
| 2017 | 48.52 | 46.08 | 40.79 | 33.85    | 28.32    | 26.26    | 42.79             | 49.32 | 43.27 | 41.34 | 42.83 | 46.51 |
| 2018 | 52.38 | 49.75 | 44.05 | 36.58    | 30.62    | 28.41    | 46.21             | 53.25 | 46.73 | 44.65 | 46.26 | 50.22 |
| 2019 | 55.26 | 52.49 | 46.49 | 38.62    | 32.35    | 30.02    | 48.76             | 56.17 | 49.31 | 47.12 | 48.81 | 52.99 |
| 2020 | 56.97 | 54.12 | 47.94 | 39.84    | 33.38    | 30.98    | 50.28             | 57.91 | 50.85 | 48.59 | 50.33 | 54.63 |
| 2021 | 41.45 | 41.10 | 39.61 | 37.58    | 37.65    | 37.69    | 37.48             | 37.52 | 37.70 | 38.17 | 42.19 | 43.92 |
| 2022 | 44.22 | 43.60 | 41.90 | 39.88    | 40.03    | 40.08    | 40.28             | 40.29 | 40.49 | 40.99 | 45.65 | 47.87 |
| 2023 | 47.82 | 47.03 | 45.38 | 43.48    | 42.96    | 42.98    | 43.28             | 43.11 | 43.47 | 43.99 | 49.00 | 51.98 |
| 2024 | 52.90 | 51.85 | 49.40 | 47.44    | 46.75    | 46.83    | 47.21             | 47.13 | 47.53 | 48.19 | 51.35 | 54.75 |
| 2025 | 54.76 | 52.54 | 49.16 | 47.18    | 47.16    | 47.24    | 47.62             | 47.54 | 47.91 | 48.59 | 51.61 | 55.14 |
| 2026 | 54.66 | 53.58 | 50.20 | 48.02    | 47.52    | 47.60    | 47.99             | 47.91 | 48.32 | 48.87 | 52.44 | 56.10 |
| 2027 | 54.33 | 52.60 | 49.46 | 46.57    | 46.53    | 46.60    | 46.97             | 46.87 | 47.28 | 47.86 | 52.76 | 56.02 |
| 2028 | 53.51 | 51.90 | 48.26 | 45.80    | 45.72    | 45.78    | 45.99             | 46.05 | 46.28 | 46.99 | 54.97 | 57.99 |
| 2029 | 59.48 | 58.72 | 54.79 | 51.54    | 51.57    | 51.49    | 52.03             | 52.13 | 52.40 | 52.99 | 58.70 | 62.29 |
| 2030 | 63.14 | 59.67 | 54.62 | 50.37    | 50.11    | 50.13    | 50.64             | 50.74 | 51.00 | 51.85 | 60.59 | 64.36 |
| 2031 | 64.86 | 60.74 | 56.47 | 52.68    | 52.82    | 52.82    | 53.64             | 53.74 | 54.01 | 54.65 | 61.28 | 64.69 |
| 2032 | 66.10 | 61.90 | 57.55 | 53.69    | 53.83    | 53.83    | 54.66             | 54.76 | 55.04 | 55.69 | 62.45 | 65.93 |
| 2033 | 67.46 | 63.18 | 58.75 | 54.81    | 54.95    | 54.95    | 55.80             | 55.90 | 56.19 | 56.85 | 63.74 | 67.29 |
| 2034 | 68.73 | 64.37 | 59.85 | 55.83    | 55.98    | 55.98    | 56.84             | 56.95 | 57.24 | 57.92 | 64.94 | 68.55 |

|      | TABLE 2b                   |       |       |          |         |           |           |        |       |       |       |       |  |
|------|----------------------------|-------|-------|----------|---------|-----------|-----------|--------|-------|-------|-------|-------|--|
|      |                            |       |       |          | Avo     | ided Cos  | ts        |        |       |       |       |       |  |
|      |                            |       |       | Standard | Fixed P | rice Opti | on for Wi | ind QF |       |       |       |       |  |
|      | Off-Peak Forecast (\$/MWH) |       |       |          |         |           |           |        |       |       |       |       |  |
|      |                            |       |       |          |         |           |           |        |       |       |       |       |  |
| Year | Jan                        | Feb   | Mar   | Apr      | May     | Jun       | Jul       | Aug    | Sep   | Oct   | Nov   | Dec   |  |
| 2014 | 34.43                      | 47.68 | 39.18 | 11.53    | 6.18    | 5.68      | 18.08     | 33.33  | 36.83 | 35.93 | 37.68 | 43.68 |  |
| 2015 | 39.42                      | 37.64 | 33.22 | 20.08    | 12.92   | 8.57      | 20.35     | 32.82  | 30.41 | 33.72 | 34.67 | 37.69 |  |
| 2016 | 39.59                      | 37.81 | 33.39 | 20.24    | 13.08   | 8.73      | 20.51     | 32.99  | 30.58 | 33.89 | 34.84 | 37.86 |  |
| 2017 | 41.65                      | 39.78 | 35.13 | 21.30    | 13.76   | 9.18      | 21.58     | 34.70  | 32.17 | 35.65 | 36.65 | 39.83 |  |
| 2018 | 44.41                      | 42.41 | 37.46 | 22.75    | 14.74   | 9.87      | 23.06     | 37.02  | 34.32 | 38.02 | 39.09 | 42.47 |  |
| 2019 | 47.37                      | 45.25 | 39.99 | 24.33    | 15.80   | 10.62     | 24.65     | 39.51  | 36.64 | 40.58 | 41.72 | 45.31 |  |
| 2020 | 49.77                      | 47.51 | 42.00 | 26.90    | 18.42   | 13.46     | 28.49     | 42.81  | 39.35 | 42.62 | 43.86 | 47.63 |  |
| 2021 | 39.48                      | 39.13 | 37.65 | 35.61    | 35.68   | 35.72     | 35.51     | 35.55  | 35.74 | 36.20 | 40.22 | 41.95 |  |
| 2022 | 42.21                      | 41.59 | 39.89 | 37.87    | 38.02   | 38.07     | 38.27     | 38.29  | 38.49 | 38.98 | 43.64 | 45.87 |  |
| 2023 | 45.77                      | 44.98 | 43.33 | 41.43    | 40.91   | 40.93     | 41.23     | 41.05  | 41.42 | 41.94 | 46.95 | 49.93 |  |
| 2024 | 50.82                      | 49.78 | 47.32 | 45.36    | 44.67   | 44.75     | 45.13     | 45.05  | 45.45 | 46.12 | 49.27 | 52.68 |  |
| 2025 | 52.63                      | 50.42 | 47.04 | 45.06    | 45.03   | 45.11     | 45.50     | 45.42  | 45.79 | 46.46 | 49.48 | 53.02 |  |
| 2026 | 52.50                      | 51.41 | 48.03 | 45.86    | 45.35   | 45.43     | 45.83     | 45.75  | 46.15 | 46.71 | 50.28 | 53.93 |  |
| 2027 | 52.12                      | 50.39 | 47.25 | 44.36    | 44.33   | 44.39     | 44.76     | 44.67  | 45.07 | 45.65 | 50.55 | 53.81 |  |
| 2028 | 51.26                      | 49.65 | 46.01 | 43.55    | 43.47   | 43.53     | 43.74     | 43.80  | 44.03 | 44.74 | 52.72 | 55.74 |  |
| 2029 | 57.18                      | 56.42 | 52.49 | 49.24    | 49.28   | 49.20     | 49.74     | 49.84  | 50.10 | 50.70 | 56.41 | 60.00 |  |
| 2030 | 60.80                      | 57.33 | 52.29 | 48.03    | 47.77   | 47.80     | 48.31     | 48.40  | 48.66 | 49.51 | 58.25 | 62.03 |  |
| 2031 | 62.48                      | 58.36 | 54.09 | 50.30    | 50.44   | 50.44     | 51.25     | 51.35  | 51.63 | 52.27 | 58.90 | 62.31 |  |
| 2032 | 63.69                      | 59.49 | 55.14 | 51.27    | 51.42   | 51.42     | 52.25     | 52.35  | 52.63 | 53.28 | 60.03 | 63.52 |  |
| 2033 | 64.98                      | 60.71 | 56.27 | 52.33    | 52.48   | 52.48     | 53.32     | 53.42  | 53.71 | 54.38 | 61.26 | 64.81 |  |
| 2034 | 66.20                      | 61.84 | 57.32 | 53.30    | 53.45   | 53.45     | 54.31     | 54.42  | 54.71 | 55.39 | 62.41 | 66.02 |  |

|      |       |       |       |          | T         | ABLE 3a    |           |        |       |       |       |       |
|------|-------|-------|-------|----------|-----------|------------|-----------|--------|-------|-------|-------|-------|
|      |       |       |       |          |           | ided Cost  |           |        |       |       |       |       |
|      |       |       |       | Standard | d Fixed P | rice Optic | on for So | lar QF |       |       |       |       |
|      |       |       |       | 0        | n-Peak F  | orecast (  | \$/MWH)   |        |       |       |       |       |
| .,   |       |       |       | _        |           |            |           |        |       |       |       |       |
| Year | Jan   | Feb   | Mar   | Apr      | May       | Jun        | Jul       | Aug    | Sep   | Oct   | Nov   | Dec   |
| 2014 | 48.13 | 56.88 | 48.63 | 30.38    | 30.88     | 31.03      | 45.53     | 54.78  | 50.38 | 46.88 | 48.63 | 54.38 |
| 2015 | 50.13 | 47.79 | 42.72 | 36.07    | 30.77     | 28.80      | 44.64     | 50.90  | 45.10 | 43.25 | 44.68 | 48.21 |
| 2016 | 49.77 | 47.46 | 42.45 | 35.88    | 30.65     | 28.70      | 44.34     | 50.53  | 44.80 | 42.97 | 44.38 | 47.87 |
| 2017 | 52.43 | 49.99 | 44.70 | 37.76    | 32.23     | 30.17      | 46.70     | 53.23  | 47.18 | 45.25 | 46.74 | 50.42 |
| 2018 | 56.37 | 53.74 | 48.04 | 40.57    | 34.61     | 32.40      | 50.20     | 57.24  | 50.72 | 48.64 | 50.25 | 54.21 |
| 2019 | 59.33 | 56.56 | 50.56 | 42.69    | 36.42     | 34.09      | 52.83     | 60.24  | 53.38 | 51.19 | 52.88 | 57.06 |
| 2020 | 61.12 | 58.27 | 52.09 | 43.99    | 37.53     | 35.13      | 54.43     | 62.06  | 55.00 | 52.74 | 54.48 | 58.78 |
| 2021 | 45.68 | 45.33 | 43.84 | 41.81    | 41.88     | 41.92      | 41.71     | 41.75  | 41.93 | 42.40 | 46.42 | 48.15 |
| 2022 | 48.53 | 47.91 | 46.21 | 44.19    | 44.34     | 44.39      | 44.59     | 44.60  | 44.80 | 45.30 | 49.96 | 52.18 |
| 2023 | 52.21 | 51.42 | 49.77 | 47.87    | 47.35     | 47.37      | 47.67     | 47.50  | 47.86 | 48.38 | 53.39 | 56.37 |
| 2024 | 57.37 | 56.32 | 53.87 | 51.91    | 51.22     | 51.30      | 51.68     | 51.60  | 52.00 | 52.66 | 55.82 | 59.22 |
| 2025 | 59.32 | 57.10 | 53.72 | 51.74    | 51.72     | 51.80      | 52.18     | 52.10  | 52.47 | 53.15 | 56.17 | 59.70 |
| 2026 | 59.31 | 58.23 | 54.85 | 52.67    | 52.17     | 52.25      | 52.64     | 52.56  | 52.97 | 53.52 | 57.09 | 60.75 |
| 2027 | 59.07 | 57.34 | 54.20 | 51.31    | 51.27     | 51.34      | 51.71     | 51.61  | 52.02 | 52.60 | 57.50 | 60.76 |
| 2028 | 58.34 | 56.73 | 53.09 | 50.63    | 50.55     | 50.61      | 50.82     | 50.88  | 51.11 | 51.82 | 59.80 | 62.82 |
| 2029 | 64.40 | 63.64 | 59.71 | 56.46    | 56.49     | 56.41      | 56.95     | 57.05  | 57.32 | 57.91 | 63.62 | 67.21 |
| 2030 | 68.16 | 64.69 | 59.64 | 55.39    | 55.13     | 55.15      | 55.66     | 55.76  | 56.02 | 56.87 | 65.61 | 69.38 |
| 2031 | 69.98 | 65.86 | 61.59 | 57.80    | 57.94     | 57.94      | 58.76     | 58.86  | 59.13 | 59.77 | 66.40 | 69.81 |
| 2032 | 71.31 | 67.11 | 62.76 | 58.90    | 59.04     | 59.04      | 59.87     | 59.97  | 60.25 | 60.90 | 67.66 | 71.14 |
| 2033 | 72.77 | 68.49 | 64.06 | 60.12    | 60.26     | 60.26      | 61.11     | 61.21  | 61.50 | 62.16 | 69.05 | 72.60 |
| 2034 | 74.15 | 69.79 | 65.27 | 61.25    | 61.40     | 61.40      | 62.26     | 62.37  | 62.66 | 63.34 | 70.36 | 73.97 |

|      |                            |       |       |          | T         | ABLE 3b   |           |        |       |       |       |       |  |
|------|----------------------------|-------|-------|----------|-----------|-----------|-----------|--------|-------|-------|-------|-------|--|
|      |                            |       |       |          | Avoi      | ided Cos  | ts        |        |       |       |       |       |  |
|      |                            |       |       | Standard | d Fixed P | rice Opti | on for So | lar QF |       |       |       |       |  |
|      | Off-Peak Forecast (\$/MWH) |       |       |          |           |           |           |        |       |       |       |       |  |
|      |                            |       |       |          |           |           |           |        |       |       |       |       |  |
| Year | Jan                        | Feb   | Mar   | Apr      | May       | Jun       | Jul       | Aug    | Sep   | Oct   | Nov   | Dec   |  |
| 2014 | 38.13                      | 51.38 | 42.88 | 15.23    | 9.88      | 9.38      | 21.78     | 37.03  | 40.53 | 39.63 | 41.38 | 47.38 |  |
| 2015 | 43.19                      | 41.41 | 36.99 | 23.85    | 16.69     | 12.34     | 24.12     | 36.59  | 34.18 | 37.49 | 38.44 | 41.46 |  |
| 2016 | 43.43                      | 41.65 | 37.23 | 24.08    | 16.92     | 12.57     | 24.35     | 36.83  | 34.42 | 37.73 | 38.68 | 41.70 |  |
| 2017 | 45.56                      | 43.69 | 39.04 | 25.21    | 17.67     | 13.09     | 25.49     | 38.61  | 36.08 | 39.56 | 40.56 | 43.74 |  |
| 2018 | 48.40                      | 46.40 | 41.45 | 26.74    | 18.73     | 13.86     | 27.05     | 41.01  | 38.31 | 42.01 | 43.08 | 46.46 |  |
| 2019 | 51.44                      | 49.32 | 44.06 | 28.40    | 19.87     | 14.69     | 28.72     | 43.58  | 40.71 | 44.65 | 45.79 | 49.38 |  |
| 2020 | 53.92                      | 51.66 | 46.15 | 31.05    | 22.57     | 17.61     | 32.64     | 46.96  | 43.50 | 46.77 | 48.01 | 51.78 |  |
| 2021 | 43.71                      | 43.36 | 41.88 | 39.84    | 39.91     | 39.95     | 39.74     | 39.78  | 39.97 | 40.43 | 44.45 | 46.18 |  |
| 2022 | 46.52                      | 45.90 | 44.20 | 42.18    | 42.33     | 42.38     | 42.58     | 42.60  | 42.80 | 43.29 | 47.95 | 50.18 |  |
| 2023 | 50.16                      | 49.37 | 47.72 | 45.82    | 45.30     | 45.32     | 45.62     | 45.44  | 45.81 | 46.33 | 51.34 | 54.32 |  |
| 2024 | 55.29                      | 54.25 | 51.79 | 49.83    | 49.14     | 49.22     | 49.60     | 49.52  | 49.92 | 50.59 | 53.74 | 57.15 |  |
| 2025 | 57.19                      | 54.98 | 51.60 | 49.62    | 49.59     | 49.67     | 50.06     | 49.98  | 50.35 | 51.02 | 54.04 | 57.58 |  |
| 2026 | 57.15                      | 56.06 | 52.68 | 50.51    | 50.00     | 50.08     | 50.48     | 50.40  | 50.80 | 51.36 | 54.93 | 58.58 |  |
| 2027 | 56.86                      | 55.13 | 51.99 | 49.10    | 49.07     | 49.13     | 49.50     | 49.41  | 49.81 | 50.39 | 55.29 | 58.55 |  |
| 2028 | 56.09                      | 54.48 | 50.84 | 48.38    | 48.30     | 48.36     | 48.57     | 48.63  | 48.86 | 49.57 | 57.55 | 60.57 |  |
| 2029 | 62.10                      | 61.34 | 57.41 | 54.16    | 54.20     | 54.12     | 54.66     | 54.76  | 55.02 | 55.62 | 61.33 | 64.92 |  |
| 2030 | 65.82                      | 62.35 | 57.31 | 53.05    | 52.79     | 52.82     | 53.33     | 53.42  | 53.68 | 54.53 | 63.27 | 67.05 |  |
| 2031 | 67.60                      | 63.48 | 59.21 | 55.42    | 55.56     | 55.56     | 56.37     | 56.47  | 56.75 | 57.39 | 64.02 | 67.43 |  |
| 2032 | 68.90                      | 64.70 | 60.35 | 56.48    | 56.63     | 56.63     | 57.46     | 57.56  | 57.84 | 58.49 | 65.24 | 68.73 |  |
| 2033 | 70.29                      | 66.02 | 61.58 | 57.64    | 57.79     | 57.79     | 58.63     | 58.73  | 59.02 | 59.69 | 66.57 | 70.12 |  |
| 2034 | 71.62                      | 67.26 | 62.74 | 58.72    | 58.87     | 58.87     | 59.73     | 59.84  | 60.13 | 60.81 | 67.83 | 71.44 |  |

PRICING OPTIONS FOR STANDARD CONTRACTS (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 Avoided Costs in Tables 4a and 4b, 5a and 5b, or 6a and 6b, depending on the type of QF, effective at execution. A Renewable QF choosing the Renewable Fixed Price Option must cede all Renewable Energy Certificates and all other Environmental Attributes generated by the facility to the Company during the deficiency period starting in 2020.

The Renewable Avoided Cost price during the deficiency period (starting in 2020) reflects an increase for avoided integration of \$3.99/MWh (\$2018).

The Renewable Avoided Cost price for wind QFs reflects a reduction by an integration charge of \$3.99/MWh (\$2018). This reduction cancels out the increase noted above during the deficiency period starting in 2020. If the QF Wind QF is off system, the Seller is paid the integration charges in Table 7 in addition to the prices listed in Tables 5a and 5b.

Sellers with contracts 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.

|      | TABLE 4a                                      |        |        |        |        |        |        |        |        |        |        |        |  |
|------|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--|
|      | Renewable Avoided Costs                       |        |        |        |        |        |        |        |        |        |        |        |  |
|      | Renewable Fixed Price Option for Base Load QF |        |        |        |        |        |        |        |        |        |        |        |  |
|      | On-Peak Forecast (\$/MWH)                     |        |        |        |        |        |        |        |        |        |        |        |  |
|      |   |        |        |        |        |        |        |        |        |        |        |        |  |
| Year | Jan   | Feb    | Mar    | Apr    | May    | Jun    | Jul    | Aug    | Sep    | Oct    | Nov    | Dec    |  |
| 2014 | 48.13   | 56.88  | 48.63  | 30.38  | 30.88  | 31.03  | 45.53  | 54.78  | 50.38  | 46.88  | 48.63  | 54.38  |  |
| 2015 | 50.13   | 47.79  | 42.72  | 36.07  | 30.77  | 28.80  | 44.64  | 50.90  | 45.10  | 43.25  | 44.68  | 48.21  |  |
| 2016 | 49.77   | 47.46  | 42.45  | 35.88  | 30.65  | 28.70  | 44.34  | 50.53  | 44.80  | 42.97  | 44.38  | 47.87  |  |
| 2017 | 52.43   | 49.99  | 44.70  | 37.76  | 32.23  | 30.17  | 46.70  | 53.23  | 47.18  | 45.25  | 46.74  | 50.42  |  |
| 2018 | 56.37   | 53.74  | 48.04  | 40.57  | 34.61  | 32.40  | 50.20  | 57.24  | 50.72  | 48.64  | 50.25  | 54.21  |  |
| 2019 | 59.33   | 56.56  | 50.56  | 42.69  | 36.42  | 34.09  | 52.83  | 60.24  | 53.38  | 51.19  | 52.88  | 57.06  |  |
| 2020 | 110.96  | 110.94 | 110.27 | 110.67 | 113.50 | 112.71 | 112.43 | 112.33 | 111.19 | 110.33 | 111.07 | 110.17 |  |
| 2021 | 113.45  | 113.66 | 112.32 | 113.27 | 115.79 | 115.12 | 114.61 | 115.06 | 113.73 | 112.83 | 113.98 | 112.81 |  |
| 2022 | 115.87  | 115.76 | 114.08 | 115.61 | 118.24 | 117.33 | 116.93 | 116.90 | 115.93 | 115.04 | 116.30 | 115.03 |  |
| 2023 | 118.52  | 118.14 | 116.39 | 118.22 | 120.38 | 119.73 | 119.43 | 119.10 | 118.36 | 117.33 | 118.85 | 117.87 |  |
| 2024 | 120.08  | 120.21 | 118.48 | 120.27 | 122.67 | 121.77 | 121.68 | 121.44 | 121.28 | 119.17 | 120.06 | 120.17 |  |
| 2025 | 122.82  | 123.11 | 121.17 | 123.25 | 126.29 | 125.25 | 124.41 | 124.53 | 123.80 | 121.82 | 122.85 | 122.54 |  |
| 2026 | 125.83  | 125.53 | 124.24 | 126.17 | 130.11 | 127.03 | 127.04 | 127.39 | 127.14 | 124.44 | 126.06 | 125.22 |  |
| 2027 | 128.29  | 127.90 | 126.44 | 128.31 | 133.59 | 129.53 | 129.20 | 130.48 | 129.45 | 126.96 | 128.10 | 127.68 |  |
| 2028 | 130.68  | 129.75 | 127.97 | 130.93 | 135.83 | 131.54 | 132.16 | 132.17 | 131.40 | 129.63 | 130.58 | 129.89 |  |
| 2029 | 133.40  | 133.19 | 130.84 | 133.83 | 142.67 | 135.11 | 135.17 | 135.18 | 135.22 | 132.25 | 132.97 | 132.87 |  |
| 2030 | 136.15  | 135.90 | 133.88 | 136.43 | 146.30 | 139.26 | 137.36 | 137.25 | 138.47 | 134.83 | 135.33 | 135.37 |  |
| 2031 | 138.67  | 138.23 | 136.79 | 139.75 | 149.10 | 143.07 | 139.93 | 140.76 | 140.94 | 137.57 | 138.55 | 138.16 |  |
| 2032 | 140.80  | 140.35 | 138.89 | 141.90 | 151.40 | 145.27 | 142.07 | 142.92 | 143.11 | 139.68 | 140.67 | 140.28 |  |
| 2033 | 144.07  | 143.61 | 142.12 | 145.19 | 154.90 | 148.64 | 145.37 | 146.23 | 146.43 | 142.92 | 143.94 | 143.54 |  |
| 2034 | 147.01  | 146.54 | 145.02 | 148.15 | 158.05 | 151.67 | 148.34 | 149.22 | 149.42 | 145.84 | 146.88 | 146.47 |  |

|      |       |       |       |           | T         | ABLE 4b   |          |         |       |       |       |       |
|------|-------|-------|-------|-----------|-----------|-----------|----------|---------|-------|-------|-------|-------|
|      |       |       |       | R         | Renewabl  | e Avoide  | d Costs  |         |       |       |       |       |
|      |       |       | Rer   | newable F | ixed Pric | e Option  | for Base | Load QI | F     |       |       |       |
|      |       |       |       | 0         | ff-Peak F | orecast ( | \$/MWH)  |         |       |       |       |       |
|      |       |       |       |           |           |           |          |         |       |       |       |       |
| Year | Jan   | Feb   | Mar   | Apr       | May       | Jun       | Jul      | Aug     | Sep   | Oct   | Nov   | Dec   |
| 2014 | 38.13 | 51.38 | 42.88 | 15.23     | 9.88      | 9.38      | 21.78    | 37.03   | 40.53 | 39.63 | 41.38 | 47.38 |
| 2015 | 43.19 | 41.41 | 36.99 | 23.85     | 16.69     | 12.34     | 24.12    | 36.59   | 34.18 | 37.49 | 38.44 | 41.46 |
| 2016 | 43.43 | 41.65 | 37.23 | 24.08     | 16.92     | 12.57     | 24.35    | 36.83   | 34.42 | 37.73 | 38.68 | 41.70 |
| 2017 | 45.56 | 43.69 | 39.04 | 25.21     | 17.67     | 13.09     | 25.49    | 38.61   | 36.08 | 39.56 | 40.56 | 43.74 |
| 2018 | 48.40 | 46.40 | 41.45 | 26.74     | 18.73     | 13.86     | 27.05    | 41.01   | 38.31 | 42.01 | 43.08 | 46.46 |
| 2019 | 51.44 | 49.32 | 44.06 | 28.40     | 19.87     | 14.69     | 28.72    | 43.58   | 40.71 | 44.65 | 45.79 | 49.38 |
| 2020 | 59.57 | 59.79 | 61.16 | 60.06     | 57.06     | 57.27     | 57.53    | 58.56   | 59.35 | 60.44 | 60.26 | 60.65 |
| 2021 | 61.57 | 60.88 | 62.38 | 61.17     | 58.60     | 58.64     | 59.22    | 59.52   | 60.55 | 62.35 | 60.20 | 61.71 |
| 2022 | 62.46 | 62.17 | 64.15 | 62.14     | 59.45     | 59.78     | 61.11    | 60.25   | 61.70 | 63.51 | 61.19 | 62.84 |
| 2023 | 63.29 | 63.33 | 65.41 | 63.80     | 59.88     | 60.91     | 62.14    | 61.65   | 62.79 | 64.80 | 62.12 | 64.11 |
| 2024 | 63.85 | 63.91 | 66.70 | 63.71     | 60.26     | 62.68     | 61.65    | 61.97   | 63.30 | 65.11 | 64.00 | 64.56 |
| 2025 | 65.15 | 65.14 | 68.08 | 64.68     | 60.34     | 63.09     | 62.95    | 63.83   | 63.92 | 66.54 | 66.09 | 65.54 |
| 2026 | 65.53 | 66.33 | 68.47 | 65.19     | 61.03     | 64.01     | 63.86    | 64.48   | 63.86 | 67.45 | 66.33 | 66.37 |
| 2027 | 67.71 | 67.69 | 69.31 | 66.85     | 60.98     | 65.19     | 65.48    | 64.93   | 65.29 | 69.40 | 67.14 | 67.59 |
| 2028 | 68.66 | 69.20 | 71.42 | 68.49     | 60.54     | 66.63     | 66.77    | 65.60   | 66.82 | 69.99 | 67.94 | 69.66 |
| 2029 | 69.19 | 69.91 | 72.73 | 69.82     | 56.36     | 66.99     | 67.94    | 66.73   | 68.08 | 70.78 | 69.92 | 70.87 |
| 2030 | 70.29 | 71.09 | 74.22 | 70.05     | 56.23     | 67.61     | 68.62    | 68.76   | 68.60 | 72.12 | 71.56 | 72.33 |
| 2031 | 71.80 | 72.85 | 75.23 | 70.47     | 57.37     | 67.52     | 70.07    | 70.21   | 68.84 | 73.33 | 73.18 | 72.51 |
| 2032 | 72.99 | 74.06 | 76.48 | 71.64     | 58.32     | 68.64     | 71.23    | 71.37   | 69.98 | 74.54 | 74.39 | 73.71 |
| 2033 | 74.59 | 75.68 | 78.16 | 73.20     | 59.59     | 70.14     | 72.79    | 72.94   | 71.51 | 76.17 | 76.02 | 75.32 |
| 2034 | 76.04 | 77.15 | 79.67 | 74.62     | 60.75     | 71.50     | 74.20    | 74.35   | 72.90 | 77.65 | 77.49 | 76.79 |

|      |  |       |       |       | T      | ABLE 5a |       |       |       |       |       |       |
|------|--|-------|-------|-------|--------|---------|-------|-------|-------|-------|-------|-------|
|      | Renewable Avoided Costs                  |       |       |       |        |         |       |       |       |       |       |       |
|      | Renewable Fixed Price Option for Wind QF |       |       |       |        |         |       |       |       |       |       |       |
|      | On-Peak Forecast (\$/MWH)                |       |       |       |        |         |       |       |       |       |       |       |
|      |  |       |       |       |        |         |       |       |       |       |       |       |
| Year | Jan                                      | Feb   | Mar   | Apr   | May    | Jun     | Jul   | Aug   | Sep   | Oct   | Nov   | Dec   |
| 2014 | 44.43                                    | 53.18 | 44.93 | 26.68 | 27.18  | 27.33   | 41.83 | 51.08 | 46.68 | 43.18 | 44.93 | 50.68 |
| 2015 | 46.36                                    | 44.02 | 38.95 | 32.30 | 27.00  | 25.03   | 40.87 | 47.13 | 41.33 | 39.48 | 40.91 | 44.44 |
| 2016 | 45.93                                    | 43.62 | 38.61 | 32.04 | 26.81  | 24.86   | 40.50 | 46.69 | 40.96 | 39.13 | 40.54 | 44.03 |
| 2017 | 48.52                                    | 46.08 | 40.79 | 33.85 | 28.32  | 26.26   | 42.79 | 49.32 | 43.27 | 41.34 | 42.83 | 46.51 |
| 2018 | 52.38                                    | 49.75 | 44.05 | 36.58 | 30.62  | 28.41   | 46.21 | 53.25 | 46.73 | 44.65 | 46.26 | 50.22 |
| 2019 | 55.26                                    | 52.49 | 46.49 | 38.62 | 32.35  | 30.02   | 48.76 | 56.17 | 49.31 | 47.12 | 48.81 | 52.99 |
| 2020 | 70.23                                    | 70.21 | 69.54 | 69.95 | 72.77  | 71.98   | 71.70 | 71.60 | 70.46 | 69.60 | 70.34 | 69.44 |
| 2021 | 71.82                                    | 72.02 | 70.69 | 71.64 | 74.15  | 73.48   | 72.97 | 73.43 | 72.09 | 71.20 | 72.35 | 71.18 |
| 2022 | 73.43                                    | 73.32 | 71.64 | 73.18 | 75.80  | 74.90   | 74.50 | 74.47 | 73.49 | 72.61 | 73.87 | 72.59 |
| 2023 | 75.14                                    | 74.76 | 73.01 | 74.84 | 77.01  | 76.36   | 76.05 | 75.73 | 74.98 | 73.96 | 75.47 | 74.50 |
| 2024 | 76.13                                    | 76.26 | 74.53 | 76.31 | 78.72  | 77.82   | 77.72 | 77.49 | 77.33 | 75.22 | 76.10 | 76.21 |
| 2025 | 77.89                                    | 78.17 | 76.24 | 78.31 | 81.36  | 80.32   | 79.47 | 79.59 | 78.87 | 76.88 | 77.91 | 77.60 |
| 2026 | 80.02                                    | 79.73 | 78.44 | 80.37 | 84.30  | 81.23   | 81.23 | 81.59 | 81.34 | 78.64 | 80.25 | 79.42 |
| 2027 | 81.60                                    | 81.21 | 79.75 | 81.62 | 86.90  | 82.84   | 82.51 | 83.79 | 82.77 | 80.27 | 81.41 | 80.99 |
| 2028 | 83.09                                    | 82.17 | 80.38 | 83.34 | 88.24  | 83.95   | 84.57 | 84.59 | 83.81 | 82.04 | 82.99 | 82.30 |
| 2029 | 84.89                                    | 84.68 | 82.34 | 85.32 | 94.16  | 86.60   | 86.67 | 86.67 | 86.71 | 83.74 | 84.46 | 84.36 |
| 2030 | 86.71                                    | 86.45 | 84.43 | 86.99 | 96.86  | 89.81   | 87.91 | 87.81 | 89.03 | 85.38 | 85.88 | 85.92 |
| 2031 | 88.27                                    | 87.83 | 86.39 | 89.35 | 98.69  | 92.67   | 89.52 | 90.35 | 90.54 | 87.17 | 88.14 | 87.76 |
| 2032 | 89.73                                    | 89.28 | 87.82 | 90.83 | 100.32 | 94.20   | 91.00 | 91.85 | 92.04 | 88.61 | 89.60 | 89.21 |
| 2033 | 91.71                                    | 91.25 | 89.76 | 92.83 | 102.54 | 96.28   | 93.01 | 93.88 | 94.07 | 90.56 | 91.58 | 91.18 |
| 2034 | 93.48                                    | 93.01 | 91.49 | 94.62 | 104.52 | 98.14   | 94.81 | 95.69 | 95.89 | 92.31 | 93.35 | 92.94 |

|      |  |       |       |       | T/    | ABLE 5b |       |       |       |       |       |       |
|------|--|-------|-------|-------|-------|---------|-------|-------|-------|-------|-------|-------|
|      | Renewable Avoided Costs Renewable Fixed Price Option for Wind QF |       |       |       |       |         |       |       |       |       |       |       |
|      |  |       |       |       |       |         |       |       |       |       |       |       |
|      | Off-Peak Forecast (\$/MWH)                                       |       |       |       |       |         |       |       |       |       |       |       |
|      |  |       |       |       |       |         |       |       |       |       |       |       |
| Year | Jan  | Feb   | Mar   | Apr   | May   | Jun     | Jul   | Aug   | Sep   | Oct   | Nov   | Dec   |
| 2014 | 34.43  | 47.68 | 39.18 | 11.53 | 6.18  | 5.68    | 18.08 | 33.33 | 36.83 | 35.93 | 37.68 | 43.68 |
| 2015 | 39.42  | 37.64 | 33.22 | 20.08 | 12.92 | 8.57    | 20.35 | 32.82 | 30.41 | 33.72 | 34.67 | 37.69 |
| 2016 | 39.59  | 37.81 | 33.39 | 20.24 | 13.08 | 8.73    | 20.51 | 32.99 | 30.58 | 33.89 | 34.84 | 37.86 |
| 2017 | 41.65  | 39.78 | 35.13 | 21.30 | 13.76 | 9.18    | 21.58 | 34.70 | 32.17 | 35.65 | 36.65 | 39.83 |
| 2018 | 44.41  | 42.41 | 37.46 | 22.75 | 14.74 | 9.87    | 23.06 | 37.02 | 34.32 | 38.02 | 39.09 | 42.47 |
| 2019 | 47.37  | 45.25 | 39.99 | 24.33 | 15.80 | 10.62   | 24.65 | 39.51 | 36.64 | 40.58 | 41.72 | 45.31 |
| 2020 | 55.42  | 55.64 | 57.01 | 55.91 | 52.91 | 53.12   | 53.38 | 54.41 | 55.20 | 56.29 | 56.11 | 56.50 |
| 2021 | 57.34  | 56.65 | 58.15 | 56.94 | 54.37 | 54.41   | 54.99 | 55.29 | 56.32 | 58.12 | 55.97 | 57.48 |
| 2022 | 58.15  | 57.86 | 59.84 | 57.83 | 55.14 | 55.47   | 56.80 | 55.94 | 57.39 | 59.20 | 56.88 | 58.53 |
| 2023 | 58.90  | 58.94 | 61.02 | 59.41 | 55.49 | 56.52   | 57.75 | 57.26 | 58.40 | 60.41 | 57.73 | 59.72 |
| 2024 | 59.38  | 59.44 | 62.23 | 59.24 | 55.79 | 58.21   | 57.18 | 57.50 | 58.83 | 60.64 | 59.53 | 60.09 |
| 2025 | 60.59  | 60.58 | 63.52 | 60.12 | 55.78 | 58.53   | 58.39 | 59.27 | 59.36 | 61.98 | 61.53 | 60.98 |
| 2026 | 60.88  | 61.68 | 63.82 | 60.54 | 56.38 | 59.36   | 59.21 | 59.83 | 59.21 | 62.80 | 61.68 | 61.72 |
| 2027 | 62.97  | 62.95 | 64.57 | 62.11 | 56.24 | 60.45   | 60.74 | 60.19 | 60.55 | 64.66 | 62.40 | 62.85 |
| 2028 | 63.83  | 64.37 | 66.59 | 63.66 | 55.71 | 61.80   | 61.94 | 60.77 | 61.99 | 65.16 | 63.11 | 64.83 |
| 2029 | 64.27  | 64.99 | 67.81 | 64.90 | 51.44 | 62.07   | 63.02 | 61.81 | 63.16 | 65.86 | 65.00 | 65.95 |
| 2030 | 65.27  | 66.07 | 69.20 | 65.03 | 51.21 | 62.59   | 63.60 | 63.74 | 63.58 | 67.10 | 66.54 | 67.31 |
| 2031 | 66.68  | 67.73 | 70.11 | 65.35 | 52.25 | 62.40   | 64.95 | 65.09 | 63.72 | 68.21 | 68.06 | 67.39 |
| 2032 | 67.78  | 68.85 | 71.27 | 66.43 | 53.11 | 63.43   | 66.02 | 66.16 | 64.77 | 69.33 | 69.18 | 68.50 |
| 2033 | 69.28  | 70.37 | 72.85 | 67.89 | 54.28 | 64.83   | 67.48 | 67.63 | 66.20 | 70.86 | 70.71 | 70.01 |
| 2034 | 70.62  | 71.73 | 74.25 | 69.20 | 55.33 | 66.08   | 68.78 | 68.93 | 67.48 | 72.23 | 72.07 | 71.37 |

|      |   |       |       |        | т.     | ABLE 6a |        |        |        |       |       |       |
|------|---|-------|-------|--------|--------|---------|--------|--------|--------|-------|-------|-------|
|      | Renewable Avoided Costs Renewable Fixed Price Option for Solar QF |       |       |        |        |         |        |        |        |       |       |       |
|      |   |       |       |        |        |         |        |        |        |       |       |       |
|      | On-Peak Forecast (\$/MWH)   |       |       |        |        |         |        |        |        |       |       |       |
|      |   |       |       |        |        |         |        |        |        |       |       |       |
| Year | Jan   | Feb   | Mar   | Apr    | May    | Jun     | Jul    | Aug    | Sep    | Oct   | Nov   | Dec   |
| 2014 | 48.13   | 56.88 | 48.63 | 30.38  | 30.88  | 31.03   | 45.53  | 54.78  | 50.38  | 46.88 | 48.63 | 54.38 |
| 2015 | 50.13   | 47.79 | 42.72 | 36.07  | 30.77  | 28.80   | 44.64  | 50.90  | 45.10  | 43.25 | 44.68 | 48.21 |
| 2016 | 49.77   | 47.46 | 42.45 | 35.88  | 30.65  | 28.70   | 44.34  | 50.53  | 44.80  | 42.97 | 44.38 | 47.87 |
| 2017 | 52.43   | 49.99 | 44.70 | 37.76  | 32.23  | 30.17   | 46.70  | 53.23  | 47.18  | 45.25 | 46.74 | 50.42 |
| 2018 | 56.37   | 53.74 | 48.04 | 40.57  | 34.61  | 32.40   | 50.20  | 57.24  | 50.72  | 48.64 | 50.25 | 54.21 |
| 2019 | 59.33   | 56.56 | 50.56 | 42.69  | 36.42  | 34.09   | 52.83  | 60.24  | 53.38  | 51.19 | 52.88 | 57.06 |
| 2020 | 74.38   | 74.36 | 73.69 | 74.10  | 76.92  | 76.13   | 75.85  | 75.75  | 74.61  | 73.75 | 74.49 | 73.59 |
| 2021 | 76.05   | 76.25 | 74.92 | 75.87  | 78.38  | 77.71   | 77.20  | 77.66  | 76.32  | 75.43 | 76.58 | 75.41 |
| 2022 | 77.74   | 77.63 | 75.95 | 77.49  | 80.11  | 79.21   | 78.81  | 78.78  | 77.80  | 76.92 | 78.18 | 76.90 |
| 2023 | 79.53   | 79.15 | 77.40 | 79.23  | 81.40  | 80.75   | 80.44  | 80.12  | 79.37  | 78.35 | 79.86 | 78.89 |
| 2024 | 80.60   | 80.73 | 79.00 | 80.78  | 83.19  | 82.29   | 82.19  | 81.96  | 81.80  | 79.69 | 80.57 | 80.68 |
| 2025 | 82.45   | 82.73 | 80.80 | 82.87  | 85.92  | 84.88   | 84.03  | 84.15  | 83.43  | 81.44 | 82.47 | 82.16 |
| 2026 | 84.67   | 84.38 | 83.09 | 85.02  | 88.95  | 85.88   | 85.88  | 86.24  | 85.99  | 83.29 | 84.90 | 84.07 |
| 2027 | 86.34   | 85.95 | 84.49 | 86.36  | 91.64  | 87.58   | 87.25  | 88.53  | 87.51  | 85.01 | 86.15 | 85.73 |
| 2028 | 87.92   | 87.00 | 85.21 | 88.17  | 93.07  | 88.78   | 89.40  | 89.42  | 88.64  | 86.87 | 87.82 | 87.13 |
| 2029 | 89.81   | 89.60 | 87.26 | 90.24  | 99.08  | 91.52   | 91.59  | 91.59  | 91.63  | 88.66 | 89.38 | 89.28 |
| 2030 | 91.73   | 91.47 | 89.45 | 92.01  | 101.88 | 94.83   | 92.93  | 92.83  | 94.05  | 90.40 | 90.90 | 90.94 |
| 2031 | 93.39   | 92.95 | 91.51 | 94.47  | 103.81 | 97.79   | 94.64  | 95.47  | 95.66  | 92.29 | 93.26 | 92.88 |
| 2032 | 94.94   | 94.49 | 93.03 | 96.04  | 105.53 | 99.41   | 96.21  | 97.06  | 97.25  | 93.82 | 94.81 | 94.42 |
| 2033 | 97.02   | 96.56 | 95.07 | 98.14  | 107.85 | 101.59  | 98.32  | 99.19  | 99.38  | 95.87 | 96.89 | 96.49 |
| 2034 | 98.90   | 98.43 | 96.91 | 100.04 | 109.94 | 103.56  | 100.23 | 101.11 | 101.31 | 97.73 | 98.77 | 98.36 |

|      |   |       |       |       | T     | ABLE 6b |       |       |       |       |       |       |
|------|---|-------|-------|-------|-------|---------|-------|-------|-------|-------|-------|-------|
|      | Renewable Avoided Costs                   |       |       |       |       |         |       |       |       |       |       |       |
|      | Renewable Fixed Price Option for Solar QF |       |       |       |       |         |       |       |       |       |       |       |
|      | Off-Peak Forecast (\$/MWH)                |       |       |       |       |         |       |       |       |       |       |       |
|      |   |       |       |       |       |         |       |       |       |       |       |       |
| Year | Jan                                       | Feb   | Mar   | Apr   | May   | Jun     | Jul   | Aug   | Sep   | Oct   | Nov   | Dec   |
| 2014 | 38.13                                     | 51.38 | 42.88 | 15.23 | 9.88  | 9.38    | 21.78 | 37.03 | 40.53 | 39.63 | 41.38 | 47.38 |
| 2015 | 43.19                                     | 41.41 | 36.99 | 23.85 | 16.69 | 12.34   | 24.12 | 36.59 | 34.18 | 37.49 | 38.44 | 41.46 |
| 2016 | 43.43                                     | 41.65 | 37.23 | 24.08 | 16.92 | 12.57   | 24.35 | 36.83 | 34.42 | 37.73 | 38.68 | 41.70 |
| 2017 | 45.56                                     | 43.69 | 39.04 | 25.21 | 17.67 | 13.09   | 25.49 | 38.61 | 36.08 | 39.56 | 40.56 | 43.74 |
| 2018 | 48.40                                     | 46.40 | 41.45 | 26.74 | 18.73 | 13.86   | 27.05 | 41.01 | 38.31 | 42.01 | 43.08 | 46.46 |
| 2019 | 51.44                                     | 49.32 | 44.06 | 28.40 | 19.87 | 14.69   | 28.72 | 43.58 | 40.71 | 44.65 | 45.79 | 49.38 |
| 2020 | 59.57                                     | 59.79 | 61.16 | 60.06 | 57.06 | 57.27   | 57.53 | 58.56 | 59.35 | 60.44 | 60.26 | 60.65 |
| 2021 | 61.57                                     | 60.88 | 62.38 | 61.17 | 58.60 | 58.64   | 59.22 | 59.52 | 60.55 | 62.35 | 60.20 | 61.71 |
| 2022 | 62.46                                     | 62.17 | 64.15 | 62.14 | 59.45 | 59.78   | 61.11 | 60.25 | 61.70 | 63.51 | 61.19 | 62.84 |
| 2023 | 63.29                                     | 63.33 | 65.41 | 63.80 | 59.88 | 60.91   | 62.14 | 61.65 | 62.79 | 64.80 | 62.12 | 64.11 |
| 2024 | 63.85                                     | 63.91 | 66.70 | 63.71 | 60.26 | 62.68   | 61.65 | 61.97 | 63.30 | 65.11 | 64.00 | 64.56 |
| 2025 | 65.15                                     | 65.14 | 68.08 | 64.68 | 60.34 | 63.09   | 62.95 | 63.83 | 63.92 | 66.54 | 66.09 | 65.54 |
| 2026 | 65.53                                     | 66.33 | 68.47 | 65.19 | 61.03 | 64.01   | 63.86 | 64.48 | 63.86 | 67.45 | 66.33 | 66.37 |
| 2027 | 67.71                                     | 67.69 | 69.31 | 66.85 | 60.98 | 65.19   | 65.48 | 64.93 | 65.29 | 69.40 | 67.14 | 67.59 |
| 2028 | 68.66                                     | 69.20 | 71.42 | 68.49 | 60.54 | 66.63   | 66.77 | 65.60 | 66.82 | 69.99 | 67.94 | 69.66 |
| 2029 | 69.19                                     | 69.91 | 72.73 | 69.82 | 56.36 | 66.99   | 67.94 | 66.73 | 68.08 | 70.78 | 69.92 | 70.87 |
| 2030 | 70.29                                     | 71.09 | 74.22 | 70.05 | 56.23 | 67.61   | 68.62 | 68.76 | 68.60 | 72.12 | 71.56 | 72.33 |
| 2031 | 71.80                                     | 72.85 | 75.23 | 70.47 | 57.37 | 67.52   | 70.07 | 70.21 | 68.84 | 73.33 | 73.18 | 72.51 |
| 2032 | 72.99                                     | 74.06 | 76.48 | 71.64 | 58.32 | 68.64   | 71.23 | 71.37 | 69.98 | 74.54 | 74.39 | 73.71 |
| 2033 | 74.59                                     | 75.68 | 78.16 | 73.20 | 59.59 | 70.14   | 72.79 | 72.94 | 71.51 | 76.17 | 76.02 | 75.32 |
| 2034 | 76.04                                     | 77.15 | 79.67 | 74.62 | 60.75 | 71.50   | 74.20 | 74.35 | 72.90 | 77.65 | 77.49 | 76.79 |

# WIND INTEGRATION

| TAE     | TABLE 7   |  |  |  |  |
|---------|-----------|--|--|--|--|
| Wind In | tegration |  |  |  |  |
| Year    | Cost      |  |  |  |  |
| 2014    | 3.70      |  |  |  |  |
| 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      |  |  |  |  |

#### MONTHLY SERVICE CHARGE

Each separately metered QF 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.

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 THE STANDARD RATES AND STANDARD PPA

A QF will be eligible to receive the standard rates and 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.

### **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 the facilities at issue are independent family-owned or community-based projects.

#### **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 the standard rates and 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 the standard rates and 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 the standard rates and 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 the standard rates and 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 On Peak Power and Off Peak Power. 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.

## SCHEDULE 201 (Concluded)

### OTHER DEFINITIONS (Continued)

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

As used in this schedule, Environmental Attributes shall mean any and all current or future credits, benefits, emissions reductions, environmental air quality credits, emissions reduction credits, offsets and allowances, howsoever entitled, resulting from the avoidance of the emission of any gas, chemical or other substance attributable to the Facility during the Term, or otherwise attributable to the generation, purchase, sale or use of energy from or by the Facility during the Term, including without limitation any of the same arising out of legislation or regulation concerned with oxides of nitrogen, sulfur or carbon, with particulate matter, soot or mercury, or implementing the United Nations Framework Convention on Climate Change (the "UNFCCC") or the Kyoto Protocol to the UNFCCC or crediting "early action" emissions reduction, or laws or regulations involving or administered by the Clean Air Markets Division of the Environmental Protection Agency or successor administrator, or any State or federal entity given jurisdiction over a program involving transferability of Environmental Attributes, including the Oregon Renewable Portfolio Standards, and any Green Tag Reporting Rights to such Environmental Attributes.

#### **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 the standard rates and Standard PPA. Disputes may be presented to the Commission for resolution.

#### **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.

Standard Renewable In System Variable Resource Power Purchase Agreement Effective July 15, 2014

# STANDARD RENEWABLE IN SYSTEM VARIABLE RESOURCE POWER PURCHASE AGREEMENT

| THIS AGREEMENT, entered into this day, 20, is between ("Seller") and Portland General Electric Company ("PGE") (hereinafter each a "Party" or collectively, "Parties").  |
|--|
| RECITALS   |
| Seller intends to construct, own, operate and maintain a facility for the generation of electric power located in County, with a Nameplate Capacity Rating of kilowatt ("kW"), as further described in Exhibit A ("Facility"); and |
| Seller intends to operate the Facility as a "Qualifying Facility," as such term is defined in Section 3.1.3, below.  |
| Seller shall sell and PGE shall purchase the entire Net Output, as such term is defined in Section 1.20, below, from the Facility in accordance with the terms and conditions of this Agreement.                                   |
| AODEEMENT  |

# <u>AGREEMENT</u>

NOW, THEREFORE, the Parties mutually agree as follows:

# **SECTION 1: DEFINITIONS**

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

- 1.1. "As-built Supplement" means the supplement to Exhibit A provided by Seller in accordance with Section 4.3 following completion of construction of the Facility, describing the Facility as actually built.
- 1.2. "Base Hours" is defined as the total number of hours in each Contract Year (8,760 or 8,784 for leap year), minus up to 200 hours of Planned Maintenance.
- 1.3. "Billing Period" means a period between PGE's readings of its power purchase billing meter at the Facility in the normal course of PGE's business. Such periods typically vary and may not coincide with calendar months.
- 1.4. "Cash Escrow" means an agreement by two parties to place money into the custody of a third party for delivery to a grantee only after the fulfillment of the conditions specified.

Schedule 201

Standard Renewable In System Variable Resource Power Purchase Agreement Effective July 15, 2014

- 1.5. "Commercial Operation Date" means the date that the Facility is deemed by PGE to be fully operational and reliable. PGE may, at its discretion, require, among other things, that all of the following events have occurred:
- 1.5.1. (facilities with nameplate under 500 kW exempt from following requirement) PGE has received a certificate addressed to PGE from a Licensed Professional Engineer ("LPE") acceptable to PGE in its reasonable judgment stating that the Facility is able to generate electric power reliably in accordance with the terms and conditions of this Agreement (certifications required under this Section 1.5 can be provided by one or more LPEs);
- 1.5.2. (facilities with nameplate under 500 kW exempt from following requirement) Start-Up Testing of the Facility has been completed in accordance with Section 1.26;
- 1.5.3. (facilities with nameplate under 500 kW exempt from following requirement) After PGE has received notice of completion of Start-Up Testing, PGE has received a certificate addressed to PGE from an LPE stating that the Facility has operated for testing purposes under this Agreement 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;
- 1.5.4. (facilities with nameplate under 500 kW exempt from following requirement) PGE has received a certificate addressed to PGE from an LPE stating that in accordance with the Generation Interconnection Agreement, all required interconnection facilities have been constructed all required interconnection tests have been completed; and the Facility is physically interconnected with PGE's electric system.
- 1.5.5. PGE has received a certificate addressed to PGE from an LPE stating that Seller has obtained all Required Facility Documents and, if requested by PGE in writing, has provided copies of any or all such requested Required Facility Documents;
- 1.6. "Contract Price" means the applicable price, including on-peak and offpeak prices, as specified in the Schedule.
- 1.7. "Contract Year" means each twelve (12) month period commencing upon the Commercial Operation Date or its anniversary during the Term, except the final contract year will be the period from the last anniversary of the Commercial Operation Date during the Term until the end of the Term.
  - 1.8. "Effective Date" has the meaning set forth in Section 2.1.
- 1.9. "Environmental Attributes" means any and all current or future credits, benefits, emissions reductions, environmental air quality credits, emissions reduction

Standard Renewable In System Variable Resource Power Purchase Agreement Effective July 15, 2014

credits, offsets and allowances, howsoever entitled, resulting from the avoidance of the emission of any gas, chemical or other substance attributable to the Facility during the Term, or otherwise attributable to the generation, purchase, sale or use of energy from or by the Facility during the Term, including without limitation any of the same arising out of legislation or regulation concerned with oxides of nitrogen, sulfur or carbon, with particulate matter, soot or mercury, or implementing the United Nations Framework Convention on Climate Change (the "UNFCCC") or the Kyoto Protocol to the UNFCCC or crediting "early action" emissions reduction, or laws or regulations involving or administered by the Clean Air Markets Division of the Environmental Protection Agency or successor administrator, or any State or federal entity given jurisdiction over a program involving transferability of Environmental Attributes, including the Oregon Renewable Portfolio Standard, and any Green Tag Reporting Rights to such Environmental Attributes.

- 1.10. "Facility" has the meaning set forth in the Recitals.
- 1.11. "Generation Interconnection Agreement" means the generation interconnection agreement to be entered into separately between Seller and PGE, providing for the construction, operation, and maintenance of interconnection facilities required to accommodate deliveries of Seller's Net Output.
- 1.12. "Generation Unit" means each separate electrical generator that contributes towards Nameplate Capacity Rating included in Exhibit A. For solar facilities, the number of Generation Units shall be one.
- 1.13. "Letter of Credit" means an engagement by a bank or other person made at the request of a customer that the issuer will honor drafts or other demands for payment upon compliance with the conditions specified in the letter of credit.
- 1.14. "Licensed Professional Engineer" or "LPE" means a person who is licensed to practice engineering in the state where the Facility is located, who has no economic relationship, association, or nexus with the Seller, and who is not a representative of a consulting engineer, contractor, designer or other individual involved in the development of the Facility, or of a manufacturer or supplier of any equipment installed in the Facility. Such Licensed Professional Engineer shall be licensed in an appropriate engineering discipline for the required certification being made and be acceptable to PGE in its reasonable judgment.
- 1.15. "Mechanical Availability Percentage" or "MAP" shall mean that percentage for any Contract Year for the Facility calculated in accordance with the following formula:

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

1.16. "Mid-C Index Price" means the Day Ahead Intercontinental Exchange ("ICE") for the bilateral OTC market for energy at the Mid-C Physical for On Peak Power and Off Peak Power. 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.

CREA-NIPPC-REC/206 Sanger/25

Schedule 201

Standard Renewable In System Variable Resource Power Purchase Agreement Effective July 15, 2014

- 1.17. "Minimum Net Output" means seventy-five percent (75%) of Nameplate Capacity Rating X thirty percent (30%) for a wind or other renewable QF or fifty percent (50%) for a solar QF X (whole months since the date selected in Section 2.2.1 / 12) X (8760 hours 200 hours of assumed Planned Maintenance).
- 1.18. "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.
- 1.19. "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.
- 1.20. "Net Output" means all energy expressed in kWhs produced by the Facility, less station and other onsite use and less transformation and transmission losses. Net Output does not include any environmental attributes, imbalance power, or power from an integrating entity.
- 1.21. "Number of Units" means the number of Generating Units in the Facility described in Exhibit A.
  - 1.22. "Off-Peak Hours" has the meaning provided in the Schedule.
  - 1.23. "On-Peak Hours" has the meaning provided in the Schedule.
- 1.24. "Operational Hours" for the Facility means the total across all Generating Units of the number of hours each of the Facility's Generating Units are potentially capable of producing power at its Nameplate Capacity Rating regardless of actual weather or seasonal conditions and the time of day or night, without any mechanical operating constraint or restriction, and potentially capable of delivering such power to the Point of Delivery in a Contract Year. During up to, but not more than, 200 hours of Planned Maintenance during a Contract Year for each Generation Unit and hours during which an event of Force Majeure exists, a Generation Unit shall be considered potentially capable of delivering such power to the Point of Delivery. For example, in the absence of any Planned Maintenance beyond 200 hours on any Generation Unit of Event of Force Majeure, the Operational Hours for a wind farm with five separate two MW turbines would be 43,800 for a Contract Year.
- 1.25. "Planned Maintenance" means outages scheduled 90 days in advance, with PGE's prior written consent, which shall not be unreasonably withheld.
- 1.26. "Point of Delivery" means the high side of the generation step up transformer(s) located at the point of interconnection between the Facility and PGE's distribution or transmission system, as specified in the Generation Interconnection Agreement.
- 1.27. "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

CREA-NIPPC-REC/206 Sanger/26 Schedule 201

Standard Renewable In System Variable Resource Power Purchase Agreement Effective July 15, 2014

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.

- 1.28. "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.
- 1.29. "Required Facility Documents" means all licenses, permits, authorizations, and agreements necessary for construction, operation, interconnection, and maintenance of the Facility including without limitation those set forth in Exhibit B.
- 1.30. Schedule" shall mean PGE Schedule 201 filed with the Oregon Public Utilities Commission ("Commission") in effect on the Effective Date of this Agreement and attached hereto as Exhibit D, the terms of which are hereby incorporated by reference. In the event of a conflict between this Agreement and the Schedule, this Agreement shall apply.
- 1.31. Senior Lien" means a prior lien which has precedence as to the property under the lien over another lien or encumbrance.
- 1.32. "Start-Up Lost Energy Value" means for the period prior to initiation of delivery: zero, unless the Net Output is less than Minimum Net Output and the mean Mid-C Index Price is greater than the Contract Price, in which case Start-Up Lost Energy Value equals: (Minimum Net Output Net Output) X (the lower of: the mean Contract Price; or the mean Mid-C Index Price mean Contract Price).
- 1.33. "Start-Up Testing" means the completion of applicable required factory and start-up tests as set forth in Exhibit C.
- 1.34. "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.
- 1.35. "Term" shall mean the period beginning on the Effective Date and ending on the Termination Date.

CREA-NIPPC-REC/206

Sanger/27

Schedule 201

Standard Renewable In System Variable Resource Power Purchase Agreement Effective July 15, 2014

1.36. "Test Period" shall mean a period of sixty (60) days or a commercially reasonable period determined by the Seller.

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

### SECTION 2: TERM; COMMERCIAL OPERATION DATE

| 2.1 This Agreement shall become effective upon execution by both Parties ("Effective Date").   |
|--|
| 2.2 Time is of the essence of this Agreement, and Seller's ability to meet certain requirements prior to the Commercial Operation Date and to complete all requirements to establish the Commercial Operation Date is critically important. Therefore,                               |
| 2.2.1 By [date to be determined by the Seller] Seller shall begin initial deliveries of Net Output; and  |
| 2.2.2 By [date to be determined by the Seller] Seller shall have completed all requirements under Section 1.5 and shall have established the Commercial Operation Date.  |
| 2.2.3 In the event Seller is unable to meet the requirements of Sections 2.2.1 and 2.2.2, if PGE is resource deficient (as defined by the Commission)PGE may terminate this agreement in accordance with Section 10. Otherwise, Seller shall pay PGE the Start-Up Lost Energy Value. |
| 2.3 This Agreement shall terminate on, [date to be chosen by Seller], or the date the Agreement is terminated in accordance with Section 9 or 11, whichever is earlier ("Termination Date").   |
| SECTION 3: REPRESENTATIONS AND WARRANTIES  |
| 3.1 Seller and PGE represent, covenant, and warrant as follows:  |
| 3.1.1 Seller warrants it is a duly organized under the laws of   |

- 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

CREA-NIPPC-REC/206 Sanger/28 Schedule 201

Standard Renewable In System Variable Resource Power Purchase Agreement Effective July 15, 2014

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 \_\_\_\_\_ kW.
- 3.1.9 Seller estimates that the average annual Net Output to be delivered by the Facility to PGE is \_\_\_\_\_ kilowatt-hours ("kWh"), which amount PGE will include in its resource planning.
- 3.1.10 Seller represents and warrants that the Facility shall achieve the following Mechanical Availability Percentages ("Guarantee of Mechanical Availability"):
- 3.1.10.1 Ninety percent (90%) beginning in the first Contract Year and extending through the Term for the Facility, if the Facility was operational and sold electricity to PGE or another buyer prior to the Effective Date of this Agreement; or
- 3.1.10.2 Ninety percent (99%) beginning in Contract Year three and extending throughout the remainder of the Term.
- 3.1.10.3 Annually, within 90 days of the end of each Contract Year Seller shall send to PGE a detailed written report demonstrating and providing evidence of the actual MAP for the previous Contract Year.
- 3.1.11 Seller will deliver from the Facility to PGE at the Point of Delivery Net Output not to exceed a maximum of \_\_\_\_\_ kWh of Net Output during each Contract Year ("Maximum Net Output").

CREA-NIPPC-REC/206 Sanger/29 Schedule 201

Standard Renewable In System Variable Resource Power Purchase Agreement Effective July 15, 2014

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

# SECTION 4: DELIVERY OF POWER, PRICE AND ENVIRONMENTAL ATTRIBUTES

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

CREA-NIPPC-REC/206
Sanger/30
Schedule 201
Standard Renewable In System Variable Resource Power Purchase Agreement
Effective July 15, 2014

agreement for all delivered Net Output proportionally related to the increase of Nameplate Capacity above 10,000 kW.

- 4.4 To the extent not otherwise provided in the Generation Interconnection Agreement, all costs associated with the modifications to PGE's interconnection facilities or electric system occasioned by or related to the interconnection of the Facility with PGE's system, or any increase in generating capability of the Facility, or any increase of delivery of Net Dependable Capacity from the Facility, shall be borne by Seller.
- 4.5 Commencing on the Effective Date and continuing through the Term of this Agreement, Seller shall provide and PGE shall acquire the Environmental Attributes for the Contract Years specified in the Schedule. The Contract Price includes full payment for the Net Output and any Environmental Attributes transferred to PGE under this Agreement. With respect to Environmental Attributes not transferred to PGE under this Agreement ("Seller-Retained RECs") 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 RECs, and PGE shall not report under such program that such Seller-Retained RECs belong to it. With respect to Environmental Attributes transferred to PGE under this Agreement ("Transferred RECs"), PGE may report under §1605(b) of the Energy Policy Act of 1992 or under any applicable program as belonging to it any of the Transferred RECs, and Seller shall not report under such program that such Transferred RECs belong to it.

### **SECTION 5: OPERATION AND CONTROL**

- 5.1 Seller shall operate and maintain the Facility in a safe manner in accordance with the Generation Interconnection Agreement, and Prudent Electrical Practices. PGE shall have no obligation to purchase Net Output from the Facility to the extent the interconnection of the Facility to PGE's electric system is disconnected, suspended or interrupted, in whole or in part, pursuant to the Generation Interconnection Agreement, or to the extent generation curtailment is required as a result of Seller's noncompliance with the Generation Interconnection Agreement. Seller is solely responsible for the operation and maintenance of the Facility. PGE shall not, by reason of its decision to inspect or not to inspect the Facility, or by any action or inaction taken with respect to any such inspection, assume or be held responsible for any liability or occurrence arising from the operation and maintenance by Seller of the Facility.
- 5.2 Seller agrees to provide sixty (60) days advance written notice of any scheduled maintenance that would require shut down of the Facility for any period of time.
- 5.3 If the Facility ceases operation for unscheduled maintenance, Seller immediately shall notify PGE of the necessity of such unscheduled maintenance, the time when such maintenance has occurred or will occur, and the anticipated duration of such maintenance. Seller shall take all reasonable measures and exercise its best

CREA-NIPPC-REC/206
Sanger/31
Schedule 201
Standard Renewable In System Variable Resource Power Purchase Agreement
Effective July 15, 2014

efforts to avoid unscheduled maintenance, to limit the duration of such unscheduled maintenance, and to perform unscheduled maintenance during Off-Peak hours.

# **SECTION 6: CREDITWORTHINESS**

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

# **SECTION 7: METERING**

- 7.1 PGE shall design, furnish, install, own, inspect, test, maintain and replace all metering equipment at Seller's cost and as required pursuant to the Generation Interconnection Agreement.
- 7.2 Metering shall be performed at the location and in a manner consistent with this Agreement and as specified in the Generation Interconnection Agreement. All Net Output purchased hereunder shall be adjusted to account for electrical losses, if any, between the point of metering and the Point of Delivery, so that the purchased amount reflects the net amount of power flowing into PGE's system at the Point of Delivery.
- 7.3 PGE shall periodically inspect, test, repair and replace the metering equipment as provided in the Generation Interconnection Agreement. If any of the inspections or tests discloses an error exceeding two (2%) percent of the actual energy delivery, either fast or slow, proper correction, based upon the inaccuracy found, shall be made of previous readings for the actual period during which the metering equipment rendered inaccurate measurements if that period can be ascertained. If the actual period cannot be ascertained, the proper correction shall be made to the measurements taken during the time the metering equipment was in service since last tested, but not exceeding three (3) months, in the amount the metering equipment shall have been shown to be in error by such test. Any correction in billings or payments resulting from a correction in the meter records shall be made in the next monthly billing or payment rendered. Such correction, when made, shall constitute full adjustment of any claim between Seller and PGE arising out of such inaccuracy of metering equipment.

CREA-NIPPC-REC/206 Sanger/32

Schedule 201

Standard Renewable In System Variable Resource Power Purchase Agreement Effective July 15, 2014

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

# SECTION 8: BILLINGS, COMPUTATIONS AND PAYMENTS

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

### SECTION 9: DEFAULT, REMEDIES AND TERMINATION

- 9.1 In addition to any other event that may constitute a default under this Agreement, the following events shall constitute defaults under this Agreement:
- 9.1.1 Breach by Seller or PGE of a representation or warranty, except for Section 3.1.4, set forth in this Agreement.
- 9.1.2 Seller's failure to provide default security, if required by Section 6, prior to delivery of any Net Output to PGE or within 10 days of notice.
- 9.1.3 Seller's failure to meet the MAP established in Section 3.1.10 Guarantee of Mechanical Availability for any single Contract Year or Seller's failure to provide any written report required by that section.
  - 9.1.4 If Seller is no longer a Qualifying Facility.
  - 9.1.5 Failure of PGE to make any required payment pursuant to Section 9.1.
- 9.2 In the event of a default hereunder, except for pursuant to section 9.1.3, the non-defaulting party may immediately terminate this Agreement at its sole discretion by delivering written notice to the other Party. In addition, except for damages related to a default pursuant to Section 9.1.3 by a QF sized at 100 kW or smaller, the non-defaulting party may pursue any and all legal or equitable remedies provided by law or pursuant to this Agreement including damages related to the need to procure replacement power. A termination hereunder shall be effective upon the date of delivery of notice, as provided in Section 20. The rights provided in this Section 9 are cumulative such that the exercise of one or more rights shall not constitute a waiver of any other rights.
- 9.3 If this Agreement is terminated as provided in this Section 9 PGE shall make all payments, within thirty (30) days, that, pursuant to the terms of this

CREA-NIPPC-REC/206 Sanger/33 Schedule 201

Standard Renewable In System Variable Resource Power Purchase Agreement Effective July 15, 2014

Agreement, are owed to Seller as of the time of receipt of notice of default. PGE shall not be required to pay Seller for any Net Output delivered by Seller after such notice of default.

- 9.4 In the event PGE terminates this Agreement pursuant to this Section 9, and Seller wishes to again sell Net Output to PGE following such termination, PGE in its sole discretion may require that Seller shall do so subject to the terms of this Agreement, including but not limited to the Contract Price until the Term of this Agreement (as set forth in Section 2.3) would have run in due course had the Agreement remained in effect. At such time Seller and PGE agree to execute a written document ratifying the terms of this Agreement.
- 9.5 Sections 9.1, 9.3, 9.4, 10, and 19.2 shall survive termination of this Agreement.

### SECTION 10: INDEMNIFICATION AND LIABILITY

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

CREA-NIPPC-REC/206
Sanger/34
Schedule 201
Standard Renewable In System Variable Resource Power Purchase Agreement
Effective July 15, 2014

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 "A-" 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 "A-" 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**

Standard Renewable In System Variable Resource Power Purchase Agreement Effective July 15, 2014

- 12.1 As used in this Agreement, "Force Majeure" or "an event of Force Majeure" means any cause beyond the reasonable control of the Seller or of PGE which, despite the exercise of due diligence, such Party is unable to prevent or overcome. By way of example, Force Majeure may include but is not limited to acts of God, fire, flood, storms, wars, hostilities, civil strife, strikes, and other labor disturbances, earthquakes, fires, lightning, epidemics, sabotage, restraint by court order or other delay or failure in the performance as a result of any action or inaction on behalf of a public authority which by the exercise of reasonable foresight such Party could not reasonably have been expected to avoid and by the exercise of due diligence, it shall be unable to overcome, subject, in each case, to the requirements of the first sentence of this paragraph. Force Majeure, however, specifically excludes the cost or availability of resources to operate the Facility, changes in market conditions that affect the price of energy or transmission, wind or water droughts, and obligations for the payment of money when due.
- 12.2 If either Party is rendered wholly or in part unable to perform its obligation under this Agreement because of an event of Force Majeure, that Party shall be excused from whatever performance is affected by the event of Force Majeure to the extent and for the duration of the Force Majeure, after which such Party shall recommence performance of such obligation, provided that:
- 12.2.1 the non-performing Party shall, promptly, but in any case within one (1) week after the occurrence of the Force Majeure, give the other Party written notice describing the particulars of the occurrence; and
- 12.2.2 the suspension of performance shall be of no greater scope and of no longer duration than is required by the Force Majeure; and
- 12.2.3 the non-performing Party uses its best efforts to remedy its inability to perform its obligations under this Agreement.
- 12.3 No obligations of either Party which arose before the Force Majeure causing the suspension of performance shall be excused as a result of the Force Majeure.
- 12.4 Neither Party shall be required to settle any strike, walkout, lockout or other labor dispute on terms which, in the sole judgment of the Party involved in the dispute, are contrary to the Party's best interests.

### **SECTION 13: SEVERAL OBLIGATIONS**

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

CREA-NIPPC-REC/206
Sanger/36
Schedule 201
Standard Renewable In System Variable Resource Power Purchase Agreement
Effective July 15, 2014

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

### SECTION 15: PARTIAL INVALIDITY AND PURPA REPEAL

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

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

# **SECTION 16: WAIVER**

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

### SECTION 17: GOVERNMENTAL JURISDICTION AND AUTHORIZATIONS

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

# SECTION 18: SUCCESSORS AND ASSIGNS

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

# SECTION 19: ENTIRE AGREEMENT

19.1 This Agreement supersedes all prior agreements, proposals, representations, negotiations, discussions or letters, whether oral or in writing,

CREA-NIPPC-REC/206

Sanger/37 Schedule 201

Standard Renewable In System Variable Resource Power Purchase Agreement Effective July 15, 2014

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:                      |  |               |
|---------------------------------|--|---------------|
| with a copy to:                 |  | -<br>-<br>-   |
| To PGE:                         | Contracts Manager QF Contracts, 3WTC0306 PGE - 121 SW Salmon St. Portland, Oregon 97204            |               |
|                                 | may change the person to whom such notices a<br>oviding written notices thereof in accordance with |               |
|                                 | REOF, the Parties hereto have caused this Agve names as of the Effective Date.                     | reement to be |
| PGE                             |  |               |
| By:<br>Name:<br>Title:<br>Date: |  |               |
| (Name Seller)                   | ·  |               |

CREA-NIPPC-REC/206
Sanger/38
Schedule 201
Standard Renewable In System Variable Resource Power Purchase Agreement
Effective July 15, 2014

| By:    |  |  |
|--------|--|--|
| Name:  |  |  |
| Title: |  |  |
|        |  |  |
| Date:  |  |  |

CREA-NIPPC-REC/206
Sanger/39
Schedule 201
Standard Renewable In System Variable Resource Power Purchase Agreement
Effective July 15, 2014

# EXHIBIT A DESCRIPTION OF SELLER'S FACILITY

[Seller to Complete]

CREA-NIPPC-REC/206
Sanger/40
Schedule 201
Standard Renewable In System Variable Resource Power Purchase Agreement

Effective July 15, 2014

# EXHIBIT B REQUIRED FACILITY DOCUMENTS

# [Seller list all permits and authorizations required for this project]

Sellers Generation Interconnection Agreement

Schedule 201

Standard Renewable In System Variable Resource Power Purchase Agreement Effective July 15, 2014

# EXHIBIT C START-UP TESTING

## [Seller identify appropriate tests]

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

- 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

CREA-NIPPC-REC/206
Sanger/42
Schedule 201
Standard Renewable In System Variable Resource Power Purchase Agreement
Effective July 15, 2014

EXHIBIT D SCHEDULE [Attach currently in-effect Schedule 201]

# BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

# UM 1931

| PORTLAND GENERAL ELECTRIC COMPANY, | ) |
|------------------------------------|---|
| Complainant,                       | ) |
| v.                                 | ) |
| ALFALFA SOLAR I LLC, et al.        | ) |
| Defendants.                        | ) |

# **EXHIBIT CREA-NIPPC-REC/207**

# **BROCKMAN KACIA EMAIL ON JULY 31, 2014**

**December 28, 2018** 

From: Brockman, Kacia <kacia.brockman@state.or.us>

**Sent:** Thursday, July 31, 2014 9:38 AM

To: BLESS Adam; Barbara Parr; bill@oneenergyrenewables.com; bob@oregoncub.org; ANDRUS Brittany;

bryce.dalley@pacificorp.com; bvc@dvclaw.com; catriona@oregoncub.org;

cstokes@cablehuston.com; da@thenescogroup.com; david.tooze@portlandoregon.gov; dbrown@obsidianfinance.com; dhenkels@cleantechlawpartners.com; dlchain@wvi.com;

dlokting@stollberne.com; dockets@mcd-law.com; dockets@oregoncub.org; dockets@oseia.org; dockets@renewablenw.org; dustin.till@pacificorp.com; dwalker@idahopower.com; Greg Adams;

irion@sanger-law.com; james@utilityadvocates.org; jhilton@idahopower.com;

john.harvey@exeloncorp.com; john.volkman@energytrust.org; jravenesanmarcos@yahoo.com; k.a.newman@frontier.com; kacia.brockman@state.or.us; kaufmann@lklaw.com; lovinger@lklaw.com;

matt.krumenauer@state.or.us; megan@renewablenw.org; mmcarthur@aocweb.org; mpengilly@gmail.com; nelson@thnelson.com; oregondockets@pacificorp.com;

paul.ackerman@constellation.com; Peter Richardson; PGE OPUC Filings; renee.m.france@state.or.us;

Richard George; rlorenz@cablehuston.com; ANDRUS Stephanie; tcp@dvclaw.com; tgregory@obsidianrenewables.com; thad.roth@energytrust.org; tmroush@wvi.com;

wcarey@gorge.net

**Cc:** Rob Macfarlane; Mihir Desu; Colin Wright

Subject: RE: UM 1610 PGE Avoided Cost Workshop - WebEx Meeting July 29

Attachments: PGE UM 1610 Schedule 201 Avoided Cost Update\_Sch 201\_Final\_05 30 14\_ODOE comments.doc

#### Greetings,

Attached is a redline version of PGE's filed Schedule 201 with the comments and suggested edits that I described in our meeting on July 29. Please contact me via cell phone or email with any questions. Thanks,

Kacia Brockman
Energy Policy Analyst
Oregon Department of Energy

P: (503) 373-7955 C: (503) 689-0822

From: Barbara Parr [mailto:Barbara.Parr@pgn.com]

Sent: Thursday, July 24, 2014 11:35 AM

To: dockets@oregoncub.org; dockets@oseia.org; oregondockets@pacificorp.com; dockets@renewablenw.org; paul.ackerman@constellation.com; greg@richardsonadams.com; da@thenescogroup.com; ANDRUS Brittany; ANDRUS Stephanie; james@utilityadvocates.org; BLESS Adam; kacia.brockman@state.or.us; dbrown@obsidianfinance.com; wcarey@gorge.net; bryce.dalley@pacificorp.com; megan@renewablenw.org; bill@oneenergyrenewables.com; dlchain@wvi.com; renee.m.france@doj.state.or.us; Richard George; tgregory@obsidianrenewables.com; john.harvey@exeloncorp.com; dhenkels@cleantechlawpartners.com; jhilton@idahopower.com; bob@oregoncub.org; kaufmann@lklaw.com; matt.krumenauer@state.or.us; dlokting@stollberne.com; rlorenz@cablehuston.com; lovinger@lklaw.com; jravenesanmarcos@yahoo.com; mmcarthur@aocweb.org; catriona@oregoncub.org; nelson@thnelson.com; k.a.newman@frontier.com; mpengilly@gmail.com; tcp@dvclaw.com; dockets@mcd-law.com; peter@richardsonadams.com; thad.roth@energytrust.org; tmroush@wvi.com; irion@sanger-law.com; cstokes@cablehuston.com; dustin.till@pacificorp.com; PGE OPUC Filings; david.tooze@portlandoregon.gov; bvc@dvclaw.com; john.volkman@energytrust.org; dwalker@idahopower.com

Cc: Rob Macfarlane; Mihir Desu; Colin Wright

Subject: UM 1610 PGE Avoided Cost Workshop - WebEx Meeting July 29

PGE's follow-up UM 1610 workshop will be held **Thursday, July 29 from 9:00 am to Noon** at PGE Legal Offices, 121 SW Salmon Street, 1WTC 13<sup>th</sup> floor, Legal A Conference Room, Portland.

#### WebEx meeting information:

Meeting Number: 960 439 609 Meeting Password: Portland1

To start this meeting:

- 1. Go to <a href="https://pqn.webex.com/pqn/j.php?MTID=ma084487e575f31a00ecbfc7bbc75821b">https://pqn.webex.com/pqn/j.php?MTID=ma084487e575f31a00ecbfc7bbc75821b</a>
- 2. If you are not logged in, log in to your account.

\_\_\_\_\_

## **Audio conference information:**

To join the meeting, call the number below and enter the access code: Call-in toll-free number (US/Canada): 1-877-668-4490 OR Call-in toll number (US/Canada): 1-408-792-6300

# Access code: 960 439 609

-----

#### For assistance

4 0 1 1 1 1

- 1. Go to <a href="https://pqn.webex.com/pqn/mc">https://pqn.webex.com/pqn/mc</a>
- 2. On the left navigation bar, click "Support".

To add this meeting to your calendar program (for example Microsoft Outlook), click this link: <a href="https://pqn.webex.com/pqn/j.php?MTID=m9f1e46b797601ae242b5f83e0e87433a">https://pqn.webex.com/pqn/j.php?MTID=m9f1e46b797601ae242b5f83e0e87433a</a>

#### http://www.webex.com

IMPORTANT NOTICE: This WebEx service includes a feature that allows audio and any documents and other materials exchanged or viewed during the session to be recorded. You should inform all meeting attendees prior to recording if you intend to record the meeting. Please note that any such recordings may be subject to discovery in the event of litigation.

Barbara Parr | Legal Assistant to Richard George, Assistant General Counsel and Denise Saunders, Associate General Counsel. Portland General Electric Company, 121 SW Salmon St, 1WTC1301| Portland, Oregon 97204 | ☎: 503.464-8872 | ♣: 503.464-2200 | ☑: barbara.parr@pgn.com

Sheet No. 201-1

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

#### **PURPOSE**

To provide information about 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's generation.

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.

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 the filed Avoided Costs in effect at that time.

Effective for service on and after July 15, 2014

#### **Portland General Electric Company**

Sheet No. 201-2

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

#### 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 Resources Power Purchase Agreement
- Standard Off System Integrated Variable Resources 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 Resources Power Purchase Agreement
- Standard Renewable Off System Integrated Variable Resources 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.

Commented [KB1]: From the 7/29 meeting, we understand that run of river hydro QFs will use the PPA for Variable Resources, and receive the avoided cost prices for Base Load QFs. Suggested edits on sheets 201-4 and 201-10 reinforce this.

Effective for service on and after July 15, 2014

#### **Portland General Electric Company**

Sheet No. 201-3

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

#### **BASIS FOR POWER PURCHASE PRICE**

#### **AVOIDED COST SUMMARY**

The power purchase rates are based on the Company's Avoided Costs. 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."

The Avoided Costs as listed in Tables 1 and 2 below include monthly On- and Off-Peak prices.

#### **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 December 2014, the period of time during which the Company's Avoided Costs are associated with incremental purchases of Energy and capacity from the market. For the period 2015 through 2030, the 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...

#### PRICING FOR STANDARD PPA

Pricing represent 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 the Avoided Cost in effect at the time the agreement is executed.

The Company will pay Seller the Off-Peak Avoided Cost pursuant to Tables 1b, 2b, 3b, 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 Contract; (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 the On-Peak Avoided Cost pursuant to Table 1a, 2a, 3a, 4a, 5a, or 6a for all other Net Output. (See the PPA for defined terms.)

**Commented [KB2]:** Update with new sufficiency period end date.

**Commented [KB3]:** Update with new deficiency period start and end dates.

Commented [KB4]: Add a new paragraph here that mirrors the one above, but for Renewable Avoided Costs. Include correct sufficiency/deficiency dates and description of the avoided proxy resource.

Effective for service on and after July 15, 2014

Sheet No. 201-4

### SCHEDULE 201 (Continued)

PRICING FOR STANDARD PPA (Continued)

### 1) Standard Fixed Price Option

The Standard Fixed Price Option is based on 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 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. The capacity contribution to peak for the avoided proxy resource on which Avoided Costs for the Standard Fixed Price Option are based and for Base Load QF resources (Tables 1a and 1b) is assumed to be 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. If the Wind QF is off system, 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.

Sellers with contracts 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.

Commented [KB5]: This clarifies that run of river hydro and other QF types are eligible for the Base Load QF prices.

Commented [KB6]: Changes to this paragraph clarify the adjustments for capacity contribution.

Commented [KB7]: Changes to this paragraph clarify the adjustments for integration.

Deleted: The

Deleted: Avoided Cost

Deleted: s

**Deleted:** and integration charges, both at \$3.99/MWh (\$2018), for a net zero effect

Commented [KB8]: CREA suggested changing this to "located outside the Company's BAA" throughout Schedule 201 and the PPAs.

Deleted:

|      |        |        |        |          | Т.        | ABLE 1a   |          |         |        |        |        |        |
|------|--------|--------|--------|----------|-----------|-----------|----------|---------|--------|--------|--------|--------|
|      |        |        |        |          | Avo       | ided Cos  | ts       |         |        |        |        |        |
|      |        |        | St     | andard F | ixed Pric | e Option  | for Base | Load QF | •      |        |        |        |
|      |        |        |        | 0        | n-Peak F  | orecast ( | \$/MWH)  |         |        |        |        |        |
|      |        |        |        |          |           |           |          |         |        |        |        |        |
| Year | Jan    | Feb    | Mar    | Apr      | May       | Jun       | Jul      | Aug     | Sep    | Oct    | Nov    | Dec    |
| 2014 | 48.13  | 56.88  | 48.63  | 30.38    | 30.88     | 31.03     | 45.53    | 54.78   | 50.38  | 46.88  | 48.63  | 54.38  |
| 2015 | 50.13  | 47.79  | 42.72  | 36.07    | 30.77     | 28.80     | 44.64    | 50.90   | 45.10  | 43.25  | 44.68  | 48.21  |
| 2016 | 49.77  | 47.46  | 42.45  | 35.88    | 30.65     | 28.70     | 44.34    | 50.53   | 44.80  | 42.97  | 44.38  | 47.87  |
| 2017 | 52.43  | 49.99  | 44.70  | 37.76    | 32.23     | 30.17     | 46.70    | 53.23   | 47.18  | 45.25  | 46.74  | 50.42  |
| 2018 | 56.37  | 53.74  | 48.04  | 40.57    | 34.61     | 32.40     | 50.20    | 57.24   | 50.72  | 48.64  | 50.25  | 54.21  |
| 2019 | 59.33  | 56.56  | 50.56  | 42.69    | 36.42     | 34.09     | 52.83    | 60.24   | 53.38  | 51.19  | 52.88  | 57.06  |
| 2020 | 61.12  | 58.27  | 52.09  | 43.99    | 37.53     | 35.13     | 54.43    | 62.06   | 55.00  | 52.74  | 54.48  | 58.78  |
| 2021 | 83.08  | 82.73  | 81.25  | 79.21    | 79.28     | 79.32     | 79.11    | 79.15   | 79.34  | 79.80  | 83.82  | 85.55  |
| 2022 | 86.66  | 86.03  | 84.34  | 82.31    | 82.46     | 82.52     | 82.71    | 82.73   | 82.93  | 83.42  | 88.08  | 90.31  |
| 2023 | 91.20  | 90.41  | 88.76  | 86.86    | 86.34     | 86.36     | 86.66    | 86.48   | 86.85  | 87.37  | 92.37  | 95.36  |
| 2024 | 96.86  | 95.81  | 93.35  | 91.39    | 90.70     | 90.78     | 91.16    | 91.09   | 91.49  | 92.15  | 95.30  | 98.71  |
| 2025 | 99.69  | 97.48  | 94.10  | 92.12    | 92.10     | 92.18     | 92.56    | 92.48   | 92.85  | 93.52  | 96.54  | 100.08 |
| 2026 | 100.47 | 99.38  | 96.00  | 93.83    | 93.32     | 93.40     | 93.80    | 93.72   | 94.12  | 94.68  | 98.25  | 101.90 |
| 2027 | 101.02 | 99.29  | 96.15  | 93.26    | 93.22     | 93.29     | 93.66    | 93.56   | 93.97  | 94.55  | 99.45  | 102.71 |
| 2028 | 101.10 | 99.49  | 95.85  | 93.39    | 93.31     | 93.37     | 93.58    | 93.64   | 93.87  | 94.58  | 102.56 | 105.58 |
| 2029 | 107.98 | 107.22 | 103.29 | 100.04   | 100.08    | 100.00    | 100.54   | 100.64  | 100.90 | 101.50 | 107.20 | 110.79 |
| 2030 | 112.59 | 109.12 | 104.07 | 99.81    | 99.56     | 99.58     | 100.09   | 100.18  | 100.44 | 101.29 | 110.03 | 113.81 |
| 2031 | 115.26 | 111.15 | 106.88 | 103.09   | 103.23    | 103.23    | 104.04   | 104.14  | 104.41 | 105.06 | 111.68 | 115.10 |
| 2032 | 117.17 | 112.98 | 108.63 | 104.76   | 104.90    | 104.90    | 105.73   | 105.83  | 106.11 | 106.77 | 113.52 | 117.00 |
| 2033 | 119.82 | 115.54 | 111.10 | 107.17   | 107.31    | 107.31    | 108.16   | 108.26  | 108.54 | 109.21 | 116.10 | 119.64 |
| 2034 | 122.26 | 117.90 | 113.38 | 109.36   | 109.51    | 109.51    | 110.37   | 110.48  | 110.77 | 111.45 | 118.47 | 122.08 |

# **SCHEDULE 201 (Continued)**

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

|      |       |       |       |          | T          | ABLE 1b   |          |         |       |       |       |       |
|------|-------|-------|-------|----------|------------|-----------|----------|---------|-------|-------|-------|-------|
|      |       |       |       |          | Avo        | ided Cos  | ts       |         |       |       |       |       |
|      |       |       | Sta   | andard F | ixed Price | e Option  | for Base | Load QF |       |       |       |       |
|      |       |       |       | 0        | ff-Peak F  | orecast ( | \$/MWH)  |         |       |       |       |       |
|      |       |       |       |          |            |           |          |         |       |       |       |       |
| Year | Jan   | Feb   | Mar   | Apr      | May        | Jun       | Jul      | Aug     | Sep   | Oct   | Nov   | Dec   |
| 2014 | 38.13 | 51.38 | 42.88 | 15.23    | 9.88       | 9.38      | 21.78    | 37.03   | 40.53 | 39.63 | 41.38 | 47.38 |
| 2015 | 43.19 | 41.41 | 36.99 | 23.85    | 16.69      | 12.34     | 24.12    | 36.59   | 34.18 | 37.49 | 38.44 | 41.46 |
| 2016 | 43.43 | 41.65 | 37.23 | 24.08    | 16.92      | 12.57     | 24.35    | 36.83   | 34.42 | 37.73 | 38.68 | 41.70 |
| 2017 | 45.56 | 43.69 | 39.04 | 25.21    | 17.67      | 13.09     | 25.49    | 38.61   | 36.08 | 39.56 | 40.56 | 43.74 |
| 2018 | 48.40 | 46.40 | 41.45 | 26.74    | 18.73      | 13.86     | 27.05    | 41.01   | 38.31 | 42.01 | 43.08 | 46.46 |
| 2019 | 51.44 | 49.32 | 44.06 | 28.40    | 19.87      | 14.69     | 28.72    | 43.58   | 40.71 | 44.65 | 45.79 | 49.38 |
| 2020 | 53.92 | 51.66 | 46.15 | 31.05    | 22.57      | 17.61     | 32.64    | 46.96   | 43.50 | 46.77 | 48.01 | 51.78 |
| 2021 | 43.71 | 43.36 | 41.88 | 39.84    | 39.91      | 39.95     | 39.74    | 39.78   | 39.97 | 40.43 | 44.45 | 46.18 |
| 2022 | 46.52 | 45.90 | 44.20 | 42.18    | 42.33      | 42.38     | 42.58    | 42.60   | 42.80 | 43.29 | 47.95 | 50.18 |
| 2023 | 50.16 | 49.37 | 47.72 | 45.82    | 45.30      | 45.32     | 45.62    | 45.44   | 45.81 | 46.33 | 51.34 | 54.32 |
| 2024 | 55.29 | 54.25 | 51.79 | 49.83    | 49.14      | 49.22     | 49.60    | 49.52   | 49.92 | 50.59 | 53.74 | 57.15 |
| 2025 | 57.19 | 54.98 | 51.60 | 49.62    | 49.59      | 49.67     | 50.06    | 49.98   | 50.35 | 51.02 | 54.04 | 57.58 |
| 2026 | 57.15 | 56.06 | 52.68 | 50.51    | 50.00      | 50.08     | 50.48    | 50.40   | 50.80 | 51.36 | 54.93 | 58.58 |
| 2027 | 56.86 | 55.13 | 51.99 | 49.10    | 49.07      | 49.13     | 49.50    | 49.41   | 49.81 | 50.39 | 55.29 | 58.55 |
| 2028 | 56.09 | 54.48 | 50.84 | 48.38    | 48.30      | 48.36     | 48.57    | 48.63   | 48.86 | 49.57 | 57.55 | 60.57 |
| 2029 | 62.10 | 61.34 | 57.41 | 54.16    | 54.20      | 54.12     | 54.66    | 54.76   | 55.02 | 55.62 | 61.33 | 64.92 |
| 2030 | 65.82 | 62.35 | 57.31 | 53.05    | 52.79      | 52.82     | 53.33    | 53.42   | 53.68 | 54.53 | 63.27 | 67.05 |
| 2031 | 67.60 | 63.48 | 59.21 | 55.42    | 55.56      | 55.56     | 56.37    | 56.47   | 56.75 | 57.39 | 64.02 | 67.43 |
| 2032 | 68.90 | 64.70 | 60.35 | 56.48    | 56.63      | 56.63     | 57.46    | 57.56   | 57.84 | 58.49 | 65.24 | 68.73 |
| 2033 | 70.29 | 66.02 | 61.58 | 57.64    | 57.79      | 57.79     | 58.63    | 58.73   | 59.02 | 59.69 | 66.57 | 70.12 |
| 2034 | 71.62 | 67.26 | 62.74 | 58.72    | 58.87      | 58.87     | 59.73    | 59.84   | 60.13 | 60.81 | 67.83 | 71.44 |

# **SCHEDULE 201 (Continued)**

|      |       |       |       |          | T.        | ABLE 2a   |           |        |       |       |       |       |
|------|-------|-------|-------|----------|-----------|-----------|-----------|--------|-------|-------|-------|-------|
|      |       |       |       |          | Avoi      | ided Cos  | ts        |        |       |       |       |       |
|      |       |       |       | Standard | d Fixed P | rice Opti | on for Wi | ind QF |       |       |       |       |
|      |       |       |       | 0        | n-Peak F  | orecast ( | \$/MWH)   |        |       |       |       |       |
|      |       |       |       |          |           |           |           |        |       |       |       |       |
| Year | Jan   | Feb   | Mar   | Apr      | May       | Jun       | Jul       | Aug    | Sep   | Oct   | Nov   | Dec   |
| 2014 | 44.43 | 53.18 | 44.93 | 26.68    | 27.18     | 27.33     | 41.83     | 51.08  | 46.68 | 43.18 | 44.93 | 50.68 |
| 2015 | 46.36 | 44.02 | 38.95 | 32.30    | 27.00     | 25.03     | 40.87     | 47.13  | 41.33 | 39.48 | 40.91 | 44.44 |
| 2016 | 45.93 | 43.62 | 38.61 | 32.04    | 26.81     | 24.86     | 40.50     | 46.69  | 40.96 | 39.13 | 40.54 | 44.03 |
| 2017 | 48.52 | 46.08 | 40.79 | 33.85    | 28.32     | 26.26     | 42.79     | 49.32  | 43.27 | 41.34 | 42.83 | 46.51 |
| 2018 | 52.38 | 49.75 | 44.05 | 36.58    | 30.62     | 28.41     | 46.21     | 53.25  | 46.73 | 44.65 | 46.26 | 50.22 |
| 2019 | 55.26 | 52.49 | 46.49 | 38.62    | 32.35     | 30.02     | 48.76     | 56.17  | 49.31 | 47.12 | 48.81 | 52.99 |
| 2020 | 56.97 | 54.12 | 47.94 | 39.84    | 33.38     | 30.98     | 50.28     | 57.91  | 50.85 | 48.59 | 50.33 | 54.63 |
| 2021 | 41.45 | 41.10 | 39.61 | 37.58    | 37.65     | 37.69     | 37.48     | 37.52  | 37.70 | 38.17 | 42.19 | 43.92 |
| 2022 | 44.22 | 43.60 | 41.90 | 39.88    | 40.03     | 40.08     | 40.28     | 40.29  | 40.49 | 40.99 | 45.65 | 47.87 |
| 2023 | 47.82 | 47.03 | 45.38 | 43.48    | 42.96     | 42.98     | 43.28     | 43.11  | 43.47 | 43.99 | 49.00 | 51.98 |
| 2024 | 52.90 | 51.85 | 49.40 | 47.44    | 46.75     | 46.83     | 47.21     | 47.13  | 47.53 | 48.19 | 51.35 | 54.75 |
| 2025 | 54.76 | 52.54 | 49.16 | 47.18    | 47.16     | 47.24     | 47.62     | 47.54  | 47.91 | 48.59 | 51.61 | 55.14 |
| 2026 | 54.66 | 53.58 | 50.20 | 48.02    | 47.52     | 47.60     | 47.99     | 47.91  | 48.32 | 48.87 | 52.44 | 56.10 |
| 2027 | 54.33 | 52.60 | 49.46 | 46.57    | 46.53     | 46.60     | 46.97     | 46.87  | 47.28 | 47.86 | 52.76 | 56.02 |
| 2028 | 53.51 | 51.90 | 48.26 | 45.80    | 45.72     | 45.78     | 45.99     | 46.05  | 46.28 | 46.99 | 54.97 | 57.99 |
| 2029 | 59.48 | 58.72 | 54.79 | 51.54    | 51.57     | 51.49     | 52.03     | 52.13  | 52.40 | 52.99 | 58.70 | 62.29 |
| 2030 | 63.14 | 59.67 | 54.62 | 50.37    | 50.11     | 50.13     | 50.64     | 50.74  | 51.00 | 51.85 | 60.59 | 64.36 |
| 2031 | 64.86 | 60.74 | 56.47 | 52.68    | 52.82     | 52.82     | 53.64     | 53.74  | 54.01 | 54.65 | 61.28 | 64.69 |
| 2032 | 66.10 | 61.90 | 57.55 | 53.69    | 53.83     | 53.83     | 54.66     | 54.76  | 55.04 | 55.69 | 62.45 | 65.93 |
| 2033 | 67.46 | 63.18 | 58.75 | 54.81    | 54.95     | 54.95     | 55.80     | 55.90  | 56.19 | 56.85 | 63.74 | 67.29 |
| 2034 | 68.73 | 64.37 | 59.85 | 55.83    | 55.98     | 55.98     | 56.84     | 56.95  | 57.24 | 57.92 | 64.94 | 68.55 |

# **SCHEDULE 201 (Continued)**

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

|      | -     |       |       |          | т.         | ABLE 2b   |            |        |       |       |       |       |
|------|-------|-------|-------|----------|------------|-----------|------------|--------|-------|-------|-------|-------|
|      |       |       |       |          |            | ded Cos   | 10         |        |       |       |       |       |
|      |       |       |       | Standard | Fixed P    |           |            | ind OF |       |       |       |       |
|      |       |       |       |          | ff-Peak F  |           |            | iiu Qi |       |       |       |       |
|      |       |       |       |          | II-I Cak I | orecast ( | φ/1414411) |        |       |       |       |       |
| Year | Jan   | Feb   | Mar   | Apr      | May        | Jun       | Jul        | Aug    | Sep   | Oct   | Nov   | Dec   |
| 2014 | 34.43 | 47.68 | 39.18 | 11.53    | 6.18       | 5.68      | 18.08      | 33.33  | 36.83 | 35.93 | 37.68 | 43.68 |
| 2015 | 39.42 | 37.64 | 33.22 | 20.08    | 12.92      | 8.57      | 20.35      | 32.82  | 30.41 | 33.72 | 34.67 | 37.69 |
| 2016 | 39.59 | 37.81 | 33.39 | 20.24    | 13.08      | 8.73      | 20.51      | 32.99  | 30.58 | 33.89 | 34.84 | 37.86 |
| 2017 | 41.65 | 39.78 | 35.13 | 21.30    | 13.76      | 9.18      | 21.58      | 34.70  | 32.17 | 35.65 | 36.65 | 39.83 |
| 2018 | 44.41 | 42.41 | 37.46 | 22.75    | 14.74      | 9.87      | 23.06      | 37.02  | 34.32 | 38.02 | 39.09 | 42.47 |
| 2019 | 47.37 | 45.25 | 39.99 | 24.33    | 15.80      | 10.62     | 24.65      | 39.51  | 36.64 | 40.58 | 41.72 | 45.31 |
| 2020 | 49.77 | 47.51 | 42.00 | 26.90    | 18.42      | 13.46     | 28.49      | 42.81  | 39.35 | 42.62 | 43.86 | 47.63 |
| 2021 | 39.48 | 39.13 | 37.65 | 35.61    | 35.68      | 35.72     | 35.51      | 35.55  | 35.74 | 36.20 | 40.22 | 41.95 |
| 2022 | 42.21 | 41.59 | 39.89 | 37.87    | 38.02      | 38.07     | 38.27      | 38.29  | 38.49 | 38.98 | 43.64 | 45.87 |
| 2023 | 45.77 | 44.98 | 43.33 | 41.43    | 40.91      | 40.93     | 41.23      | 41.05  | 41.42 | 41.94 | 46.95 | 49.93 |
| 2024 | 50.82 | 49.78 | 47.32 | 45.36    | 44.67      | 44.75     | 45.13      | 45.05  | 45.45 | 46.12 | 49.27 | 52.68 |
| 2025 | 52.63 | 50.42 | 47.04 | 45.06    | 45.03      | 45.11     | 45.50      | 45.42  | 45.79 | 46.46 | 49.48 | 53.02 |
| 2026 | 52.50 | 51.41 | 48.03 | 45.86    | 45.35      | 45.43     | 45.83      | 45.75  | 46.15 | 46.71 | 50.28 | 53.93 |
| 2027 | 52.12 | 50.39 | 47.25 | 44.36    | 44.33      | 44.39     | 44.76      | 44.67  | 45.07 | 45.65 | 50.55 | 53.81 |
| 2028 | 51.26 | 49.65 | 46.01 | 43.55    | 43.47      | 43.53     | 43.74      | 43.80  | 44.03 | 44.74 | 52.72 | 55.74 |
| 2029 | 57.18 | 56.42 | 52.49 | 49.24    | 49.28      | 49.20     | 49.74      | 49.84  | 50.10 | 50.70 | 56.41 | 60.00 |
| 2030 | 60.80 | 57.33 | 52.29 | 48.03    | 47.77      | 47.80     | 48.31      | 48.40  | 48.66 | 49.51 | 58.25 | 62.03 |
| 2031 | 62.48 | 58.36 | 54.09 | 50.30    | 50.44      | 50.44     | 51.25      | 51.35  | 51.63 | 52.27 | 58.90 | 62.31 |
| 2032 | 63.69 | 59.49 | 55.14 | 51.27    | 51.42      | 51.42     | 52.25      | 52.35  | 52.63 | 53.28 | 60.03 | 63.52 |
| 2033 | 64.98 | 60.71 | 56.27 | 52.33    | 52.48      | 52.48     | 53.32      | 53.42  | 53.71 | 54.38 | 61.26 | 64.81 |
| 2034 | 66.20 | 61.84 | 57.32 | 53.30    | 53.45      | 53.45     | 54.31      | 54.42  | 54.71 | 55.39 | 62.41 | 66.02 |

Sheet No. 201-8

# **SCHEDULE 201 (Continued)**

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

|      |       |       |       |          | T         | ABLE 3a   |           |        |       |       |       |       |
|------|-------|-------|-------|----------|-----------|-----------|-----------|--------|-------|-------|-------|-------|
|      |       |       |       |          | Avoi      | ided Cos  | ts        |        |       |       |       |       |
|      |       |       |       | Standard | d Fixed P | rice Opti | on for So | lar QF |       |       |       |       |
|      |       |       |       | 0        | n-Peak F  | orecast ( | \$/MWH)   |        |       |       |       |       |
| V    |       | F-1   |       |          |           |           | 11        |        | 0     | 0-1   | None  | D     |
| Year | Jan   | Feb   | Mar   | Apr      | May       | Jun       | Jul       | Aug    | Sep   | Oct   | Nov   | Dec   |
| 2014 | 48.13 | 56.88 | 48.63 | 30.38    | 30.88     | 31.03     | 45.53     | 54.78  | 50.38 | 46.88 | 48.63 | 54.38 |
| 2015 | 50.13 | 47.79 | 42.72 | 36.07    | 30.77     | 28.80     | 44.64     | 50.90  | 45.10 | 43.25 | 44.68 | 48.21 |
| 2016 | 49.77 | 47.46 | 42.45 | 35.88    | 30.65     | 28.70     | 44.34     | 50.53  | 44.80 | 42.97 | 44.38 | 47.87 |
| 2017 | 52.43 | 49.99 | 44.70 | 37.76    | 32.23     | 30.17     | 46.70     | 53.23  | 47.18 | 45.25 | 46.74 | 50.42 |
| 2018 | 56.37 | 53.74 | 48.04 | 40.57    | 34.61     | 32.40     | 50.20     | 57.24  | 50.72 | 48.64 | 50.25 | 54.21 |
| 2019 | 59.33 | 56.56 | 50.56 | 42.69    | 36.42     | 34.09     | 52.83     | 60.24  | 53.38 | 51.19 | 52.88 | 57.06 |
| 2020 | 61.12 | 58.27 | 52.09 | 43.99    | 37.53     | 35.13     | 54.43     | 62.06  | 55.00 | 52.74 | 54.48 | 58.78 |
| 2021 | 45.68 | 45.33 | 43.84 | 41.81    | 41.88     | 41.92     | 41.71     | 41.75  | 41.93 | 42.40 | 46.42 | 48.15 |
| 2022 | 48.53 | 47.91 | 46.21 | 44.19    | 44.34     | 44.39     | 44.59     | 44.60  | 44.80 | 45.30 | 49.96 | 52.18 |
| 2023 | 52.21 | 51.42 | 49.77 | 47.87    | 47.35     | 47.37     | 47.67     | 47.50  | 47.86 | 48.38 | 53.39 | 56.37 |
| 2024 | 57.37 | 56.32 | 53.87 | 51.91    | 51.22     | 51.30     | 51.68     | 51.60  | 52.00 | 52.66 | 55.82 | 59.22 |
| 2025 | 59.32 | 57.10 | 53.72 | 51.74    | 51.72     | 51.80     | 52.18     | 52.10  | 52.47 | 53.15 | 56.17 | 59.70 |
| 2026 | 59.31 | 58.23 | 54.85 | 52.67    | 52.17     | 52.25     | 52.64     | 52.56  | 52.97 | 53.52 | 57.09 | 60.75 |
| 2027 | 59.07 | 57.34 | 54.20 | 51.31    | 51.27     | 51.34     | 51.71     | 51.61  | 52.02 | 52.60 | 57.50 | 60.76 |
| 2028 | 58.34 | 56.73 | 53.09 | 50.63    | 50.55     | 50.61     | 50.82     | 50.88  | 51.11 | 51.82 | 59.80 | 62.82 |
| 2029 | 64.40 | 63.64 | 59.71 | 56.46    | 56.49     | 56.41     | 56.95     | 57.05  | 57.32 | 57.91 | 63.62 | 67.21 |
| 2030 | 68.16 | 64.69 | 59.64 | 55.39    | 55.13     | 55.15     | 55.66     | 55.76  | 56.02 | 56.87 | 65.61 | 69.38 |
| 2031 | 69.98 | 65.86 | 61.59 | 57.80    | 57.94     | 57.94     | 58.76     | 58.86  | 59.13 | 59.77 | 66.40 | 69.81 |
| 2032 | 71.31 | 67.11 | 62.76 | 58.90    | 59.04     | 59.04     | 59.87     | 59.97  | 60.25 | 60.90 | 67.66 | 71.14 |
| 2033 | 72.77 | 68.49 | 64.06 | 60.12    | 60.26     | 60.26     | 61.11     | 61.21  | 61.50 | 62.16 | 69.05 | 72.60 |
| 2034 | 74.15 | 69.79 | 65.27 | 61.25    | 61.40     | 61.40     | 62.26     | 62.37  | 62.66 | 63.34 | 70.36 | 73.97 |

Sheet No. 201-9

# **SCHEDULE 201 (Continued)**

|      |       |       |       |          | T         | ABLE 3b   |           |        |       |       |       |       |
|------|-------|-------|-------|----------|-----------|-----------|-----------|--------|-------|-------|-------|-------|
|      |       |       |       |          | Avoi      | ided Cos  | ts        |        |       |       |       |       |
|      |       |       |       | Standard | I Fixed P | rice Opti | on for So | lar QF |       |       |       |       |
|      |       |       |       | 0        | ff-Peak F | orecast ( | \$/MWH)   |        |       |       |       |       |
|      |       |       |       |          |           |           |           |        |       |       |       |       |
| Year | Jan   | Feb   | Mar   | Apr      | May       | Jun       | Jul       | Aug    | Sep   | Oct   | Nov   | Dec   |
| 2014 | 38.13 | 51.38 | 42.88 | 15.23    | 9.88      | 9.38      | 21.78     | 37.03  | 40.53 | 39.63 | 41.38 | 47.38 |
| 2015 | 43.19 | 41.41 | 36.99 | 23.85    | 16.69     | 12.34     | 24.12     | 36.59  | 34.18 | 37.49 | 38.44 | 41.46 |
| 2016 | 43.43 | 41.65 | 37.23 | 24.08    | 16.92     | 12.57     | 24.35     | 36.83  | 34.42 | 37.73 | 38.68 | 41.70 |
| 2017 | 45.56 | 43.69 | 39.04 | 25.21    | 17.67     | 13.09     | 25.49     | 38.61  | 36.08 | 39.56 | 40.56 | 43.74 |
| 2018 | 48.40 | 46.40 | 41.45 | 26.74    | 18.73     | 13.86     | 27.05     | 41.01  | 38.31 | 42.01 | 43.08 | 46.46 |
| 2019 | 51.44 | 49.32 | 44.06 | 28.40    | 19.87     | 14.69     | 28.72     | 43.58  | 40.71 | 44.65 | 45.79 | 49.38 |
| 2020 | 53.92 | 51.66 | 46.15 | 31.05    | 22.57     | 17.61     | 32.64     | 46.96  | 43.50 | 46.77 | 48.01 | 51.78 |
| 2021 | 43.71 | 43.36 | 41.88 | 39.84    | 39.91     | 39.95     | 39.74     | 39.78  | 39.97 | 40.43 | 44.45 | 46.18 |
| 2022 | 46.52 | 45.90 | 44.20 | 42.18    | 42.33     | 42.38     | 42.58     | 42.60  | 42.80 | 43.29 | 47.95 | 50.18 |
| 2023 | 50.16 | 49.37 | 47.72 | 45.82    | 45.30     | 45.32     | 45.62     | 45.44  | 45.81 | 46.33 | 51.34 | 54.32 |
| 2024 | 55.29 | 54.25 | 51.79 | 49.83    | 49.14     | 49.22     | 49.60     | 49.52  | 49.92 | 50.59 | 53.74 | 57.15 |
| 2025 | 57.19 | 54.98 | 51.60 | 49.62    | 49.59     | 49.67     | 50.06     | 49.98  | 50.35 | 51.02 | 54.04 | 57.58 |
| 2026 | 57.15 | 56.06 | 52.68 | 50.51    | 50.00     | 50.08     | 50.48     | 50.40  | 50.80 | 51.36 | 54.93 | 58.58 |
| 2027 | 56.86 | 55.13 | 51.99 | 49.10    | 49.07     | 49.13     | 49.50     | 49.41  | 49.81 | 50.39 | 55.29 | 58.55 |
| 2028 | 56.09 | 54.48 | 50.84 | 48.38    | 48.30     | 48.36     | 48.57     | 48.63  | 48.86 | 49.57 | 57.55 | 60.57 |
| 2029 | 62.10 | 61.34 | 57.41 | 54.16    | 54.20     | 54.12     | 54.66     | 54.76  | 55.02 | 55.62 | 61.33 | 64.92 |
| 2030 | 65.82 | 62.35 | 57.31 | 53.05    | 52.79     | 52.82     | 53.33     | 53.42  | 53.68 | 54.53 | 63.27 | 67.05 |
| 2031 | 67.60 | 63.48 | 59.21 | 55.42    | 55.56     | 55.56     | 56.37     | 56.47  | 56.75 | 57.39 | 64.02 | 67.43 |
| 2032 | 68.90 | 64.70 | 60.35 | 56.48    | 56.63     | 56.63     | 57.46     | 57.56  | 57.84 | 58.49 | 65.24 | 68.73 |
| 2033 | 70.29 | 66.02 | 61.58 | 57.64    | 57.79     | 57.79     | 58.63     | 58.73  | 59.02 | 59.69 | 66.57 | 70.12 |
| 2034 | 71.62 | 67.26 | 62.74 | 58.72    | 58.87     | 58.87     | 59.73     | 59.84  | 60.13 | 60.81 | 67.83 | 71.44 |

Sheet No. 201-10

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

PRICING OPTIONS FOR STANDARD CONTRACTS (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.

A Renewable QF choosing the Renewable Fixed Price Option must cede all Renewable Energy Certificates generated by the facility to the Company during the deficiency period starting in 2020.

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. The capacity contribution to peak for the avoided proxy resource on which Renewable Avoided Costs for the Renewable Fixed Price Option are based and for Wind QF resources (Tables 5a and 5b) is assumed to be 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 Cost during the deficiency period (starting in 2020) includes avoided wind integration costs, shown in Table 7. Prices paid to the Seller under the Standard Fixed Price Option for Wind QFs (Tables 5a and 5b) include a reduction for the wind integration costs in Table 7, which cancels out the wind integration costs included in the Renewable Avoided Cost during the deficiency period starting in 2020. If the Wind QF is off system, the Seller is paid the wind integration charges in Table 7 in addition to the prices listed in Tables 5a and 5b.

Sellers with contracts exceeding 15 years will receive pricing equal to the Mid-C Index Price and will retain all Environmental Attributes generated by the facility for all years up to five in excess of the initial 15.

Deleted:

Commented [KB9]: We recommend adding a definition for RECs, and will recommend language in a separate communication.

Deleted: and all other Environmental Attributes

Commented [KB11]: This new paragraph explains the capacity contribution, and mirrors the information provided on Sheet 201-4 for the Standard Fixed Price Option.

Deleted: price

Deleted: reflects an increase for

Deleted: of \$3.99/MWh (\$2018)

Deleted: ¶

The Renewable Avoided Cost price for wind QFs reflects a reduction by an integration charge of \$3.99/MWh (\$2018). This reduction Prices paid to the Seller under the Standard

Deleted: increase noted above

Deleted: QF

Commented [KB12]: This clarifies that RECs are not ceded after the Seller stops receiving deficiency period avoided cost rates.

# **SCHEDULE 201 (Continued)**

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

|      |        |        |        |           | Т.          | ABLE 4a   |          |        |        |        |        |        |
|------|--------|--------|--------|-----------|-------------|-----------|----------|--------|--------|--------|--------|--------|
|      |        |        |        | F         | Renewabl    | e Avoide  | d Costs  |        |        |        |        |        |
|      |        |        | Rei    | newable I | Fixed Price | ce Option | for Base | Load Q | F      |        |        |        |
|      |        |        |        | 0         | n-Peak F    | orecast ( | \$/MWH)  |        |        |        |        |        |
|      |        |        |        |           |             |           |          |        |        |        |        |        |
| Year | Jan    | Feb    | Mar    | Apr       | May         | Jun       | Jul      | Aug    | Sep    | Oct    | Nov    | Dec    |
| 2014 | 48.13  | 56.88  | 48.63  | 30.38     | 30.88       | 31.03     | 45.53    | 54.78  | 50.38  | 46.88  | 48.63  | 54.38  |
| 2015 | 50.13  | 47.79  | 42.72  | 36.07     | 30.77       | 28.80     | 44.64    | 50.90  | 45.10  | 43.25  | 44.68  | 48.21  |
| 2016 | 49.77  | 47.46  | 42.45  | 35.88     | 30.65       | 28.70     | 44.34    | 50.53  | 44.80  | 42.97  | 44.38  | 47.87  |
| 2017 | 52.43  | 49.99  | 44.70  | 37.76     | 32.23       | 30.17     | 46.70    | 53.23  | 47.18  | 45.25  | 46.74  | 50.42  |
| 2018 | 56.37  | 53.74  | 48.04  | 40.57     | 34.61       | 32.40     | 50.20    | 57.24  | 50.72  | 48.64  | 50.25  | 54.21  |
| 2019 | 59.33  | 56.56  | 50.56  | 42.69     | 36.42       | 34.09     | 52.83    | 60.24  | 53.38  | 51.19  | 52.88  | 57.06  |
| 2020 | 110.96 | 110.94 | 110.27 | 110.67    | 113.50      | 112.71    | 112.43   | 112.33 | 111.19 | 110.33 | 111.07 | 110.17 |
| 2021 | 113.45 | 113.66 | 112.32 | 113.27    | 115.79      | 115.12    | 114.61   | 115.06 | 113.73 | 112.83 | 113.98 | 112.81 |
| 2022 | 115.87 | 115.76 | 114.08 | 115.61    | 118.24      | 117.33    | 116.93   | 116.90 | 115.93 | 115.04 | 116.30 | 115.03 |
| 2023 | 118.52 | 118.14 | 116.39 | 118.22    | 120.38      | 119.73    | 119.43   | 119.10 | 118.36 | 117.33 | 118.85 | 117.87 |
| 2024 | 120.08 | 120.21 | 118.48 | 120.27    | 122.67      | 121.77    | 121.68   | 121.44 | 121.28 | 119.17 | 120.06 | 120.17 |
| 2025 | 122.82 | 123.11 | 121.17 | 123.25    | 126.29      | 125.25    | 124.41   | 124.53 | 123.80 | 121.82 | 122.85 | 122.54 |
| 2026 | 125.83 | 125.53 | 124.24 | 126.17    | 130.11      | 127.03    | 127.04   | 127.39 | 127.14 | 124.44 | 126.06 | 125.22 |
| 2027 | 128.29 | 127.90 | 126.44 | 128.31    | 133.59      | 129.53    | 129.20   | 130.48 | 129.45 | 126.96 | 128.10 | 127.68 |
| 2028 | 130.68 | 129.75 | 127.97 | 130.93    | 135.83      | 131.54    | 132.16   | 132.17 | 131.40 | 129.63 | 130.58 | 129.89 |
| 2029 | 133.40 | 133.19 | 130.84 | 133.83    | 142.67      | 135.11    | 135.17   | 135.18 | 135.22 | 132.25 | 132.97 | 132.87 |
| 2030 | 136.15 | 135.90 | 133.88 | 136.43    | 146.30      | 139.26    | 137.36   | 137.25 | 138.47 | 134.83 | 135.33 | 135.37 |
| 2031 | 138.67 | 138.23 | 136.79 | 139.75    | 149.10      | 143.07    | 139.93   | 140.76 | 140.94 | 137.57 | 138.55 | 138.16 |
| 2032 | 140.80 | 140.35 | 138.89 | 141.90    | 151.40      | 145.27    | 142.07   | 142.92 | 143.11 | 139.68 | 140.67 | 140.28 |
| 2033 | 144.07 | 143.61 | 142.12 | 145.19    | 154.90      | 148.64    | 145.37   | 146.23 | 146.43 | 142.92 | 143.94 | 143.54 |
| 2034 | 147.01 | 146.54 | 145.02 | 148.15    | 158.05      | 151.67    | 148.34   | 149.22 | 149.42 | 145.84 | 146.88 | 146.47 |

# **SCHEDULE 201 (Continued)**

|      |       |       |       |           | TA        | ABLE 4b   |          |        |       |       |       |       |
|------|-------|-------|-------|-----------|-----------|-----------|----------|--------|-------|-------|-------|-------|
|      |       |       |       | R         | enewable  | e Avoide  | d Costs  |        |       |       |       |       |
|      |       |       | Rer   | newable F | ixed Pric | e Option  | for Base | Load Q | =     |       |       |       |
|      |       |       |       | 0         | ff-Peak F | orecast ( | \$/MWH)  |        |       |       |       |       |
|      |       |       |       |           |           |           |          |        |       |       |       |       |
| Year | Jan   | Feb   | Mar   | Apr       | May       | Jun       | Jul      | Aug    | Sep   | Oct   | Nov   | Dec   |
| 2014 | 38.13 | 51.38 | 42.88 | 15.23     | 9.88      | 9.38      | 21.78    | 37.03  | 40.53 | 39.63 | 41.38 | 47.38 |
| 2015 | 43.19 | 41.41 | 36.99 | 23.85     | 16.69     | 12.34     | 24.12    | 36.59  | 34.18 | 37.49 | 38.44 | 41.46 |
| 2016 | 43.43 | 41.65 | 37.23 | 24.08     | 16.92     | 12.57     | 24.35    | 36.83  | 34.42 | 37.73 | 38.68 | 41.70 |
| 2017 | 45.56 | 43.69 | 39.04 | 25.21     | 17.67     | 13.09     | 25.49    | 38.61  | 36.08 | 39.56 | 40.56 | 43.74 |
| 2018 | 48.40 | 46.40 | 41.45 | 26.74     | 18.73     | 13.86     | 27.05    | 41.01  | 38.31 | 42.01 | 43.08 | 46.46 |
| 2019 | 51.44 | 49.32 | 44.06 | 28.40     | 19.87     | 14.69     | 28.72    | 43.58  | 40.71 | 44.65 | 45.79 | 49.38 |
| 2020 | 59.57 | 59.79 | 61.16 | 60.06     | 57.06     | 57.27     | 57.53    | 58.56  | 59.35 | 60.44 | 60.26 | 60.65 |
| 2021 | 61.57 | 60.88 | 62.38 | 61.17     | 58.60     | 58.64     | 59.22    | 59.52  | 60.55 | 62.35 | 60.20 | 61.71 |
| 2022 | 62.46 | 62.17 | 64.15 | 62.14     | 59.45     | 59.78     | 61.11    | 60.25  | 61.70 | 63.51 | 61.19 | 62.84 |
| 2023 | 63.29 | 63.33 | 65.41 | 63.80     | 59.88     | 60.91     | 62.14    | 61.65  | 62.79 | 64.80 | 62.12 | 64.11 |
| 2024 | 63.85 | 63.91 | 66.70 | 63.71     | 60.26     | 62.68     | 61.65    | 61.97  | 63.30 | 65.11 | 64.00 | 64.56 |
| 2025 | 65.15 | 65.14 | 68.08 | 64.68     | 60.34     | 63.09     | 62.95    | 63.83  | 63.92 | 66.54 | 66.09 | 65.54 |
| 2026 | 65.53 | 66.33 | 68.47 | 65.19     | 61.03     | 64.01     | 63.86    | 64.48  | 63.86 | 67.45 | 66.33 | 66.37 |
| 2027 | 67.71 | 67.69 | 69.31 | 66.85     | 60.98     | 65.19     | 65.48    | 64.93  | 65.29 | 69.40 | 67.14 | 67.59 |
| 2028 | 68.66 | 69.20 | 71.42 | 68.49     | 60.54     | 66.63     | 66.77    | 65.60  | 66.82 | 69.99 | 67.94 | 69.66 |
| 2029 | 69.19 | 69.91 | 72.73 | 69.82     | 56.36     | 66.99     | 67.94    | 66.73  | 68.08 | 70.78 | 69.92 | 70.87 |
| 2030 | 70.29 | 71.09 | 74.22 | 70.05     | 56.23     | 67.61     | 68.62    | 68.76  | 68.60 | 72.12 | 71.56 | 72.33 |
| 2031 | 71.80 | 72.85 | 75.23 | 70.47     | 57.37     | 67.52     | 70.07    | 70.21  | 68.84 | 73.33 | 73.18 | 72.51 |
| 2032 | 72.99 | 74.06 | 76.48 | 71.64     | 58.32     | 68.64     | 71.23    | 71.37  | 69.98 | 74.54 | 74.39 | 73.71 |
| 2033 | 74.59 | 75.68 | 78.16 | 73.20     | 59.59     | 70.14     | 72.79    | 72.94  | 71.51 | 76.17 | 76.02 | 75.32 |
| 2034 | 76.04 | 77.15 | 79.67 | 74.62     | 60.75     | 71.50     | 74.20    | 74.35  | 72.90 | 77.65 | 77.49 | 76.79 |

# **SCHEDULE 201 (Continued)**

|      |       |       |       |         | т/         | ABLE 5a   |           |        |       |       |       |       |
|------|-------|-------|-------|---------|------------|-----------|-----------|--------|-------|-------|-------|-------|
|      |       |       |       | F       | Renewable  | e Avoide  | d Costs   |        |       |       |       |       |
|      |       |       | F     | Renewab | le Fixed F | rice Opt  | ion for W | ind QF |       |       |       |       |
|      |       |       |       | 0       | n-Peak F   | orecast ( | \$/MWH)   |        |       |       |       |       |
|      |       |       |       |         |            |           |           |        |       |       |       |       |
| Year | Jan   | Feb   | Mar   | Apr     | May        | Jun       | Jul       | Aug    | Sep   | Oct   | Nov   | Dec   |
| 2014 | 44.43 | 53.18 | 44.93 | 26.68   | 27.18      | 27.33     | 41.83     | 51.08  | 46.68 | 43.18 | 44.93 | 50.68 |
| 2015 | 46.36 | 44.02 | 38.95 | 32.30   | 27.00      | 25.03     | 40.87     | 47.13  | 41.33 | 39.48 | 40.91 | 44.44 |
| 2016 | 45.93 | 43.62 | 38.61 | 32.04   | 26.81      | 24.86     | 40.50     | 46.69  | 40.96 | 39.13 | 40.54 | 44.03 |
| 2017 | 48.52 | 46.08 | 40.79 | 33.85   | 28.32      | 26.26     | 42.79     | 49.32  | 43.27 | 41.34 | 42.83 | 46.51 |
| 2018 | 52.38 | 49.75 | 44.05 | 36.58   | 30.62      | 28.41     | 46.21     | 53.25  | 46.73 | 44.65 | 46.26 | 50.22 |
| 2019 | 55.26 | 52.49 | 46.49 | 38.62   | 32.35      | 30.02     | 48.76     | 56.17  | 49.31 | 47.12 | 48.81 | 52.99 |
| 2020 | 70.23 | 70.21 | 69.54 | 69.95   | 72.77      | 71.98     | 71.70     | 71.60  | 70.46 | 69.60 | 70.34 | 69.44 |
| 2021 | 71.82 | 72.02 | 70.69 | 71.64   | 74.15      | 73.48     | 72.97     | 73.43  | 72.09 | 71.20 | 72.35 | 71.18 |
| 2022 | 73.43 | 73.32 | 71.64 | 73.18   | 75.80      | 74.90     | 74.50     | 74.47  | 73.49 | 72.61 | 73.87 | 72.59 |
| 2023 | 75.14 | 74.76 | 73.01 | 74.84   | 77.01      | 76.36     | 76.05     | 75.73  | 74.98 | 73.96 | 75.47 | 74.50 |
| 2024 | 76.13 | 76.26 | 74.53 | 76.31   | 78.72      | 77.82     | 77.72     | 77.49  | 77.33 | 75.22 | 76.10 | 76.21 |
| 2025 | 77.89 | 78.17 | 76.24 | 78.31   | 81.36      | 80.32     | 79.47     | 79.59  | 78.87 | 76.88 | 77.91 | 77.60 |
| 2026 | 80.02 | 79.73 | 78.44 | 80.37   | 84.30      | 81.23     | 81.23     | 81.59  | 81.34 | 78.64 | 80.25 | 79.42 |
| 2027 | 81.60 | 81.21 | 79.75 | 81.62   | 86.90      | 82.84     | 82.51     | 83.79  | 82.77 | 80.27 | 81.41 | 80.99 |
| 2028 | 83.09 | 82.17 | 80.38 | 83.34   | 88.24      | 83.95     | 84.57     | 84.59  | 83.81 | 82.04 | 82.99 | 82.30 |
| 2029 | 84.89 | 84.68 | 82.34 | 85.32   | 94.16      | 86.60     | 86.67     | 86.67  | 86.71 | 83.74 | 84.46 | 84.36 |
| 2030 | 86.71 | 86.45 | 84.43 | 86.99   | 96.86      | 89.81     | 87.91     | 87.81  | 89.03 | 85.38 | 85.88 | 85.92 |
| 2031 | 88.27 | 87.83 | 86.39 | 89.35   | 98.69      | 92.67     | 89.52     | 90.35  | 90.54 | 87.17 | 88.14 | 87.76 |
| 2032 | 89.73 | 89.28 | 87.82 | 90.83   | 100.32     | 94.20     | 91.00     | 91.85  | 92.04 | 88.61 | 89.60 | 89.21 |
| 2033 | 91.71 | 91.25 | 89.76 | 92.83   | 102.54     | 96.28     | 93.01     | 93.88  | 94.07 | 90.56 | 91.58 | 91.18 |
| 2034 | 93.48 | 93.01 | 91.49 | 94.62   | 104.52     | 98.14     | 94.81     | 95.69  | 95.89 | 92.31 | 93.35 | 92.94 |

# **SCHEDULE 201 (Continued)**

|      |       |       |       |         | TA         | ABLE 5b   |           |        |       |       |       |       |
|------|-------|-------|-------|---------|------------|-----------|-----------|--------|-------|-------|-------|-------|
|      |       |       |       | F       | Renewable  | e Avoide  | d Costs   |        |       |       |       |       |
|      |       |       | F     | Renewab | le Fixed F | rice Opt  | ion for W | ind QF |       |       |       |       |
|      |       |       |       | 0       | ff-Peak F  | orecast ( | \$/MWH)   |        |       |       |       |       |
|      |       |       |       |         |            |           |           |        |       |       |       |       |
| Year | Jan   | Feb   | Mar   | Apr     | May        | Jun       | Jul       | Aug    | Sep   | Oct   | Nov   | Dec   |
| 2014 | 34.43 | 47.68 | 39.18 | 11.53   | 6.18       | 5.68      | 18.08     | 33.33  | 36.83 | 35.93 | 37.68 | 43.68 |
| 2015 | 39.42 | 37.64 | 33.22 | 20.08   | 12.92      | 8.57      | 20.35     | 32.82  | 30.41 | 33.72 | 34.67 | 37.69 |
| 2016 | 39.59 | 37.81 | 33.39 | 20.24   | 13.08      | 8.73      | 20.51     | 32.99  | 30.58 | 33.89 | 34.84 | 37.86 |
| 2017 | 41.65 | 39.78 | 35.13 | 21.30   | 13.76      | 9.18      | 21.58     | 34.70  | 32.17 | 35.65 | 36.65 | 39.83 |
| 2018 | 44.41 | 42.41 | 37.46 | 22.75   | 14.74      | 9.87      | 23.06     | 37.02  | 34.32 | 38.02 | 39.09 | 42.47 |
| 2019 | 47.37 | 45.25 | 39.99 | 24.33   | 15.80      | 10.62     | 24.65     | 39.51  | 36.64 | 40.58 | 41.72 | 45.31 |
| 2020 | 55.42 | 55.64 | 57.01 | 55.91   | 52.91      | 53.12     | 53.38     | 54.41  | 55.20 | 56.29 | 56.11 | 56.50 |
| 2021 | 57.34 | 56.65 | 58.15 | 56.94   | 54.37      | 54.41     | 54.99     | 55.29  | 56.32 | 58.12 | 55.97 | 57.48 |
| 2022 | 58.15 | 57.86 | 59.84 | 57.83   | 55.14      | 55.47     | 56.80     | 55.94  | 57.39 | 59.20 | 56.88 | 58.53 |
| 2023 | 58.90 | 58.94 | 61.02 | 59.41   | 55.49      | 56.52     | 57.75     | 57.26  | 58.40 | 60.41 | 57.73 | 59.72 |
| 2024 | 59.38 | 59.44 | 62.23 | 59.24   | 55.79      | 58.21     | 57.18     | 57.50  | 58.83 | 60.64 | 59.53 | 60.09 |
| 2025 | 60.59 | 60.58 | 63.52 | 60.12   | 55.78      | 58.53     | 58.39     | 59.27  | 59.36 | 61.98 | 61.53 | 60.98 |
| 2026 | 60.88 | 61.68 | 63.82 | 60.54   | 56.38      | 59.36     | 59.21     | 59.83  | 59.21 | 62.80 | 61.68 | 61.72 |
| 2027 | 62.97 | 62.95 | 64.57 | 62.11   | 56.24      | 60.45     | 60.74     | 60.19  | 60.55 | 64.66 | 62.40 | 62.85 |
| 2028 | 63.83 | 64.37 | 66.59 | 63.66   | 55.71      | 61.80     | 61.94     | 60.77  | 61.99 | 65.16 | 63.11 | 64.83 |
| 2029 | 64.27 | 64.99 | 67.81 | 64.90   | 51.44      | 62.07     | 63.02     | 61.81  | 63.16 | 65.86 | 65.00 | 65.95 |
| 2030 | 65.27 | 66.07 | 69.20 | 65.03   | 51.21      | 62.59     | 63.60     | 63.74  | 63.58 | 67.10 | 66.54 | 67.31 |
| 2031 | 66.68 | 67.73 | 70.11 | 65.35   | 52.25      | 62.40     | 64.95     | 65.09  | 63.72 | 68.21 | 68.06 | 67.39 |
| 2032 | 67.78 | 68.85 | 71.27 | 66.43   | 53.11      | 63.43     | 66.02     | 66.16  | 64.77 | 69.33 | 69.18 | 68.50 |
| 2033 | 69.28 | 70.37 | 72.85 | 67.89   | 54.28      | 64.83     | 67.48     | 67.63  | 66.20 | 70.86 | 70.71 | 70.01 |
| 2034 | 70.62 | 71.73 | 74.25 | 69.20   | 55.33      | 66.08     | 68.78     | 68.93  | 67.48 | 72.23 | 72.07 | 71.37 |

# **SCHEDULE 201 (Continued)**

|      |       |       |       |         | Т.         | ABLE 6a   |           |         |        |       |       |       |
|------|-------|-------|-------|---------|------------|-----------|-----------|---------|--------|-------|-------|-------|
|      |       |       |       | F       | Renewabl   | e Avoide  | d Costs   |         |        |       |       |       |
|      |       |       |       | Renewab | le Fixed I | Price 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   |
| 2014 | 48.13 | 56.88 | 48.63 | 30.38   | 30.88      | 31.03     | 45.53     | 54.78   | 50.38  | 46.88 | 48.63 | 54.38 |
| 2015 | 50.13 | 47.79 | 42.72 | 36.07   | 30.77      | 28.80     | 44.64     | 50.90   | 45.10  | 43.25 | 44.68 | 48.21 |
| 2016 | 49.77 | 47.46 | 42.45 | 35.88   | 30.65      | 28.70     | 44.34     | 50.53   | 44.80  | 42.97 | 44.38 | 47.87 |
| 2017 | 52.43 | 49.99 | 44.70 | 37.76   | 32.23      | 30.17     | 46.70     | 53.23   | 47.18  | 45.25 | 46.74 | 50.42 |
| 2018 | 56.37 | 53.74 | 48.04 | 40.57   | 34.61      | 32.40     | 50.20     | 57.24   | 50.72  | 48.64 | 50.25 | 54.21 |
| 2019 | 59.33 | 56.56 | 50.56 | 42.69   | 36.42      | 34.09     | 52.83     | 60.24   | 53.38  | 51.19 | 52.88 | 57.06 |
| 2020 | 74.38 | 74.36 | 73.69 | 74.10   | 76.92      | 76.13     | 75.85     | 75.75   | 74.61  | 73.75 | 74.49 | 73.59 |
| 2021 | 76.05 | 76.25 | 74.92 | 75.87   | 78.38      | 77.71     | 77.20     | 77.66   | 76.32  | 75.43 | 76.58 | 75.41 |
| 2022 | 77.74 | 77.63 | 75.95 | 77.49   | 80.11      | 79.21     | 78.81     | 78.78   | 77.80  | 76.92 | 78.18 | 76.90 |
| 2023 | 79.53 | 79.15 | 77.40 | 79.23   | 81.40      | 80.75     | 80.44     | 80.12   | 79.37  | 78.35 | 79.86 | 78.89 |
| 2024 | 80.60 | 80.73 | 79.00 | 80.78   | 83.19      | 82.29     | 82.19     | 81.96   | 81.80  | 79.69 | 80.57 | 80.68 |
| 2025 | 82.45 | 82.73 | 80.80 | 82.87   | 85.92      | 84.88     | 84.03     | 84.15   | 83.43  | 81.44 | 82.47 | 82.16 |
| 2026 | 84.67 | 84.38 | 83.09 | 85.02   | 88.95      | 85.88     | 85.88     | 86.24   | 85.99  | 83.29 | 84.90 | 84.07 |
| 2027 | 86.34 | 85.95 | 84.49 | 86.36   | 91.64      | 87.58     | 87.25     | 88.53   | 87.51  | 85.01 | 86.15 | 85.73 |
| 2028 | 87.92 | 87.00 | 85.21 | 88.17   | 93.07      | 88.78     | 89.40     | 89.42   | 88.64  | 86.87 | 87.82 | 87.13 |
| 2029 | 89.81 | 89.60 | 87.26 | 90.24   | 99.08      | 91.52     | 91.59     | 91.59   | 91.63  | 88.66 | 89.38 | 89.28 |
| 2030 | 91.73 | 91.47 | 89.45 | 92.01   | 101.88     | 94.83     | 92.93     | 92.83   | 94.05  | 90.40 | 90.90 | 90.94 |
| 2031 | 93.39 | 92.95 | 91.51 | 94.47   | 103.81     | 97.79     | 94.64     | 95.47   | 95.66  | 92.29 | 93.26 | 92.88 |
| 2032 | 94.94 | 94.49 | 93.03 | 96.04   | 105.53     | 99.41     | 96.21     | 97.06   | 97.25  | 93.82 | 94.81 | 94.42 |
| 2033 | 97.02 | 96.56 | 95.07 | 98.14   | 107.85     | 101.59    | 98.32     | 99.19   | 99.38  | 95.87 | 96.89 | 96.49 |
| 2034 | 98.90 | 98.43 | 96.91 | 100.04  | 109.94     | 103.56    | 100.23    | 101.11  | 101.31 | 97.73 | 98.77 | 98.36 |

# **SCHEDULE 201 (Continued)**

|      |       |       |       |          | TA         | ABLE 6b   |            |         |       |       |       |       |
|------|-------|-------|-------|----------|------------|-----------|------------|---------|-------|-------|-------|-------|
|      |       |       |       | R        | Renewable  | e Avoide  | d Costs    |         |       |       |       |       |
|      |       |       | F     | Renewabl | le Fixed F | rice Opt  | ion for So | olar QF |       |       |       |       |
|      |       |       |       | 0        | ff-Peak F  | orecast ( | \$/MWH)    |         |       |       |       |       |
|      |       |       |       |          |            |           |            |         | _     | _     |       | _     |
| Year | Jan   | Feb   | Mar   | Apr      | May        | Jun       | Jul        | Aug     | Sep   | Oct   | Nov   | Dec   |
| 2014 | 38.13 | 51.38 | 42.88 | 15.23    | 9.88       | 9.38      | 21.78      | 37.03   | 40.53 | 39.63 | 41.38 | 47.38 |
| 2015 | 43.19 | 41.41 | 36.99 | 23.85    | 16.69      | 12.34     | 24.12      | 36.59   | 34.18 | 37.49 | 38.44 | 41.46 |
| 2016 | 43.43 | 41.65 | 37.23 | 24.08    | 16.92      | 12.57     | 24.35      | 36.83   | 34.42 | 37.73 | 38.68 | 41.70 |
| 2017 | 45.56 | 43.69 | 39.04 | 25.21    | 17.67      | 13.09     | 25.49      | 38.61   | 36.08 | 39.56 | 40.56 | 43.74 |
| 2018 | 48.40 | 46.40 | 41.45 | 26.74    | 18.73      | 13.86     | 27.05      | 41.01   | 38.31 | 42.01 | 43.08 | 46.46 |
| 2019 | 51.44 | 49.32 | 44.06 | 28.40    | 19.87      | 14.69     | 28.72      | 43.58   | 40.71 | 44.65 | 45.79 | 49.38 |
| 2020 | 59.57 | 59.79 | 61.16 | 60.06    | 57.06      | 57.27     | 57.53      | 58.56   | 59.35 | 60.44 | 60.26 | 60.65 |
| 2021 | 61.57 | 60.88 | 62.38 | 61.17    | 58.60      | 58.64     | 59.22      | 59.52   | 60.55 | 62.35 | 60.20 | 61.71 |
| 2022 | 62.46 | 62.17 | 64.15 | 62.14    | 59.45      | 59.78     | 61.11      | 60.25   | 61.70 | 63.51 | 61.19 | 62.84 |
| 2023 | 63.29 | 63.33 | 65.41 | 63.80    | 59.88      | 60.91     | 62.14      | 61.65   | 62.79 | 64.80 | 62.12 | 64.11 |
| 2024 | 63.85 | 63.91 | 66.70 | 63.71    | 60.26      | 62.68     | 61.65      | 61.97   | 63.30 | 65.11 | 64.00 | 64.56 |
| 2025 | 65.15 | 65.14 | 68.08 | 64.68    | 60.34      | 63.09     | 62.95      | 63.83   | 63.92 | 66.54 | 66.09 | 65.54 |
| 2026 | 65.53 | 66.33 | 68.47 | 65.19    | 61.03      | 64.01     | 63.86      | 64.48   | 63.86 | 67.45 | 66.33 | 66.37 |
| 2027 | 67.71 | 67.69 | 69.31 | 66.85    | 60.98      | 65.19     | 65.48      | 64.93   | 65.29 | 69.40 | 67.14 | 67.59 |
| 2028 | 68.66 | 69.20 | 71.42 | 68.49    | 60.54      | 66.63     | 66.77      | 65.60   | 66.82 | 69.99 | 67.94 | 69.66 |
| 2029 | 69.19 | 69.91 | 72.73 | 69.82    | 56.36      | 66.99     | 67.94      | 66.73   | 68.08 | 70.78 | 69.92 | 70.87 |
| 2030 | 70.29 | 71.09 | 74.22 | 70.05    | 56.23      | 67.61     | 68.62      | 68.76   | 68.60 | 72.12 | 71.56 | 72.33 |
| 2031 | 71.80 | 72.85 | 75.23 | 70.47    | 57.37      | 67.52     | 70.07      | 70.21   | 68.84 | 73.33 | 73.18 | 72.51 |
| 2032 | 72.99 | 74.06 | 76.48 | 71.64    | 58.32      | 68.64     | 71.23      | 71.37   | 69.98 | 74.54 | 74.39 | 73.71 |
| 2033 | 74.59 | 75.68 | 78.16 | 73.20    | 59.59      | 70.14     | 72.79      | 72.94   | 71.51 | 76.17 | 76.02 | 75.32 |
| 2034 | 76.04 | 77.15 | 79.67 | 74.62    | 60.75      | 71.50     | 74.20      | 74.35   | 72.90 | 77.65 | 77.49 | 76.79 |

Sheet No. 201-17

# SCHEDULE 201 (Continued)

# WIND INTEGRATION

| TABLE 7  |          |  |  |  |  |  |  |  |  |
|----------|----------|--|--|--|--|--|--|--|--|
| Wind Int | egration |  |  |  |  |  |  |  |  |
| Year     | Cost     |  |  |  |  |  |  |  |  |
| 2014     | 3.70     |  |  |  |  |  |  |  |  |
| 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     |  |  |  |  |  |  |  |  |

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

### MONTHLY SERVICE CHARGE

Each separately metered QF will be charged \$10.00 per month.

### **INSURANCE REQUIREMENTS**

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

- 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.
- 2) 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.

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.

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

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

A QF will be eligible to receive the standard rates and 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.

### **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 the facilities at issue are independent family-owned or community-based projects.

### **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 the standard rates and 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 the standard rates and 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 the standard rates and 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 the standard rates and 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 On Peak Power and Off Peak Power. 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.

Sheet No. 201-20

### **SCHEDULE 201 (Concluded)**

OTHER DEFINITIONS (Continued)

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

As used in this schedule, Environmental Attributes shall mean any and all current or future credits, benefits, emissions reductions, environmental air quality credits, emissions reduction credits, offsets and allowances, howsoever entitled, resulting from the avoidance of the emission of any gas, chemical or other substance attributable to the Facility during the Term, or otherwise attributable to the generation, purchase, sale or use of energy from or by the Facility during the Term, including without limitation any of the same arising out of legislation or regulation concerned with oxides of nitrogen, sulfur or carbon, with particulate matter, soot or mercury, or implementing the United Nations Framework Convention on Climate Change (the "UNFCCC") or the Kyoto Protocol to the UNFCCC or crediting "early action" emissions reduction, or laws or regulations involving or administered by the Clean Air Markets Division of the Environmental Protection Agency or successor administrator, or any State or federal entity given jurisdiction over a program involving transferability of Environmental Attributes, including the Oregon Renewable Portfolio Standards, and any Green Tag Reporting Rights to such Environmental Attributes.

### **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 the standard rates and Standard PPA. Disputes may be presented to the Commission for resolution.

### **SPECIAL CONDITIONS**

- Delivery of energy by Seller will be at a voltage, phase, frequency, and power factor as specified by the Company.
- 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.
- 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.

# BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

# **UM 1931**

| PORTLAND GENERAL ELECTRIC COMPANY, | )           |
|------------------------------------|-------------|
| Complainant,                       | )           |
| v.                                 | )           |
| ALFALFA SOLAR I LLC, et al.        | )           |
| Defendants.                        | )<br>)<br>) |

# **EXHIBIT CREA-NIPPC-REC/208**

# BARBARA PARR EMAIL ON AUGUST 20, 2014 (WITHOUT ALL ATTACHMENTS)

**December 28, 2018** 

From: Barbara Parr <Barbara.Parr@pgn.com>
Sent: Wednesday, August 20, 2014 5:39 PM

**To:** 'dockets@oregoncub.org'; 'dockets@oseia.org'; 'oregondockets@pacificorp.com';

'dockets@renewablenw.org'; 'paul.ackerman@constellation.com'; Greg Adams;

'da@thenescogroup.com'; 'brittany.andrus@state.or.us'; 'stephanie.andrus@state.or.us'; 'james@utilityadvocates.org'; 'kacia.brockman@state.or.us'; 'dbrown@obsidianfinance.com';

'wcarey@gorge.net'; 'bryce.dalley@pacificorp.com'; 'megan@renewablenw.org';

'bill@oneenergyrenewables.com'; 'dlchain@wvi.com'; 'renee.m.france@doj.state.or.us'; Richard

George; 'tgregory@obsidianrenewables.com'; 'john.harvey@exeloncorp.com';

'dhenkels@cleantechlawpartners.com'; 'jhilton@idahopower.com'; 'bob@oregoncub.org'; 'kaufmann@lklaw.com'; 'matt.krumenauer@state.or.us'; 'dlokting@stollberne.com'; 'rlorenz@cablehuston.com'; 'lovinger@lklaw.com'; 'jravenesanmarcos@yahoo.com'; 'mmcarthur@aocweb.org'; 'catriona@oregoncub.org'; 'nelson@thnelson.com';

'k.a.newman@frontier.com'; 'mpengilly@gmail.com'; 'tcp@dvclaw.com'; 'dockets@mcd-law.com'; Peter Richardson; 'thad.roth@energytrust.org'; 'tmroush@wvi.com'; 'irion@sanger-law.com';

'cstokes@cablehuston.com'; 'dustin.till@pacificorp.com'; PGE OPUC Filings;

'david.tooze@portlandoregon.gov'; 'bvc@dvclaw.com'; 'john.volkman@energytrust.org';

'dwalker@idahopower.com'

**Subject:** PGE UM 1610 Workshop Notice & PPAs

**Attachments:** PGE UM 1610 Schedule 201 Avoided Cost Update\_Sch 201\_filing\_redline.pdf; PGE UM 1610 Schedule

201 Avoided Cost Update\_Sch 201\_original\_redline.pdf; PGE UM 1610 Schedule 201 Settlement Version-Off-System Variable-Redline-081914.pdf; PGE UM 1610 Schedule 201 Settlement Version-

RENEWABLE In-System Non-Variable-Redline-081914.pdf; PGE UM 1610 Schedule 201-COMPARISON-Off-System Variable-081914.pdf; PGE UM 1610 Schedule 201-COMPARISON-

RENEWABLE In-System Non-Variable-081914.pdf

Portland General Electric Company (PGE) UM 1610 workshop will be held on Wednesday, September 3 from 1:00 p.m. to 4:00 p.m. (PST) at PGE Legal Offices, 121 SW Salmon Street, 1WTC 13<sup>th</sup> floor, Legal A Conference Room, Portland.

### WebEx meeting information:

Meeting Number: 968 582 129 Meeting Password: Portland1

### To start or join the online meeting: go

to <a href="https://pgn.webex.com/pgn/j.php?MTID=m90c43b2cebe0eacd6db048233fadb147">https://pgn.webex.com/pgn/j.php?MTID=m90c43b2cebe0eacd6db048233fadb147</a>

<u>Audio conference information</u>: To join the meeting, call-in toll-free number (US/Canada): **1-877-668-4490** OR

Call-in toll number (US/Canada): 1-408-792-6300; Enter the access code: 968 582 129

Please find attached two standard PPAs (four redlines) and PGE's Schedule 201 (two redlines) for use in the next UM 1610 compliance filing workshop on September 3.

The PPAs should be representative of substantially all the changes previously discussed in the prior workshops. One PPA is variable, thus containing the MAG changes, and off-system, thus including the scheduling provisions. The other PPA is renewable and firm, so it contains the environmental attribute

Sanger/2

changes and the monthly minimum net output requirements and corresponding damages calculations. These documents reflect the input from the various stakeholders and PGE's proposal to address requested stakeholder changes. We include explanatory comments within the documents. For the most part, we have accepted requested changes. In a few instances, we have requested issues to be considered in Phase II. The two redlines of each PPA show: 1) the changes made to the May compliance filing to address stakeholder input; and 2) cumulative changes from the currently in-effect PPAs.

The Schedule also reflects stakeholder input and includes specifically suggested wording changes from ODOE and other parties. The redlines show 1) changes from the May compliance filing; and 2) cumulative changes to the schedule currently in effect.

We will discuss these proposed compliance documents at our next workshop on September 3, but if there are questions or comments prior to then, please do not hesitate to contact me.

Rich



Richard George | Assistant General Counsel

Portland General Electric Co. | 121 SW Salmon Street, 1WTC1301 | Portland, OR 97204

**2** 503-464-7611 503-8

503-863-1248 | ♣ 503-464-2200 | ☑ <u>Richard.George@pgn.com</u>

www.portlandgeneral.com

\*\*\*\*\*\*\* Privilege/Confidentiality Statement \*\*\*\*\*\*\*\*\*\*\*

This e-mail message, including any attachments, is the property of Portland General Electric Company. Since it is a communication by its Legal Department, it may contain attorney privileged and/or confidential information. The review, disclosure, distribution, or copying of this message by or to anyone other than the named addressee(s) is strictly prohibited. If you have received this message in error, please immediately notify the sender by reply e-mail and delete the original email and all copies of the message. Thank you.

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

### **PURPOSE**

To provide information about <u>Standard Avoided Costs</u>, Avoided Costs<u>and Renewable Avoided Costs</u>, 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.

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 <a href="either">either</a> the filed <a href="either">Standard</a> Avoided Costs or <a href="either">Renewable Avoided Costs</a> in effect at that time.

Comment [MD1]: CREA proposed
striking this change.

Deleted: 's generation

Effective for service

on and after September 3, 2014

Comment [MD2]: Need to change effective date when this is filed.

Sheet No. 201-2

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

### 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 <u>In-System</u> Non-Variable Power Purchase Agreement
- Standard Off-System Non-Variable Power Purchase Agreement
- Standard In-System Variable Resources Power Purchase Agreement
- Standard Off-System Variable Resources 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 Resources Power Purchase Agreement
- Standard Renewable Off-System Variable Resources 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.

Effective for service on and after September 3, 2014

Deleted: In System

Deleted: Off System

Deleted: In System

Comment [MD3]: CREA proposed
striking "Integrated" from titles.

Deleted: Off System

Deleted: Integrated

Deleted: In System

Deleted: Off System

Deleted: In System

Comment [MD4]: CREA proposed
striking "Integrated" from titles.

Deleted: Off System

Deleted: Integrated

Deleted: OFF SYSTEM

### Sheet No. 201-3

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

### **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 <u>either</u> the <u>Standard or Renewable</u> Avoided Costs in effect at the time the agreement is executed.

**Comment [MD5]:** For consistency purposes changed rates to prices throughout document

Deleted: rates

Deleted: T

**Deleted:** and 2 below include monthly On- and Off-Peak prices

Deleted: December 2014

Deleted: p

Deleted: 2015 through 2030

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.)

Deleted:,

Deleted: Contract

Deleted:,

Effective for service on and after September 3, 2014

Sheet No. 201-4

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

PRICING FOR STANDARD PPA (Continued)

### 1) Standard Fixed Price Option

The Standard Fixed Price Option is based on <u>Standard</u> 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 <u>Standard</u> Avoided Costs in Tables 1a and 1b, 2a and 2b, or 3a and 3c, depending on the type of QF, effective at execution. <u>QFs using any resource type other than wind and solar are assumed to be Base Load QFs.</u>

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 off-system, 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.

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.

Deleted:

Comment [MD6]: ODOE: "This clarifies that run of river hydro and other QF types are eligible for the Base Load QF prices."

Comment [MD7]: ODOE: "Changes to
this paragraph clarify the
adjustments for capacity
contribution."

**Deleted:** The capacity contribution to peak for the avoided proxy resource on which Avoided Costs for the Standard Fixed Price Option are based and Base Load QF resources (Tables 1a and 1b) is assumed to be 100%.

Comment [MD8]: ODOE: "Changes to this paragraph clarify the adjustments for integration."

Deleted: T

**Deleted:** Avoided Cost

**Deleted:** s

**Deleted:** and integration charges, both at \$3.99/MWh (\$2018), for a net zero effect

Deleted:

Deleted: |

Deleted: off system

Deleted:

Deleted: contract

|      |        |        |        |          | T.        | ABLE 1a   |          |         |        |        |        |        |
|------|--------|--------|--------|----------|-----------|-----------|----------|---------|--------|--------|--------|--------|
|      |        |        |        |          | Avo       | ided Cos  | ts       |         |        |        |        |        |
|      |        |        | St     | andard F | ixed Pric | e Option  | for Base | Load QF | 1      |        |        |        |
|      |        |        |        | 0        | n-Peak F  | orecast ( | \$/MWH)  |         |        |        |        |        |
|      |        |        |        |          |           |           |          |         |        |        |        |        |
| Year | Jan    | Feb    | Mar    | Apr      | May       | Jun       | Jul      | Aug     | Sep    | Oct    | Nov    | Dec    |
| 2014 | 48.13  | 56.88  | 48.63  | 30.38    | 30.88     | 31.03     | 45.53    | 54.78   | 50.38  | 46.88  | 48.63  | 54.38  |
| 2015 | 50.13  | 47.79  | 42.72  | 36.07    | 30.77     | 28.80     | 44.64    | 50.90   | 45.10  | 43.25  | 44.68  | 48.21  |
| 2016 | 49.77  | 47.46  | 42.45  | 35.88    | 30.65     | 28.70     | 44.34    | 50.53   | 44.80  | 42.97  | 44.38  | 47.87  |
| 2017 | 52.43  | 49.99  | 44.70  | 37.76    | 32.23     | 30.17     | 46.70    | 53.23   | 47.18  | 45.25  | 46.74  | 50.42  |
| 2018 | 56.37  | 53.74  | 48.04  | 40.57    | 34.61     | 32.40     | 50.20    | 57.24   | 50.72  | 48.64  | 50.25  | 54.21  |
| 2019 | 59.33  | 56.56  | 50.56  | 42.69    | 36.42     | 34.09     | 52.83    | 60.24   | 53.38  | 51.19  | 52.88  | 57.06  |
| 2020 | 61.12  | 58.27  | 52.09  | 43.99    | 37.53     | 35.13     | 54.43    | 62.06   | 55.00  | 52.74  | 54.48  | 58.78  |
| 2021 | 83.08  | 82.73  | 81.25  | 79.21    | 79.28     | 79.32     | 79.11    | 79.15   | 79.34  | 79.80  | 83.82  | 85.55  |
| 2022 | 86.66  | 86.03  | 84.34  | 82.31    | 82.46     | 82.52     | 82.71    | 82.73   | 82.93  | 83.42  | 88.08  | 90.31  |
| 2023 | 91.20  | 90.41  | 88.76  | 86.86    | 86.34     | 86.36     | 86.66    | 86.48   | 86.85  | 87.37  | 92.37  | 95.36  |
| 2024 | 96.86  | 95.81  | 93.35  | 91.39    | 90.70     | 90.78     | 91.16    | 91.09   | 91.49  | 92.15  | 95.30  | 98.71  |
| 2025 | 99.69  | 97.48  | 94.10  | 92.12    | 92.10     | 92.18     | 92.56    | 92.48   | 92.85  | 93.52  | 96.54  | 100.08 |
| 2026 | 100.47 | 99.38  | 96.00  | 93.83    | 93.32     | 93.40     | 93.80    | 93.72   | 94.12  | 94.68  | 98.25  | 101.90 |
| 2027 | 101.02 | 99.29  | 96.15  | 93.26    | 93.22     | 93.29     | 93.66    | 93.56   | 93.97  | 94.55  | 99.45  | 102.71 |
| 2028 | 101.10 | 99.49  | 95.85  | 93.39    | 93.31     | 93.37     | 93.58    | 93.64   | 93.87  | 94.58  | 102.56 | 105.58 |
| 2029 | 107.98 | 107.22 | 103.29 | 100.04   | 100.08    | 100.00    | 100.54   | 100.64  | 100.90 | 101.50 | 107.20 | 110.79 |
| 2030 | 112.59 | 109.12 | 104.07 | 99.81    | 99.56     | 99.58     | 100.09   | 100.18  | 100.44 | 101.29 | 110.03 | 113.81 |
| 2031 | 115.26 | 111.15 | 106.88 | 103.09   | 103.23    | 103.23    | 104.04   | 104.14  | 104.41 | 105.06 | 111.68 | 115.10 |
| 2032 | 117.17 | 112.98 | 108.63 | 104.76   | 104.90    | 104.90    | 105.73   | 105.83  | 106.11 | 106.77 | 113.52 | 117.00 |
| 2033 | 119.82 | 115.54 | 111.10 | 107.17   | 107.31    | 107.31    | 108.16   | 108.26  | 108.54 | 109.21 | 116.10 | 119.64 |
| 2034 | 122.26 | 117.90 | 113.38 | 109.36   | 109.51    | 109.51    | 110.37   | 110.48  | 110.77 | 111.45 | 118.47 | 122.08 |

Effective for service on and after <u>September 3, 2014</u>

Sheet No. 201-5

# **SCHEDULE 201 (Continued)**

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

|      |       |       |       |          | TA         | ABLE 1b   |          |         |       |       |       |       |
|------|-------|-------|-------|----------|------------|-----------|----------|---------|-------|-------|-------|-------|
|      |       |       |       |          |            | ded Cost  | s        |         |       |       |       |       |
|      |       |       | Sta   | andard F | ixed Price | Option    | for Base | Load QF |       |       |       |       |
|      |       |       |       | 0        | ff-Peak F  | orecast ( | \$/MWH)  |         |       |       |       |       |
|      |       |       |       |          |            |           |          |         |       |       |       |       |
| Year | Jan   | Feb   | Mar   | Apr      | May        | Jun       | Jul      | Aug     | Sep   | Oct   | Nov   | Dec   |
| 2014 | 38.13 | 51.38 | 42.88 | 15.23    | 9.88       | 9.38      | 21.78    | 37.03   | 40.53 | 39.63 | 41.38 | 47.38 |
| 2015 | 43.19 | 41.41 | 36.99 | 23.85    | 16.69      | 12.34     | 24.12    | 36.59   | 34.18 | 37.49 | 38.44 | 41.46 |
| 2016 | 43.43 | 41.65 | 37.23 | 24.08    | 16.92      | 12.57     | 24.35    | 36.83   | 34.42 | 37.73 | 38.68 | 41.70 |
| 2017 | 45.56 | 43.69 | 39.04 | 25.21    | 17.67      | 13.09     | 25.49    | 38.61   | 36.08 | 39.56 | 40.56 | 43.74 |
| 2018 | 48.40 | 46.40 | 41.45 | 26.74    | 18.73      | 13.86     | 27.05    | 41.01   | 38.31 | 42.01 | 43.08 | 46.46 |
| 2019 | 51.44 | 49.32 | 44.06 | 28.40    | 19.87      | 14.69     | 28.72    | 43.58   | 40.71 | 44.65 | 45.79 | 49.38 |
| 2020 | 53.92 | 51.66 | 46.15 | 31.05    | 22.57      | 17.61     | 32.64    | 46.96   | 43.50 | 46.77 | 48.01 | 51.78 |
| 2021 | 43.71 | 43.36 | 41.88 | 39.84    | 39.91      | 39.95     | 39.74    | 39.78   | 39.97 | 40.43 | 44.45 | 46.18 |
| 2022 | 46.52 | 45.90 | 44.20 | 42.18    | 42.33      | 42.38     | 42.58    | 42.60   | 42.80 | 43.29 | 47.95 | 50.18 |
| 2023 | 50.16 | 49.37 | 47.72 | 45.82    | 45.30      | 45.32     | 45.62    | 45.44   | 45.81 | 46.33 | 51.34 | 54.32 |
| 2024 | 55.29 | 54.25 | 51.79 | 49.83    | 49.14      | 49.22     | 49.60    | 49.52   | 49.92 | 50.59 | 53.74 | 57.15 |
| 2025 | 57.19 | 54.98 | 51.60 | 49.62    | 49.59      | 49.67     | 50.06    | 49.98   | 50.35 | 51.02 | 54.04 | 57.58 |
| 2026 | 57.15 | 56.06 | 52.68 | 50.51    | 50.00      | 50.08     | 50.48    | 50.40   | 50.80 | 51.36 | 54.93 | 58.58 |
| 2027 | 56.86 | 55.13 | 51.99 | 49.10    | 49.07      | 49.13     | 49.50    | 49.41   | 49.81 | 50.39 | 55.29 | 58.55 |
| 2028 | 56.09 | 54.48 | 50.84 | 48.38    | 48.30      | 48.36     | 48.57    | 48.63   | 48.86 | 49.57 | 57.55 | 60.57 |
| 2029 | 62.10 | 61.34 | 57.41 | 54.16    | 54.20      | 54.12     | 54.66    | 54.76   | 55.02 | 55.62 | 61.33 | 64.92 |
| 2030 | 65.82 | 62.35 | 57.31 | 53.05    | 52.79      | 52.82     | 53.33    | 53.42   | 53.68 | 54.53 | 63.27 | 67.05 |
| 2031 | 67.60 | 63.48 | 59.21 | 55.42    | 55.56      | 55.56     | 56.37    | 56.47   | 56.75 | 57.39 | 64.02 | 67.43 |
| 2032 | 68.90 | 64.70 | 60.35 | 56.48    | 56.63      | 56.63     | 57.46    | 57.56   | 57.84 | 58.49 | 65.24 | 68.73 |
| 2033 | 70.29 | 66.02 | 61.58 | 57.64    | 57.79      | 57.79     | 58.63    | 58.73   | 59.02 | 59.69 | 66.57 | 70.12 |
| 2034 | 71.62 | 67.26 | 62.74 | 58.72    | 58.87      | 58.87     | 59.73    | 59.84   | 60.13 | 60.81 | 67.83 | 71.44 |

Effective for service

on and after September 3, 2014

# Portland General Electric Company

Sheet No. 201-6

# **SCHEDULE 201 (Continued)**

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

|      |       |       |       |          | T        | ABLE 2a     |           |       |       |       |       |       |
|------|-------|-------|-------|----------|----------|-------------|-----------|-------|-------|-------|-------|-------|
|      |       |       |       |          | Avoi     | ded Cost    | s         |       |       |       |       |       |
|      |       |       |       | Standard | Fixed P  | rice Option | on for Wi | nd QF |       |       |       |       |
|      |       |       |       | 0        | n-Peak F | orecast (   | \$/MWH)   |       |       |       |       |       |
|      |       |       |       |          |          |             |           |       |       |       |       |       |
| Year | Jan   | Feb   | Mar   | Apr      | May      | Jun         | Jul       | Aug   | Sep   | Oct   | Nov   | Dec   |
| 2014 | 44.43 | 53.18 | 44.93 | 26.68    | 27.18    | 27.33       | 41.83     | 51.08 | 46.68 | 43.18 | 44.93 | 50.68 |
| 2015 | 46.36 | 44.02 | 38.95 | 32.30    | 27.00    | 25.03       | 40.87     | 47.13 | 41.33 | 39.48 | 40.91 | 44.44 |
| 2016 | 45.93 | 43.62 | 38.61 | 32.04    | 26.81    | 24.86       | 40.50     | 46.69 | 40.96 | 39.13 | 40.54 | 44.03 |
| 2017 | 48.52 | 46.08 | 40.79 | 33.85    | 28.32    | 26.26       | 42.79     | 49.32 | 43.27 | 41.34 | 42.83 | 46.51 |
| 2018 | 52.38 | 49.75 | 44.05 | 36.58    | 30.62    | 28.41       | 46.21     | 53.25 | 46.73 | 44.65 | 46.26 | 50.22 |
| 2019 | 55.26 | 52.49 | 46.49 | 38.62    | 32.35    | 30.02       | 48.76     | 56.17 | 49.31 | 47.12 | 48.81 | 52.99 |
| 2020 | 56.97 | 54.12 | 47.94 | 39.84    | 33.38    | 30.98       | 50.28     | 57.91 | 50.85 | 48.59 | 50.33 | 54.63 |
| 2021 | 41.45 | 41.10 | 39.61 | 37.58    | 37.65    | 37.69       | 37.48     | 37.52 | 37.70 | 38.17 | 42.19 | 43.92 |
| 2022 | 44.22 | 43.60 | 41.90 | 39.88    | 40.03    | 40.08       | 40.28     | 40.29 | 40.49 | 40.99 | 45.65 | 47.87 |
| 2023 | 47.82 | 47.03 | 45.38 | 43.48    | 42.96    | 42.98       | 43.28     | 43.11 | 43.47 | 43.99 | 49.00 | 51.98 |
| 2024 | 52.90 | 51.85 | 49.40 | 47.44    | 46.75    | 46.83       | 47.21     | 47.13 | 47.53 | 48.19 | 51.35 | 54.75 |
| 2025 | 54.76 | 52.54 | 49.16 | 47.18    | 47.16    | 47.24       | 47.62     | 47.54 | 47.91 | 48.59 | 51.61 | 55.14 |
| 2026 | 54.66 | 53.58 | 50.20 | 48.02    | 47.52    | 47.60       | 47.99     | 47.91 | 48.32 | 48.87 | 52.44 | 56.10 |
| 2027 | 54.33 | 52.60 | 49.46 | 46.57    | 46.53    | 46.60       | 46.97     | 46.87 | 47.28 | 47.86 | 52.76 | 56.02 |
| 2028 | 53.51 | 51.90 | 48.26 | 45.80    | 45.72    | 45.78       | 45.99     | 46.05 | 46.28 | 46.99 | 54.97 | 57.99 |
| 2029 | 59.48 | 58.72 | 54.79 | 51.54    | 51.57    | 51.49       | 52.03     | 52.13 | 52.40 | 52.99 | 58.70 | 62.29 |
| 2030 | 63.14 | 59.67 | 54.62 | 50.37    | 50.11    | 50.13       | 50.64     | 50.74 | 51.00 | 51.85 | 60.59 | 64.36 |
| 2031 | 64.86 | 60.74 | 56.47 | 52.68    | 52.82    | 52.82       | 53.64     | 53.74 | 54.01 | 54.65 | 61.28 | 64.69 |
| 2032 | 66.10 | 61.90 | 57.55 | 53.69    | 53.83    | 53.83       | 54.66     | 54.76 | 55.04 | 55.69 | 62.45 | 65.93 |
| 2033 | 67.46 | 63.18 | 58.75 | 54.81    | 54.95    | 54.95       | 55.80     | 55.90 | 56.19 | 56.85 | 63.74 | 67.29 |
| 2034 | 68.73 | 64.37 | 59.85 | 55.83    | 55.98    | 55.98       | 56.84     | 56.95 | 57.24 | 57.92 | 64.94 | 68.55 |

Effective for service on and after September 3, 2014

# Portland General Electric Company

Sheet No. 201-7

# **SCHEDULE 201 (Continued)**

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

|      |       |       |       |       |           |           |             |       |       |       |       | 1     |
|------|-------|-------|-------|-------|-----------|-----------|-------------|-------|-------|-------|-------|-------|
|      |       |       |       |       |           | ABLE 2b   |             |       |       |       |       |       |
|      |       |       |       | O4 1  |           | ded Cost  |             |       |       |       |       |       |
|      |       |       |       |       | Fixed P   |           |             | na QF |       |       |       |       |
|      |       |       |       | 0     | ff-Peak F | orecast ( | \$/IVIVV H) |       |       |       |       |       |
| Year | Jan   | Feb   | Mar   | Apr   | May       | Jun       | Jul         | Aug   | Sep   | Oct   | Nov   | Dec   |
| 2014 | 34.43 | 47.68 | 39.18 | 11.53 | 6.18      | 5.68      | 18.08       | 33.33 | 36.83 | 35.93 | 37.68 | 43.68 |
| 2015 | 39.42 | 37.64 | 33.22 | 20.08 | 12.92     | 8.57      | 20.35       | 32.82 | 30.41 | 33.72 | 34.67 | 37.69 |
| 2016 | 39.59 | 37.81 | 33.39 | 20.24 | 13.08     | 8.73      | 20.51       | 32.99 | 30.58 | 33.89 | 34.84 | 37.86 |
| 2017 | 41.65 | 39.78 | 35.13 | 21.30 | 13.76     | 9.18      | 21.58       | 34.70 | 32.17 | 35.65 | 36.65 | 39.83 |
| 2018 | 44.41 | 42.41 | 37.46 | 22.75 | 14.74     | 9.87      | 23.06       | 37.02 | 34.32 | 38.02 | 39.09 | 42.47 |
| 2019 | 47.37 | 45.25 | 39.99 | 24.33 | 15.80     | 10.62     | 24.65       | 39.51 | 36.64 | 40.58 | 41.72 | 45.31 |
| 2020 | 49.77 | 47.51 | 42.00 | 26.90 | 18.42     | 13.46     | 28.49       | 42.81 | 39.35 | 42.62 | 43.86 | 47.63 |
| 2021 | 39.48 | 39.13 | 37.65 | 35.61 | 35.68     | 35.72     | 35.51       | 35.55 | 35.74 | 36.20 | 40.22 | 41.95 |
| 2022 | 42.21 | 41.59 | 39.89 | 37.87 | 38.02     | 38.07     | 38.27       | 38.29 | 38.49 | 38.98 | 43.64 | 45.87 |
| 2023 | 45.77 | 44.98 | 43.33 | 41.43 | 40.91     | 40.93     | 41.23       | 41.05 | 41.42 | 41.94 | 46.95 | 49.93 |
| 2024 | 50.82 | 49.78 | 47.32 | 45.36 | 44.67     | 44.75     | 45.13       | 45.05 | 45.45 | 46.12 | 49.27 | 52.68 |
| 2025 | 52.63 | 50.42 | 47.04 | 45.06 | 45.03     | 45.11     | 45.50       | 45.42 | 45.79 | 46.46 | 49.48 | 53.02 |
| 2026 | 52.50 | 51.41 | 48.03 | 45.86 | 45.35     | 45.43     | 45.83       | 45.75 | 46.15 | 46.71 | 50.28 | 53.93 |
| 2027 | 52.12 | 50.39 | 47.25 | 44.36 | 44.33     | 44.39     | 44.76       | 44.67 | 45.07 | 45.65 | 50.55 | 53.81 |
| 2028 | 51.26 | 49.65 | 46.01 | 43.55 | 43.47     | 43.53     | 43.74       | 43.80 | 44.03 | 44.74 | 52.72 | 55.74 |
| 2029 | 57.18 | 56.42 | 52.49 | 49.24 | 49.28     | 49.20     | 49.74       | 49.84 | 50.10 | 50.70 | 56.41 | 60.00 |
| 2030 | 60.80 | 57.33 | 52.29 | 48.03 | 47.77     | 47.80     | 48.31       | 48.40 | 48.66 | 49.51 | 58.25 | 62.03 |
| 2031 | 62.48 | 58.36 | 54.09 | 50.30 | 50.44     | 50.44     | 51.25       | 51.35 | 51.63 | 52.27 | 58.90 | 62.31 |
| 2032 | 63.69 | 59.49 | 55.14 | 51.27 | 51.42     | 51.42     | 52.25       | 52.35 | 52.63 | 53.28 | 60.03 | 63.52 |
| 2033 | 64.98 | 60.71 | 56.27 | 52.33 | 52.48     | 52.48     | 53.32       | 53.42 | 53.71 | 54.38 | 61.26 | 64.81 |
| 2034 | 66.20 | 61.84 | 57.32 | 53.30 | 53.45     | 53.45     | 54.31       | 54.42 | 54.71 | 55.39 | 62.41 | 66.02 |

Effective for service

on and after September 3, 2014

# Portland General Electric Company

Sheet No. 201-8

# **SCHEDULE 201 (Continued)**

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

|      |       |       |       |          | T         | ABLE 3a    |           |        |       |       |       |       |
|------|-------|-------|-------|----------|-----------|------------|-----------|--------|-------|-------|-------|-------|
|      |       |       |       |          | Avoi      | ided Cos   | s         |        |       |       |       |       |
|      |       |       |       | Standard | I Fixed P | rice Optic | on for So | lar QF |       |       |       |       |
|      |       |       |       | 0        | n-Peak F  | orecast (  | \$/MWH)   |        |       |       |       |       |
|      |       |       |       |          |           |            |           |        |       |       |       |       |
| Year | Jan   | Feb   | Mar   | Apr      | May       | Jun        | Jul       | Aug    | Sep   | Oct   | Nov   | Dec   |
| 2014 | 48.13 | 56.88 | 48.63 | 30.38    | 30.88     | 31.03      | 45.53     | 54.78  | 50.38 | 46.88 | 48.63 | 54.38 |
| 2015 | 50.13 | 47.79 | 42.72 | 36.07    | 30.77     | 28.80      | 44.64     | 50.90  | 45.10 | 43.25 | 44.68 | 48.21 |
| 2016 | 49.77 | 47.46 | 42.45 | 35.88    | 30.65     | 28.70      | 44.34     | 50.53  | 44.80 | 42.97 | 44.38 | 47.87 |
| 2017 | 52.43 | 49.99 | 44.70 | 37.76    | 32.23     | 30.17      | 46.70     | 53.23  | 47.18 | 45.25 | 46.74 | 50.42 |
| 2018 | 56.37 | 53.74 | 48.04 | 40.57    | 34.61     | 32.40      | 50.20     | 57.24  | 50.72 | 48.64 | 50.25 | 54.21 |
| 2019 | 59.33 | 56.56 | 50.56 | 42.69    | 36.42     | 34.09      | 52.83     | 60.24  | 53.38 | 51.19 | 52.88 | 57.06 |
| 2020 | 61.12 | 58.27 | 52.09 | 43.99    | 37.53     | 35.13      | 54.43     | 62.06  | 55.00 | 52.74 | 54.48 | 58.78 |
| 2021 | 45.68 | 45.33 | 43.84 | 41.81    | 41.88     | 41.92      | 41.71     | 41.75  | 41.93 | 42.40 | 46.42 | 48.15 |
| 2022 | 48.53 | 47.91 | 46.21 | 44.19    | 44.34     | 44.39      | 44.59     | 44.60  | 44.80 | 45.30 | 49.96 | 52.18 |
| 2023 | 52.21 | 51.42 | 49.77 | 47.87    | 47.35     | 47.37      | 47.67     | 47.50  | 47.86 | 48.38 | 53.39 | 56.37 |
| 2024 | 57.37 | 56.32 | 53.87 | 51.91    | 51.22     | 51.30      | 51.68     | 51.60  | 52.00 | 52.66 | 55.82 | 59.22 |
| 2025 | 59.32 | 57.10 | 53.72 | 51.74    | 51.72     | 51.80      | 52.18     | 52.10  | 52.47 | 53.15 | 56.17 | 59.70 |
| 2026 | 59.31 | 58.23 | 54.85 | 52.67    | 52.17     | 52.25      | 52.64     | 52.56  | 52.97 | 53.52 | 57.09 | 60.75 |
| 2027 | 59.07 | 57.34 | 54.20 | 51.31    | 51.27     | 51.34      | 51.71     | 51.61  | 52.02 | 52.60 | 57.50 | 60.76 |
| 2028 | 58.34 | 56.73 | 53.09 | 50.63    | 50.55     | 50.61      | 50.82     | 50.88  | 51.11 | 51.82 | 59.80 | 62.82 |
| 2029 | 64.40 | 63.64 | 59.71 | 56.46    | 56.49     | 56.41      | 56.95     | 57.05  | 57.32 | 57.91 | 63.62 | 67.21 |
| 2030 | 68.16 | 64.69 | 59.64 | 55.39    | 55.13     | 55.15      | 55.66     | 55.76  | 56.02 | 56.87 | 65.61 | 69.38 |
| 2031 | 69.98 | 65.86 | 61.59 | 57.80    | 57.94     | 57.94      | 58.76     | 58.86  | 59.13 | 59.77 | 66.40 | 69.81 |
| 2032 | 71.31 | 67.11 | 62.76 | 58.90    | 59.04     | 59.04      | 59.87     | 59.97  | 60.25 | 60.90 | 67.66 | 71.14 |
| 2033 | 72.77 | 68.49 | 64.06 | 60.12    | 60.26     | 60.26      | 61.11     | 61.21  | 61.50 | 62.16 | 69.05 | 72.60 |
| 2034 | 74.15 | 69.79 | 65.27 | 61.25    | 61.40     | 61.40      | 62.26     | 62.37  | 62.66 | 63.34 | 70.36 | 73.97 |

|            | Effective for service |
|------------|-----------------------|
| n and afte | r September 3, 2014   |

# Portland General Electric Company

Sheet No. 201-9

# **SCHEDULE 201 (Continued)**

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

|      |       |       |       |          | TA        | ABLE 3b    |           |        |       |       |       |       |
|------|-------|-------|-------|----------|-----------|------------|-----------|--------|-------|-------|-------|-------|
|      |       |       |       |          |           | ided Cos   | s         |        |       |       |       |       |
|      |       |       |       | Standard | Fixed P   | rice Optic | on for So | lar QF |       |       |       |       |
|      |       |       |       | 0        | ff-Peak F | orecast (  | \$/MWH)   |        |       |       |       |       |
|      |       |       |       |          |           |            |           |        |       |       |       |       |
| Year | Jan   | Feb   | Mar   | Apr      | May       | Jun        | Jul       | Aug    | Sep   | Oct   | Nov   | Dec   |
| 2014 | 38.13 | 51.38 | 42.88 | 15.23    | 9.88      | 9.38       | 21.78     | 37.03  | 40.53 | 39.63 | 41.38 | 47.38 |
| 2015 | 43.19 | 41.41 | 36.99 | 23.85    | 16.69     | 12.34      | 24.12     | 36.59  | 34.18 | 37.49 | 38.44 | 41.46 |
| 2016 | 43.43 | 41.65 | 37.23 | 24.08    | 16.92     | 12.57      | 24.35     | 36.83  | 34.42 | 37.73 | 38.68 | 41.70 |
| 2017 | 45.56 | 43.69 | 39.04 | 25.21    | 17.67     | 13.09      | 25.49     | 38.61  | 36.08 | 39.56 | 40.56 | 43.74 |
| 2018 | 48.40 | 46.40 | 41.45 | 26.74    | 18.73     | 13.86      | 27.05     | 41.01  | 38.31 | 42.01 | 43.08 | 46.46 |
| 2019 | 51.44 | 49.32 | 44.06 | 28.40    | 19.87     | 14.69      | 28.72     | 43.58  | 40.71 | 44.65 | 45.79 | 49.38 |
| 2020 | 53.92 | 51.66 | 46.15 | 31.05    | 22.57     | 17.61      | 32.64     | 46.96  | 43.50 | 46.77 | 48.01 | 51.78 |
| 2021 | 43.71 | 43.36 | 41.88 | 39.84    | 39.91     | 39.95      | 39.74     | 39.78  | 39.97 | 40.43 | 44.45 | 46.18 |
| 2022 | 46.52 | 45.90 | 44.20 | 42.18    | 42.33     | 42.38      | 42.58     | 42.60  | 42.80 | 43.29 | 47.95 | 50.18 |
| 2023 | 50.16 | 49.37 | 47.72 | 45.82    | 45.30     | 45.32      | 45.62     | 45.44  | 45.81 | 46.33 | 51.34 | 54.32 |
| 2024 | 55.29 | 54.25 | 51.79 | 49.83    | 49.14     | 49.22      | 49.60     | 49.52  | 49.92 | 50.59 | 53.74 | 57.15 |
| 2025 | 57.19 | 54.98 | 51.60 | 49.62    | 49.59     | 49.67      | 50.06     | 49.98  | 50.35 | 51.02 | 54.04 | 57.58 |
| 2026 | 57.15 | 56.06 | 52.68 | 50.51    | 50.00     | 50.08      | 50.48     | 50.40  | 50.80 | 51.36 | 54.93 | 58.58 |
| 2027 | 56.86 | 55.13 | 51.99 | 49.10    | 49.07     | 49.13      | 49.50     | 49.41  | 49.81 | 50.39 | 55.29 | 58.55 |
| 2028 | 56.09 | 54.48 | 50.84 | 48.38    | 48.30     | 48.36      | 48.57     | 48.63  | 48.86 | 49.57 | 57.55 | 60.57 |
| 2029 | 62.10 | 61.34 | 57.41 | 54.16    | 54.20     | 54.12      | 54.66     | 54.76  | 55.02 | 55.62 | 61.33 | 64.92 |
| 2030 | 65.82 | 62.35 | 57.31 | 53.05    | 52.79     | 52.82      | 53.33     | 53.42  | 53.68 | 54.53 | 63.27 | 67.05 |
| 2031 | 67.60 | 63.48 | 59.21 | 55.42    | 55.56     | 55.56      | 56.37     | 56.47  | 56.75 | 57.39 | 64.02 | 67.43 |
| 2032 | 68.90 | 64.70 | 60.35 | 56.48    | 56.63     | 56.63      | 57.46     | 57.56  | 57.84 | 58.49 | 65.24 | 68.73 |
| 2033 | 70.29 | 66.02 | 61.58 | 57.64    | 57.79     | 57.79      | 58.63     | 58.73  | 59.02 | 59.69 | 66.57 | 70.12 |
| 2034 | 71.62 | 67.26 | 62.74 | 58.72    | 58.87     | 58.87      | 59.73     | 59.84  | 60.13 | 60.81 | 67.83 | 71.44 |

Effective for service on and after September 3, 2014

Sheet No. 201-10

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

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 during the Renewable Resource Deficiency Period.

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 off-system, the Seller is paid the wind integration charges in Table 7, in addition to the prices listed in Tables 5a and 5b.

Sellers with <u>PPAs</u> exceeding 15 years will receive pricing equal to the Mid-C Index Price and will retain all <u>Environmental Attributes generated by the facility</u> for all years up to five in excess of the initial 15.

**Deleted:** CONTRACTS

### Deleted:

#### Deleted:

Comment [MD9]: Changes reflect narrowing the definition as discussed in the workshops. Used CREA's language for PAC as template. Definition below.

Deleted: Renewable Energy Certificates

Deleted: and all other Environmental Attributes

Deleted: d

Deleted: starting in 2020

Comment [MD10]: ODDE: "This new paragraph explains the capacity contribution, and mirrors the information provided on Sheet 201-4 for the Standard Fixed Price Option."

Deleted: price

Deleted: d

Deleted: (starting in 2020)

**Deleted:** s

**Deleted:** of \$3.99/MWh (\$2018)

**Deleted:** The Renewable Avoided Cost price for wind QFs reflects a reduction by an integration charge of \$3.99/MWh (\$2018). This reduction

Deleted: the increase noted above

Deleted: d

**Deleted:** starting in 2020

Deleted:

Deleted: QF

Deleted: off system

Deleted: contracts

Comment [MD11]: ODOE: "This clarifies that RECs are not ceded after the Seller stops receiving deficiency period avoided cost prices."

| Effective                        | (           |  |
|----------------------------------|-------------|--|
| on and after <mark>Septem</mark> | for service |  |
|                                  |             |  |
|                                  |             |  |
|                                  |             |  |
|                                  |             |  |
|                                  |             |  |
|                                  |             |  |
|                                  |             |  |
|                                  |             |  |
|                                  |             |  |
|                                  |             |  |
|                                  |             |  |
|                                  |             |  |
|                                  |             |  |
|                                  |             |  |
|                                  |             |  |
|                                  |             |  |
|                                  |             |  |
|                                  |             |  |
|                                  |             |  |
|                                  |             |  |
|                                  |             |  |
|                                  |             |  |
|                                  |             |  |
|                                  |             |  |
|                                  |             |  |
|                                  |             |  |
|                                  |             |  |
|                                  |             |  |
|                                  |             |  |

#### Portland General Electric Company

Sheet No. 201-11

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

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

|      | TABLE 4a   |        |        |        |        |        |        |          |        |        |        |        |
|------|--|--------|--------|--------|--------|--------|--------|----------|--------|--------|--------|--------|
|      | Renewable Avoided Costs  Renewable Fixed Price Option for Base Load QF |        |        |        |        |        |        |          |        |        |        |        |
|      |  |        | Kei    |        |        |        |        | e Load Q | F      |        |        |        |
|      | On-Peak Forecast (\$/MWH)  |        |        |        |        |        |        |          |        |        |        |        |
| Year | Jan  | Feb    | Mar    | Apr    | May    | Jun    | Jul    | Aug      | Sep    | Oct    | Nov    | Dec    |
| 2014 | 48.13  | 56.88  | 48.63  | 30.38  | 30.88  | 31.03  | 45.53  | 54.78    | 50.38  | 46.88  | 48.63  | 54.38  |
| 2014 | 50.13  | 47.79  | 42.72  | 36.07  | 30.88  | 28.80  | 44.64  | 50.90    | 45.10  | 43.25  | 44.68  | 48.21  |
| 2015 | 49.77  | 47.79  | 42.72  | 35.88  | 30.65  | 28.70  | 44.34  | 50.53    | 44.80  | 42.97  | 44.38  | 47.87  |
|      |  |        |        |        |        |        |        |          |        |        |        |        |
| 2017 | 52.43  | 49.99  | 44.70  | 37.76  | 32.23  | 30.17  | 46.70  | 53.23    | 47.18  | 45.25  | 46.74  | 50.42  |
| 2018 | 56.37  | 53.74  | 48.04  | 40.57  | 34.61  | 32.40  | 50.20  | 57.24    | 50.72  | 48.64  | 50.25  | 54.21  |
| 2019 | 59.33  | 56.56  | 50.56  | 42.69  | 36.42  | 34.09  | 52.83  | 60.24    | 53.38  | 51.19  | 52.88  | 57.06  |
| 2020 | 110.96   | 110.94 | 110.27 | 110.67 | 113.50 | 112.71 | 112.43 | 112.33   | 111.19 | 110.33 | 111.07 | 110.17 |
| 2021 | 113.45   | 113.66 | 112.32 | 113.27 | 115.79 | 115.12 | 114.61 | 115.06   | 113.73 | 112.83 | 113.98 | 112.81 |
| 2022 | 115.87   | 115.76 | 114.08 | 115.61 | 118.24 | 117.33 | 116.93 | 116.90   | 115.93 | 115.04 | 116.30 | 115.03 |
| 2023 | 118.52   | 118.14 | 116.39 | 118.22 | 120.38 | 119.73 | 119.43 | 119.10   | 118.36 | 117.33 | 118.85 | 117.87 |
| 2024 | 120.08   | 120.21 | 118.48 | 120.27 | 122.67 | 121.77 | 121.68 | 121.44   | 121.28 | 119.17 | 120.06 | 120.17 |
| 2025 | 122.82   | 123.11 | 121.17 | 123.25 | 126.29 | 125.25 | 124.41 | 124.53   | 123.80 | 121.82 | 122.85 | 122.54 |
| 2026 | 125.83   | 125.53 | 124.24 | 126.17 | 130.11 | 127.03 | 127.04 | 127.39   | 127.14 | 124.44 | 126.06 | 125.22 |
| 2027 | 128.29   | 127.90 | 126.44 | 128.31 | 133.59 | 129.53 | 129.20 | 130.48   | 129.45 | 126.96 | 128.10 | 127.68 |
| 2028 | 130.68   | 129.75 | 127.97 | 130.93 | 135.83 | 131.54 | 132.16 | 132.17   | 131.40 | 129.63 | 130.58 | 129.89 |
| 2029 | 133.40   | 133.19 | 130.84 | 133.83 | 142.67 | 135.11 | 135.17 | 135.18   | 135.22 | 132.25 | 132.97 | 132.87 |
| 2030 | 136.15   | 135.90 | 133.88 | 136.43 | 146.30 | 139.26 | 137.36 | 137.25   | 138.47 | 134.83 | 135.33 | 135.37 |
| 2031 | 138.67   | 138.23 | 136.79 | 139.75 | 149.10 | 143.07 | 139.93 | 140.76   | 140.94 | 137.57 | 138.55 | 138.16 |
| 2032 | 140.80   | 140.35 | 138.89 | 141.90 | 151.40 | 145.27 | 142.07 | 142.92   | 143.11 | 139.68 | 140.67 | 140.28 |
| 2033 | 144.07   | 143.61 | 142.12 | 145.19 | 154.90 | 148.64 | 145.37 | 146.23   | 146.43 | 142.92 | 143.94 | 143.54 |
| 2034 | 147.01   | 146.54 | 145.02 | 148.15 | 158.05 | 151.67 | 148.34 | 149.22   | 149.42 | 145.84 | 146.88 | 146.47 |

Effective for service

on and after September 3, 2014

#### Portland General Electric Company

Sheet No. 201-12

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

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

|      | TABLE 4b                                      |       |       |       |             |            |            |        |       |       |       |       |
|------|---|-------|-------|-------|-------------|------------|------------|--------|-------|-------|-------|-------|
|      | Renewable Avoided Costs                       |       |       |       |             |            |            |        |       |       |       |       |
|      | Renewable Fixed Price Option for Base Load QF |       |       |       |             |            |            |        |       |       |       |       |
|      |   |       | 1101  |       | ff-Peak F   |            |            | Load Q |       |       |       |       |
|      |   |       |       |       | II I OUIL I | or oodot ( | Ψ, ιπιττιή |        |       |       |       |       |
| Year | Jan   | Feb   | Mar   | Apr   | May         | Jun        | Jul        | Aug    | Sep   | Oct   | Nov   | Dec   |
| 2014 | 38.13   | 51.38 | 42.88 | 15.23 | 9.88        | 9.38       | 21.78      | 37.03  | 40.53 | 39.63 | 41.38 | 47.38 |
| 2015 | 43.19   | 41.41 | 36.99 | 23.85 | 16.69       | 12.34      | 24.12      | 36.59  | 34.18 | 37.49 | 38.44 | 41.46 |
| 2016 | 43.43   | 41.65 | 37.23 | 24.08 | 16.92       | 12.57      | 24.35      | 36.83  | 34.42 | 37.73 | 38.68 | 41.70 |
| 2017 | 45.56   | 43.69 | 39.04 | 25.21 | 17.67       | 13.09      | 25.49      | 38.61  | 36.08 | 39.56 | 40.56 | 43.74 |
| 2018 | 48.40   | 46.40 | 41.45 | 26.74 | 18.73       | 13.86      | 27.05      | 41.01  | 38.31 | 42.01 | 43.08 | 46.46 |
| 2019 | 51.44   | 49.32 | 44.06 | 28.40 | 19.87       | 14.69      | 28.72      | 43.58  | 40.71 | 44.65 | 45.79 | 49.38 |
| 2020 | 59.57   | 59.79 | 61.16 | 60.06 | 57.06       | 57.27      | 57.53      | 58.56  | 59.35 | 60.44 | 60.26 | 60.65 |
| 2021 | 61.57   | 60.88 | 62.38 | 61.17 | 58.60       | 58.64      | 59.22      | 59.52  | 60.55 | 62.35 | 60.20 | 61.71 |
| 2022 | 62.46   | 62.17 | 64.15 | 62.14 | 59.45       | 59.78      | 61.11      | 60.25  | 61.70 | 63.51 | 61.19 | 62.84 |
| 2023 | 63.29   | 63.33 | 65.41 | 63.80 | 59.88       | 60.91      | 62.14      | 61.65  | 62.79 | 64.80 | 62.12 | 64.11 |
| 2024 | 63.85   | 63.91 | 66.70 | 63.71 | 60.26       | 62.68      | 61.65      | 61.97  | 63.30 | 65.11 | 64.00 | 64.56 |
| 2025 | 65.15   | 65.14 | 68.08 | 64.68 | 60.34       | 63.09      | 62.95      | 63.83  | 63.92 | 66.54 | 66.09 | 65.54 |
| 2026 | 65.53   | 66.33 | 68.47 | 65.19 | 61.03       | 64.01      | 63.86      | 64.48  | 63.86 | 67.45 | 66.33 | 66.37 |
| 2027 | 67.71   | 67.69 | 69.31 | 66.85 | 60.98       | 65.19      | 65.48      | 64.93  | 65.29 | 69.40 | 67.14 | 67.59 |
| 2028 | 68.66   | 69.20 | 71.42 | 68.49 | 60.54       | 66.63      | 66.77      | 65.60  | 66.82 | 69.99 | 67.94 | 69.66 |
| 2029 | 69.19   | 69.91 | 72.73 | 69.82 | 56.36       | 66.99      | 67.94      | 66.73  | 68.08 | 70.78 | 69.92 | 70.87 |
| 2030 | 70.29   | 71.09 | 74.22 | 70.05 | 56.23       | 67.61      | 68.62      | 68.76  | 68.60 | 72.12 | 71.56 | 72.33 |
| 2031 | 71.80   | 72.85 | 75.23 | 70.47 | 57.37       | 67.52      | 70.07      | 70.21  | 68.84 | 73.33 | 73.18 | 72.51 |
| 2032 | 72.99   | 74.06 | 76.48 | 71.64 | 58.32       | 68.64      | 71.23      | 71.37  | 69.98 | 74.54 | 74.39 | 73.71 |
| 2033 | 74.59   | 75.68 | 78.16 | 73.20 | 59.59       | 70.14      | 72.79      | 72.94  | 71.51 | 76.17 | 76.02 | 75.32 |
| 2034 | 76.04   | 77.15 | 79.67 | 74.62 | 60.75       | 71.50      | 74.20      | 74.35  | 72.90 | 77.65 | 77.49 | 76.79 |

Effective for service on and after September 3, 2014

#### Portland General Electric Company

Sheet No. 201-13

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

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

|      | TABLE 5a  |       |       |       |            |            |            |         |       |       |       |       |
|------|---|-------|-------|-------|------------|------------|------------|---------|-------|-------|-------|-------|
|      | Renewable Avoided Costs   |       |       |       |            |            |            |         |       |       |       |       |
|      | Renewable Avoided Costs  Renewable Fixed Price Option for Wind QF |       |       |       |            |            |            |         |       |       |       |       |
|      |   |       |       |       | n-Peak F   |            |            | iiiu wi |       |       |       |       |
|      |   |       |       |       | II I Can I | or coast ( | Ψ/1010011/ |         |       |       |       |       |
| Year | Jan   | Feb   | Mar   | Apr   | May        | Jun        | Jul        | Aug     | Sep   | Oct   | Nov   | Dec   |
| 2014 | 44.43   | 53.18 | 44.93 | 26.68 | 27.18      | 27.33      | 41.83      | 51.08   | 46.68 | 43.18 | 44.93 | 50.68 |
| 2015 | 46.36   | 44.02 | 38.95 | 32.30 | 27.00      | 25.03      | 40.87      | 47.13   | 41.33 | 39.48 | 40.91 | 44.44 |
| 2016 | 45.93   | 43.62 | 38.61 | 32.04 | 26.81      | 24.86      | 40.50      | 46.69   | 40.96 | 39.13 | 40.54 | 44.03 |
| 2017 | 48.52   | 46.08 | 40.79 | 33.85 | 28.32      | 26.26      | 42.79      | 49.32   | 43.27 | 41.34 | 42.83 | 46.51 |
| 2018 | 52.38   | 49.75 | 44.05 | 36.58 | 30.62      | 28.41      | 46.21      | 53.25   | 46.73 | 44.65 | 46.26 | 50.22 |
| 2019 | 55.26   | 52.49 | 46.49 | 38.62 | 32.35      | 30.02      | 48.76      | 56.17   | 49.31 | 47.12 | 48.81 | 52.99 |
| 2020 | 70.23   | 70.21 | 69.54 | 69.95 | 72.77      | 71.98      | 71.70      | 71.60   | 70.46 | 69.60 | 70.34 | 69.44 |
| 2021 | 71.82   | 72.02 | 70.69 | 71.64 | 74.15      | 73.48      | 72.97      | 73.43   | 72.09 | 71.20 | 72.35 | 71.18 |
| 2022 | 73.43   | 73.32 | 71.64 | 73.18 | 75.80      | 74.90      | 74.50      | 74.47   | 73.49 | 72.61 | 73.87 | 72.59 |
| 2023 | 75.14   | 74.76 | 73.01 | 74.84 | 77.01      | 76.36      | 76.05      | 75.73   | 74.98 | 73.96 | 75.47 | 74.50 |
| 2024 | 76.13   | 76.26 | 74.53 | 76.31 | 78.72      | 77.82      | 77.72      | 77.49   | 77.33 | 75.22 | 76.10 | 76.21 |
| 2025 | 77.89   | 78.17 | 76.24 | 78.31 | 81.36      | 80.32      | 79.47      | 79.59   | 78.87 | 76.88 | 77.91 | 77.60 |
| 2026 | 80.02   | 79.73 | 78.44 | 80.37 | 84.30      | 81.23      | 81.23      | 81.59   | 81.34 | 78.64 | 80.25 | 79.42 |
| 2027 | 81.60   | 81.21 | 79.75 | 81.62 | 86.90      | 82.84      | 82.51      | 83.79   | 82.77 | 80.27 | 81.41 | 80.99 |
| 2028 | 83.09   | 82.17 | 80.38 | 83.34 | 88.24      | 83.95      | 84.57      | 84.59   | 83.81 | 82.04 | 82.99 | 82.30 |
| 2029 | 84.89   | 84.68 | 82.34 | 85.32 | 94.16      | 86.60      | 86.67      | 86.67   | 86.71 | 83.74 | 84.46 | 84.36 |
| 2030 | 86.71   | 86.45 | 84.43 | 86.99 | 96.86      | 89.81      | 87.91      | 87.81   | 89.03 | 85.38 | 85.88 | 85.92 |
| 2031 | 88.27   | 87.83 | 86.39 | 89.35 | 98.69      | 92.67      | 89.52      | 90.35   | 90.54 | 87.17 | 88.14 | 87.76 |
| 2032 | 89.73   | 89.28 | 87.82 | 90.83 | 100.32     | 94.20      | 91.00      | 91.85   | 92.04 | 88.61 | 89.60 | 89.21 |
| 2033 | 91.71   | 91.25 | 89.76 | 92.83 | 102.54     | 96.28      | 93.01      | 93.88   | 94.07 | 90.56 | 91.58 | 91.18 |
| 2034 | 93.48   | 93.01 | 91.49 | 94.62 | 104.52     | 98.14      | 94.81      | 95.69   | 95.89 | 92.31 | 93.35 | 92.94 |

Effective for service

on and after September 3, 2014

#### Portland General Electric Company

Sheet No. 201-14

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

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

|      |   |       |       |       | т,         | ADI E EL  |               |         |       |       |       |       |
|------|---|-------|-------|-------|------------|-----------|---------------|---------|-------|-------|-------|-------|
|      | TABLE 5b  Renewable Avoided Costs                                 |       |       |       |            |           |               |         |       |       |       |       |
|      | Renewable Avoided Costs  Renewable Fixed Price Option for Wind QF |       |       |       |            |           |               |         |       |       |       |       |
|      |   |       | г     |       | ff-Peak F  |           |               | iliu Qr |       |       |       |       |
|      |   |       |       |       | II-I Cak I | orecast ( | Ψ/1414 4 1 1/ |         |       |       |       |       |
| Year | Jan   | Feb   | Mar   | Apr   | May        | Jun       | Jul           | Aug     | Sep   | Oct   | Nov   | Dec   |
| 2014 | 34.43   | 47.68 | 39.18 | 11.53 | 6.18       | 5.68      | 18.08         | 33.33   | 36.83 | 35.93 | 37.68 | 43.68 |
| 2015 | 39.42   | 37.64 | 33.22 | 20.08 | 12.92      | 8.57      | 20.35         | 32.82   | 30.41 | 33.72 | 34.67 | 37.69 |
| 2016 | 39.59   | 37.81 | 33.39 | 20.24 | 13.08      | 8.73      | 20.51         | 32.99   | 30.58 | 33.89 | 34.84 | 37.86 |
| 2017 | 41.65   | 39.78 | 35.13 | 21.30 | 13.76      | 9.18      | 21.58         | 34.70   | 32.17 | 35.65 | 36.65 | 39.83 |
| 2018 | 44.41   | 42.41 | 37.46 | 22.75 | 14.74      | 9.87      | 23.06         | 37.02   | 34.32 | 38.02 | 39.09 | 42.47 |
| 2019 | 47.37   | 45.25 | 39.99 | 24.33 | 15.80      | 10.62     | 24.65         | 39.51   | 36.64 | 40.58 | 41.72 | 45.31 |
| 2020 | 55.42   | 55.64 | 57.01 | 55.91 | 52.91      | 53.12     | 53.38         | 54.41   | 55.20 | 56.29 | 56.11 | 56.50 |
| 2021 | 57.34   | 56.65 | 58.15 | 56.94 | 54.37      | 54.41     | 54.99         | 55.29   | 56.32 | 58.12 | 55.97 | 57.48 |
| 2022 | 58.15   | 57.86 | 59.84 | 57.83 | 55.14      | 55.47     | 56.80         | 55.94   | 57.39 | 59.20 | 56.88 | 58.53 |
| 2023 | 58.90   | 58.94 | 61.02 | 59.41 | 55.49      | 56.52     | 57.75         | 57.26   | 58.40 | 60.41 | 57.73 | 59.72 |
| 2024 | 59.38   | 59.44 | 62.23 | 59.24 | 55.79      | 58.21     | 57.18         | 57.50   | 58.83 | 60.64 | 59.53 | 60.09 |
| 2025 | 60.59   | 60.58 | 63.52 | 60.12 | 55.78      | 58.53     | 58.39         | 59.27   | 59.36 | 61.98 | 61.53 | 60.98 |
| 2026 | 60.88   | 61.68 | 63.82 | 60.54 | 56.38      | 59.36     | 59.21         | 59.83   | 59.21 | 62.80 | 61.68 | 61.72 |
| 2027 | 62.97   | 62.95 | 64.57 | 62.11 | 56.24      | 60.45     | 60.74         | 60.19   | 60.55 | 64.66 | 62.40 | 62.85 |
| 2028 | 63.83   | 64.37 | 66.59 | 63.66 | 55.71      | 61.80     | 61.94         | 60.77   | 61.99 | 65.16 | 63.11 | 64.83 |
| 2029 | 64.27   | 64.99 | 67.81 | 64.90 | 51.44      | 62.07     | 63.02         | 61.81   | 63.16 | 65.86 | 65.00 | 65.95 |
| 2030 | 65.27   | 66.07 | 69.20 | 65.03 | 51.21      | 62.59     | 63.60         | 63.74   | 63.58 | 67.10 | 66.54 | 67.31 |
| 2031 | 66.68   | 67.73 | 70.11 | 65.35 | 52.25      | 62.40     | 64.95         | 65.09   | 63.72 | 68.21 | 68.06 | 67.39 |
| 2032 | 67.78   | 68.85 | 71.27 | 66.43 | 53.11      | 63.43     | 66.02         | 66.16   | 64.77 | 69.33 | 69.18 | 68.50 |
| 2033 | 69.28   | 70.37 | 72.85 | 67.89 | 54.28      | 64.83     | 67.48         | 67.63   | 66.20 | 70.86 | 70.71 | 70.01 |
| 2034 | 70.62   | 71.73 | 74.25 | 69.20 | 55.33      | 66.08     | 68.78         | 68.93   | 67.48 | 72.23 | 72.07 | 71.37 |

Effective for service

on and after September 3, 2014

#### Portland General Electric Company

Sheet No. 201-15

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

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

|      | TABLE 6a                |       |       |         |            |           |           |         |        |       |       |       |
|------|-------------------------|-------|-------|---------|------------|-----------|-----------|---------|--------|-------|-------|-------|
|      | Renewable Avoided Costs |       |       |         |            |           |           |         |        |       |       |       |
|      |                         |       | F     | Renewab | le Fixed F | Price 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   |
| 2014 | 48.13                   | 56.88 | 48.63 | 30.38   | 30.88      | 31.03     | 45.53     | 54.78   | 50.38  | 46.88 | 48.63 | 54.38 |
| 2015 | 50.13                   | 47.79 | 42.72 | 36.07   | 30.77      | 28.80     | 44.64     | 50.90   | 45.10  | 43.25 | 44.68 | 48.21 |
| 2016 | 49.77                   | 47.46 | 42.45 | 35.88   | 30.65      | 28.70     | 44.34     | 50.53   | 44.80  | 42.97 | 44.38 | 47.87 |
| 2017 | 52.43                   | 49.99 | 44.70 | 37.76   | 32.23      | 30.17     | 46.70     | 53.23   | 47.18  | 45.25 | 46.74 | 50.42 |
| 2018 | 56.37                   | 53.74 | 48.04 | 40.57   | 34.61      | 32.40     | 50.20     | 57.24   | 50.72  | 48.64 | 50.25 | 54.21 |
| 2019 | 59.33                   | 56.56 | 50.56 | 42.69   | 36.42      | 34.09     | 52.83     | 60.24   | 53.38  | 51.19 | 52.88 | 57.06 |
| 2020 | 74.38                   | 74.36 | 73.69 | 74.10   | 76.92      | 76.13     | 75.85     | 75.75   | 74.61  | 73.75 | 74.49 | 73.59 |
| 2021 | 76.05                   | 76.25 | 74.92 | 75.87   | 78.38      | 77.71     | 77.20     | 77.66   | 76.32  | 75.43 | 76.58 | 75.41 |
| 2022 | 77.74                   | 77.63 | 75.95 | 77.49   | 80.11      | 79.21     | 78.81     | 78.78   | 77.80  | 76.92 | 78.18 | 76.90 |
| 2023 | 79.53                   | 79.15 | 77.40 | 79.23   | 81.40      | 80.75     | 80.44     | 80.12   | 79.37  | 78.35 | 79.86 | 78.89 |
| 2024 | 80.60                   | 80.73 | 79.00 | 80.78   | 83.19      | 82.29     | 82.19     | 81.96   | 81.80  | 79.69 | 80.57 | 80.68 |
| 2025 | 82.45                   | 82.73 | 80.80 | 82.87   | 85.92      | 84.88     | 84.03     | 84.15   | 83.43  | 81.44 | 82.47 | 82.16 |
| 2026 | 84.67                   | 84.38 | 83.09 | 85.02   | 88.95      | 85.88     | 85.88     | 86.24   | 85.99  | 83.29 | 84.90 | 84.07 |
| 2027 | 86.34                   | 85.95 | 84.49 | 86.36   | 91.64      | 87.58     | 87.25     | 88.53   | 87.51  | 85.01 | 86.15 | 85.73 |
| 2028 | 87.92                   | 87.00 | 85.21 | 88.17   | 93.07      | 88.78     | 89.40     | 89.42   | 88.64  | 86.87 | 87.82 | 87.13 |
| 2029 | 89.81                   | 89.60 | 87.26 | 90.24   | 99.08      | 91.52     | 91.59     | 91.59   | 91.63  | 88.66 | 89.38 | 89.28 |
| 2030 | 91.73                   | 91.47 | 89.45 | 92.01   | 101.88     | 94.83     | 92.93     | 92.83   | 94.05  | 90.40 | 90.90 | 90.94 |
| 2031 | 93.39                   | 92.95 | 91.51 | 94.47   | 103.81     | 97.79     | 94.64     | 95.47   | 95.66  | 92.29 | 93.26 | 92.88 |
| 2032 | 94.94                   | 94.49 | 93.03 | 96.04   | 105.53     | 99.41     | 96.21     | 97.06   | 97.25  | 93.82 | 94.81 | 94.42 |
| 2033 | 97.02                   | 96.56 | 95.07 | 98.14   | 107.85     | 101.59    | 98.32     | 99.19   | 99.38  | 95.87 | 96.89 | 96.49 |
| 2034 | 98.90                   | 98.43 | 96.91 | 100.04  | 109.94     | 103.56    | 100.23    | 101.11  | 101.31 | 97.73 | 98.77 | 98.36 |

Effective for service

on and after September 3, 2014

#### Portland General Electric Company

Sheet No. 201-16

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

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

TABLE 6b Renewable Avoided Costs Renewable Fixed Price Option for Solar QF Off-Peak Forecast (\$/MWH) Year Feb Mar May Oct Apr Jun Aug Sep 2014 38.13 51.38 42.88 15 23 9 88 9.38 21 78 37 03 40.53 39 63 41 38 47.38 2015 43.19 41.41 36.99 23.85 16.69 12.34 24.12 36.59 34.18 37.49 38.44 41.46 2016 43.43 41.65 37.23 24.08 16.92 12.57 24.35 36.83 34.42 37.73 38.68 41.70 2017 45.56 43.69 39.04 25.21 17.67 13.09 25.49 38.61 36.08 39.56 40.56 43.74 41.45 27.05 41.01 2018 48.40 46.40 26.74 18.73 13.86 38.31 42.01 43.08 46.46 2019 51.44 49.32 44.06 28.40 19.87 14.69 28.72 43.58 40.71 44.65 45.79 49.38 2020 59.57 59.79 61.16 60.06 57.06 57.27 57.53 58.56 59.35 60.44 60.26 60.65 2021 61.57 60.88 62.38 61.17 58.60 58.64 59.22 59.52 60.55 62.35 60.20 61.71 62.46 62.17 64.15 62.14 59.45 59.78 61.11 60.25 61.70 63.51 61.19 62.84 2022 2023 63.29 63.33 65.41 63.80 59.88 60.91 62.14 61.65 62.79 64.80 62.12 64.11 63.85 61.65 61.97 2024 63.91 66.70 63.71 60.26 62.68 63.30 65.11 64.00 64.56 2025 65.15 65.14 68.08 60.34 62.95 63.83 66.54 66.09 65.54 64.68 63.09 63.92 2026 65.53 66.33 68.47 65.19 61.03 64.01 63.86 64.48 63.86 67.45 66.33 66.37 66.85 60.98 67.71 67.69 69.31 65.19 65.48 64.93 65.29 69.40 67.14 67.59 2027 2028 68.66 69.20 71.42 68.49 60.54 66.63 66.77 65.60 66.82 69.99 67.94 69.66 72 73 70.87 2029 69 19 69 91 69 82 56 36 66 99 67 94 66.73 68 08 70 78 69 92 2030 70.29 71.09 74.22 70.05 56.23 67.61 68.62 68.76 68.60 72.12 71.56 72.33 71.80 72.85 75.23 70.47 57.37 70.07 70.21 72.51 2031 67.52 68.84 73.33 73.18 2032 72.99 74.06 76.48 71.64 58.32 68.64 71.23 71.37 69.98 74.54 74.39 73.71 2033 74.59 75.68 78.16 73.20 59.59 70.14 72.79 72.94 71.51 76.17 76.02 75.32 2034 76.04 77.15 79.67 74.62 60.75 71.50 74.20 74.35 72.90 77.65 77.49 76.79

Effective for service on and after <u>September 3, 2014</u>

# Portland General Electric Company

Sheet No. 201-17

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

#### WIND INTEGRATION

| TAB              | LE 7 |  |  |  |  |
|------------------|------|--|--|--|--|
| Wind Integration |      |  |  |  |  |
| Year             | Cost |  |  |  |  |
| 2014             | 3.70 |  |  |  |  |
| 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 |  |  |  |  |

Effective for service

on and after <u>September 3, 2014</u>

#### Portland General Electric Company

#### Sheet No. 201-18

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

#### 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:

- 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.
- 2) 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.

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.

Comment [MD12]: REC took issue when this was originally stricken. PGE proposes striking this as a part of Phase 2.

|            | Effective for service |
|------------|-----------------------|
| n and afte | er September 3, 2014  |

#### **Portland General Electric Company**

Sheet No. 201-19

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

# 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 <u>pricing under</u> 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 <u>Same Person(s)</u> or Affiliated Person(s), and located at the Same Site, does not exceed 10 MW.

#### 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 <u>pricing under</u> 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 <u>pricing under</u> 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

Comment [MD13]: Clarifies potential confusion around "Standard Fixed Price Option" and "Standard Prices in the Standard PPA"

Deleted: STANDARD RATES¶

Deleted: standard rates and

\_\_\_\_

**Deleted:** s

Deleted: s

**Deleted:** p

Deleted: a

**Deleted:** p

Deleted: s

Deleted: p

Deleted: a

Comment[MD14]: Same as PAC's
definition from their settlement

Deleted: s

Deleted: p

Deleted: a

**Deleted:** p

Deleted: standard rates and

Deleted: standard rates and

**Deleted:** s

Deleted: standard rates and

Deleted: standard rates and

Comment[MD15]: Clarifies that Mid-C Index price is the average and NOT the high or low. 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 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.

| Deleted: |  |
|----------|--|
| Deleted: |  |
| Deleted: |  |

Effective for service on and after <u>September 3, 2014</u>

#### Portland General Electric Company

Sheet No. 201-20

#### **SCHEDULE 201 (Concluded)**

OTHER DEFINITIONS (Continued)

#### **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.

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

As used in this schedule, Environmental Attributes shall mean any and all current or future credits, benefits, emissions reductions, environmental air quality credits, emissions reduction credits, offsets and allowances, howsoever entitled, resulting from the avoidance of the emission of any gas, chemical or other substance attributable to the Facility during the Term, or otherwise attributable to the generation, purchase, sale or use of energy from or by the Facility during the Term, including without limitation any of the same arising out of legislation or regulation concerned with oxides of nitrogen, sulfur or carbon, with particulate matter, soot or mercury, or implementing the United Nations Framework Convention on Climate Change (the "UNFCCC") or the Kyoto Protocol to the UNFCCC or crediting "early action" emissions reduction, or laws or regulations involving or administered by the Clean Air Markets Division of the Environmental Protection Agency or successor administrator, or any State or federal entity given jurisdiction over a program involving transferability of Environmental Attributes, including the Oregon Renewable Portfolio Standards, and any Green Tag Reporting Rights to such Environmental Attributes.

#### **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.

#### <u>Definition of Renewable Resource Deficiency Period</u>

This is the period from 2020 through 2034.

#### **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 <a href="mailto:pricing under">pricing under</a> the Standard PPA. Disputes may be presented to the Commission for resolution.

Deleted: standard rates and

#### **SPECIAL CONDITIONS**

- Delivery of energy by Seller will be at a voltage, phase, frequency, and power factor as specified by the Company.
- 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.
- 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.

Effective for service on and after September 3, 2014

Deleted:

| STANDARD RENEWABLE IN-SYSTEM NON-VARIABLE POWER PURCHASE   |
|--|
| AGREEMENT  |
| THIS AGREEMENT, entered into this day, 20, is between ("Seller") and Portland General Electric Company ("PGE") (hereinafter each a "Party" or collectively, "Parties").  |
| RECITALS   |
| Seller intends to construct, own, operate and maintain a facility for the generation of electric power located in County, with a Nameplate Capacity Rating of 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 1.22, below, from the Facility in accordance with the terms and conditions of this Agreement.                                   |
| <u>AGREEMENT</u>   |
| NOW, THEREFORE, the Parties mutually agree as follows:   |
| SECTION 1: DEFINITIONS   |

Deleted: the

Comment [A1]: Cleanup to address having different minimum monthly net output requirements based on seasonality, etc. set by QF.

**Deleted:** multiplied by twelve (12)

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

"Annual Minimum Net Output" means the sum of each Monthly Minimum

"As-built Supplement" means the supplement to Exhibit B provided by

"Billing Period" means a period between PGE's readings of its power

meanings:

Net Output in a Contract Year.

Facility, describing the Facility as actually built.

the custody of a third party for delivery to a grantee only after the fulfillment of the conditions specified.

purchase billing meter at the Facility in the normal course of PGE's business. Such

Seller in accordance with Section 4.4 following completion of construction of the

- 1.5. "Commercial Operation Date" means the date that the Facility is deemed by PGE to be fully operational and reliable. PGE may, at its discretion, require, among other things, that all of the following events have occurred:
- 1.5.1. (facilities with nameplate under 500 kW exempt from following requirement) PGE has received a certificate addressed to PGE from a Licensed Professional Engineer ("LPE") acceptable to PGE in its reasonable judgment stating that the Facility is able to generate electric power reliably in 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);
- 1.5.2. (facilities with nameplate under 500 kW exempt from following requirement) Start-Up Testing of the Facility has been completed in accordance with Section 1.32:
- 1.5.3. (facilities with nameplate under 500 kW exempt from following requirement) After PGE has received notice of completion of Start-Up Testing, PGE has received a certificate addressed to PGE from an LPE stating that the Facility has operated for testing purposes under this Agreement 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;
- 1.5.4. (facilities with nameplate under 500 kW exempt from following requirement) PGE has received a certificate addressed to PGE from an LPE stating that in accordance with the Generation Interconnection Agreement, all required interconnection facilities have been constructed, all required interconnection tests have been completed; and the Facility is physically interconnected with PGE's electric system.
- 1.5.5. (facilities with nameplate under 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;
- 1.6. "Contract Price" means the applicable price, including on-peak and off-peak prices, as specified in the Schedule.
  - 1.7. "Contract Month" means each calendar month of each Contract Year.
- 1.8. "Contract Year" means each twelve (12) month <u>period commencing upon</u> 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.

Deleted: 28

Deleted: calendar year

**Deleted:** beginning January 1 and ending December 31, or portion thereof commencing upon the date set forth in Section 2.1.1

**Comment [A2]:** Changes to be consistent with other agreements. Ties requirements for minimum delivery to commercial operation, rather than start of the contract.

- 1.9. "Effective Date" has the meaning set forth in Section 2.1.
- 1.10. "Environmental Attributes" means any and all current or future credits, benefits, emissions reductions, environmental air quality credits, emissions reduction credits, offsets and allowances, howsoever entitled, resulting from the avoidance of the emission of any gas, chemical or other substance attributable to the Facility during the Term, or otherwise attributable to the generation, purchase, sale or use of energy from or by the Facility during the Term, including without limitation any of the same arising out of legislation or regulation concerned with oxides of nitrogen, sulfur or carbon, with particulate matter, soot or mercury, or implementing the United Nations Framework Convention on Climate Change (the "UNFCCC") or the Kyoto Protocol to the UNFCCC or crediting "early action" emissions reduction, or laws or regulations involving or administered by the Clean Air Markets Division of the Environmental Protection Agency or successor administrator, or any State or federal entity given jurisdiction over a program involving transferability of Environmental Attributes, including the Oregon Renewable Portfolio Standards, and any Green Tag Reporting Rights to such Environmental Attributes.
  - 1.11. "Facility" has the meaning set forth in the Recitals.
- 1.12. "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 at the 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).
- 1.13. "Generation Interconnection Agreement" means the generation interconnection agreement to be entered into separately between Seller and PGE, providing for the construction, operation, and maintenance of interconnection facilities required to accommodate deliveries of Seller's Net Output.
- 1.14. "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.
- 1.15. "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

Deleted: <#>¶

appropriate engineering discipline for the required certification being made and be acceptable to PGE in its reasonable judgment.

- 1.16. "Lost Energy Value" means for a Contract Month: zero, unless the Contract Month's Net Output is less than the Monthly Minimum Net Output and the Contract Month's mean Mid-C Index Price is greater than the Contract Price, in which case Lost Energy Value equals: (Monthly Minimum Net Output Net Output for the Contract Month) X (the lower of: the mean Contract Price; or the mean Mid-C Index Price mean Contract Price).
- 1.17. "Mid-C Index Price" means the Day Ahead Intercontinental Exchange ("ICE") for the bilateral OTC market for energy at the Mid-C Physical for <a href="Average">Average</a> On Peak Power and <a href="Average">Average</a> 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.
- 1.18. "Mid-Columbia" means an area which includes points at any of the switchyards associated with the following four hydro projects: Rocky Reach, Rock Island, Wanapum and Priest Rapids. These switchyards include: Rocky Reach, Rock Island, Wanapum, McKenzie, Valhalla, Columbia, Midway and Vantage. Mid-Columbia shall also include points in the "Northwest Hub," as defined by Bonneville Power Administration. For scheduling purposes, the footprint described above shall dictate the delivery point name for the then current Western Electricity Coordinating Council ("WECC") scheduling protocols. If the footprint changes during the Term, a mutually agreed upon footprint that describes an area containing the most liquidity for trading purposes shall apply.
- 1.19. "Monthly Minimum Net Output" shall have the meaning provided in Section 4.2 of this Agreement.
- 1.20. "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.
- 1.21. "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.
- 1.22. "Net Output" means all energy expressed in kWhs produced by the Facility, less station and other onsite use and less transformation and transmission losses.
  - 1.23. "Off-Peak Hours" has the meaning provided in the Schedule.
  - 1.24. "On-Peak Hours" has the meaning provided in the Schedule.

**Comment [A3]:** Providing the link for easy reference. We also added "average" as discussed in the last workshop.

**Deleted:** Net Output does not include any environmental attributes imbalance power, or power from an integrating entity

- 1.25. "Point of Delivery" means the high side of the generation step up transformer(s) located at the point of interconnection between the Facility and PGE's distribution or transmission system, as specified in the Generation Interconnection Agreement.
- 1.26. "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.
- 1.27. "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.
- 1.28. "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.
- 1.29. "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.
- 1.30. "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.
- 1.31. "Senior Lien" means a prior lien which has precedence as to the property under the lien over another lien or encumbrance.

Comment [A4]: New definition to reflect that utility only gets attributes related to RPS during contract years as specified in schedule. Used Greg's language for Pacificorp as template

Formatted: No bullets or numbering

**Comment [A5]:** We think including this supremacy clause makes sense and would like to add it as a Phase II issue if not included now. It is not always possible to anticipate conflicts.

**Deleted:** In the event of a conflict between this Agreement and the Schedule, this Agreement shall apply.

- 1.32. "Start-Up Testing" means the completion of applicable required factory and start-up tests as set forth in Exhibit D.
- 1.33. "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.
- 1.34. "Term" shall mean the period beginning on the Effective Date and ending on the Termination Date.
- 1.35. "Test Period" shall mean a period of sixty (60) days or a commercially reasonable period determined by the Seller.
- 1.36. References to Recitals, Sections, and Exhibits are to be the recitals, sections and exhibits of this Agreement.

#### SECTION 2: TERM; COMMERCIAL OPERATION DATE

- 2.1 This Agreement shall become effective upon execution by both Parties ("Effective Date").
- 2.2 Time is of the essence of this Agreement, and Seller's ability to meet certain requirements prior to the Commercial Operation Date and to complete all requirements to establish the Commercial Operation Date is critically important. Therefore.
- 2.2.1 By \_\_\_\_\_ [date to be determined by the Seller] Seller shall begin initial deliveries of Net Output; and
- 2.2.2 By \_\_\_\_\_ [date to be determined by the Seller] Seller shall have completed all requirements under Section 1.4 and shall have established the Commercial Operation Date.
- 2.2.3 In the event Seller is unable to meet the requirements of Sections 2.2.1 and 2.2.2, Seller shall pay damages equal to the Lost Energy Value. In calculating the Lost Energy Value for use in this section, the Monthly Minimum Net Output shall be prorated if necessary when applied to the period of time between the Commercial Operation Date and the date specified in 2.2.1.
- 2.3 This Agreement shall terminate on \_\_\_\_\_\_, \_\_\_\_ [date to be chosen by Seller], or the date the Agreement is terminated in accordance with Section 9 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 duly organized under the laws of  |
|---|
| 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 kW.   |
| 3.1.9 Seller estimates that the average annual Net Output to be delivered by the Facility to PGE is kilowatt-hours ("kWh"), which amount PGE will include in its resource planning.   |

C-1

3.1.10 Seller will deliver from the Facility to PGE at the Point of Delivery Net Output not to exceed a maximum of \_\_\_\_\_ kWh of Net Output during each Contract Year ("Maximum Net Output").

- 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 renewable energy credits 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.

#### SECTION 4: DELIVERY OF POWER, PRICE AND RPS ATTRIBUTES

- 4.1 Commencing on the Effective Date and continuing through the Term of this Agreement, Seller shall sell to PGE the entire Net Output delivered from the Facility at the Point of Delivery. PGE shall pay Seller the Contract Price for all delivered Net Output.
- 4.2 Seller shall deliver to PGE from the Facility for each Contract Year Net Output equal to or greater than the Monthly Minimum Net Output (either (a) if Seller does not select the Alternative Minimum Amount as defined in Exhibit A of this Agreement, seventy-five percent (75%) of its average annual Net Output divided by twelve (12) or (b) if selected by Seller, the Alternative Minimum Amount designated for each month), provided that such Monthly Minimum Net Output shall be reduced on a pro-rata basis for any periods during a Contract Month(s) that the Facility was prevented from generating electricity for reasons of Force Majeure.
- 4.3 Seller agrees that if Seller does not deliver the Monthly Minimum Net Output each Contract Month, PGE will suffer losses equal to the Lost Energy Value. As

**Deleted:** ENVIRONMENTAL

Deleted:

**Comment [A6]:** Note, can have separate standards for each month set by QF. See also clarifying language in Exhibit A

damages for Seller's failure to deliver the Monthly 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 (not more than 24 months), 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 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 To the extent not otherwise provided in the Generation Interconnection Agreement, all costs associated with the modifications to PGE's interconnection facilities or electric system occasioned by or related to the interconnection of the Facility with PGE's system, or any increase in generating capability of the Facility, or any increase of delivery of Net Dependable Capacity from the Facility, shall be borne by Seller.
- 4.6 Commencing on the Effective Date and continuing through the Term of this Agreement, Seller shall provide and PGE shall acquire the RPS Attributes for the Contract Years as specified in 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 RECs") 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 RECs, and PGE shall not report under such program that such Seller-Retained RECs 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

**Deleted:** Environmental

Deleted: Environmental

Deleted: Environmental

**Comment [A7]:** Reflects new narrower RPS Attribute definition for when PGE is getting the attributes and broader Environmental Attributes definition for when QF is retaining.

- 5.1 Seller shall operate and maintain the Facility in a safe manner in accordance with the Generation Interconnection Agreement, and Prudent Electrical Practices. PGE shall have no obligation to purchase Net Output from the Facility to the extent the interconnection of the Facility to PGE's electric system is disconnected, suspended or interrupted, in whole or in part, pursuant to the Generation Interconnection Agreement, or to the extent generation curtailment is required as a result of Seller's noncompliance with the Generation Interconnection Agreement. Seller is solely responsible for the operation and maintenance of the Facility. PGE shall not, by reason of its decision to inspect or not to inspect the Facility, or by any action or inaction taken with respect to any such inspection, assume or be held responsible for any liability or occurrence arising from the operation and maintenance by Seller of the Facility.
- 5.2 Seller agrees to provide sixty (60) days advance written notice of any scheduled maintenance that would require shut down of the Facility for any period of time.
- 5.3 If the Facility ceases operation for unscheduled maintenance, Seller immediately shall notify PGE of the necessity of such unscheduled maintenance, the time when such maintenance has occurred or will occur, and the anticipated duration of such maintenance. Seller shall take all reasonable measures and exercise its best efforts to avoid unscheduled maintenance, to limit the duration of such unscheduled maintenance, and to perform unscheduled maintenance during Off-Peak hours.

#### **SECTION 6: CREDITWORTHINESS**

In the event Seller: a) is unable to represent or warrant as required by Section 3 that it has not been a debtor in any bankruptcy proceeding within the past two (2) years; b) becomes such a debtor during the Term; or c) is not or will not be current on all its financial obligations, Seller shall immediately notify PGE and shall promptly (and in no less than 10 days after notifying PGE) provide default security in an amount reasonably acceptable to PGE in one of the following forms: Senior Lien, Step-in Rights, a Cash Escrow or Letter of Credit. The amount of such default security that shall be acceptable to PGE shall be equal to: (annual On Peak Hours) X (On Peak Price – Off Peak Price) X (Annual 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: METERING**

7.1 PGE shall design, furnish, install, own, inspect, test, maintain and replace all metering equipment at Seller's cost and as required pursuant to the Generation Interconnection Agreement.

- 7.2 Metering shall be performed at the location and in a manner consistent with this Agreement and as specified in the Generation Interconnection Agreement. All Net Output purchased hereunder shall be adjusted to account for electrical losses, if any, between the point of metering and the Point of Delivery, so that he purchased amount reflects the net amount of power flowing into PGE's system at the Point of Delivery.
- 7.3 PGE shall periodically inspect, test, repair and replace the metering equipment as provided in the Generation Interconnection Agreement. If any of the inspections or tests discloses an error exceeding two (2%) percent of the actual energy delivery, either fast or slow, proper correction, based upon the inaccuracy found, shall be made of previous readings for the actual period during which the metering equipment rendered inaccurate measurements if that period can be ascertained. If the actual period cannot be ascertained, the proper correction shall be made to the measurements taken during the time the metering equipment was in service since last tested, but not exceeding three (3) months, in the amount the metering equipment shall have been shown to be in error by such test. Any correction in billings or payments resulting from a correction in the meter records shall be made in the next monthly billing or payment rendered. Such correction, when made, shall constitute full adjustment of any claim between Seller and PGE arising out of such inaccuracy of metering equipment.
- 7.4 To the extent not otherwise provided in the Generation Interconnection Agreement, all of PGE's costs relating to all metering equipment installed to accommodate Seller's Facility shall be borne by Seller.

#### SECTION 8: BILLINGS, COMPUTATIONS AND PAYMENTS

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

#### SECTION 9: DEFAULT, REMEDIES AND TERMINATION

- 9.1 In addition to any other event that may constitute a default under this Agreement, the following events shall constitute defaults under this Agreement:
- 9.1.1 Breach by Seller or PGE of a representation or warranty, except for Section 3.1.4, set forth in this Agreement.

- 9.1.2 Seller's failure to provide default security, if required by Section 6, prior to delivery of any Net Output to PGE or within 10 days of notice.
- 9.1.3 Seller's failure to deliver the Annual Minimum Net Output for two consecutive Contract Years.
  - 9.1.4 If Seller is no longer a Qualifying Facility.
  - 9.1.5 Failure of PGE to make any required payment pursuant to Section 8.1.
- 9.2 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 9.1.3 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 9 are cumulative such that the exercise of one or more rights shall not constitute a waiver of any other rights.
- 9.3 If this Agreement is terminated as provided in this Section 9 PGE shall make all payments, within thirty (30) days, that, pursuant to the terms of this Agreement, are owed to Seller as of the time of receipt of notice of default. PGE shall not be required to pay Seller for any Net Output delivered by Seller after such notice of default.
- 9.4 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 Monthly Minimum Net Output that Seller was otherwise obligated to provide for a period of twenty-four (24) months from the date of termination. Accounts owed by Seller pursuant to this paragraph shall be due within five (5) business days after any invoice from PGE for the same.
- 9.5 In the event PGE terminates this Agreement pursuant to this Section 9, and Seller wishes to again sell Net Output to PGE following such termination, PGE in its sole discretion may require that Seller shall do so subject to the terms of this Agreement, including but not limited to the Contract Price until the Term of this Agreement (as set forth in Section 2.3) would have run in due course had the Agreement remained in effect. At such time Seller and PGE agree to execute a written document ratifying the terms of this Agreement.
- 9.6 Sections 9.1 9.3 9.4 9.5, 10, and 19.2 shall survive termination of this Agreement.

SECTION 10: INDEMNIFICATION AND LIABILITY

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

#### **SECTION 11: INSURANCE**

11.1 Prior to the connection of the Facility to PGE's electric system, provided such Facility has a design capacity of 200 kW or more, Seller shall secure and continuously carry for the Term hereof, with an insurance company or companies rated not lower than "B+," by the A. M. Best Company, insurance policies for bodily injury and property damage liability. Such insurance shall include provisions or endorsements naming PGE, it directors, officers and employees as additional insureds; provisions that such insurance is primary insurance with respect to the interest of PGE and that any insurance or self-insurance maintained by PGE is excess and not contributory insurance with the insurance required hereunder; a cross-liability or severability of insurance interest clause; and provisions that such policies shall not be canceled or their limits of liability reduced without thirty (30) days' prior written notice to PGE. Initial

Comment [A8]: PGE's policies regarding insurance company ratings have changed since Order 06-538. PGE is willing to make this change, but requests this issue be addressed in Phase II.

Deleted: A

limits of liability for all requirements under this section shall be \$1,000,000 million single limit, which limits may be required to be increased or decreased by PGE as PGE determines in its reasonable judgment economic conditions or claims experience may warrant.

- 11.2 Prior to the connection of the Facility to PGE's electric system, provided such facility has a design capacity of 200 kW or more, Seller shall secure and continuously carry for the Term hereof, in an insurance company or companies rated not lower than "B+" by the A. M. Best Company, insurance acceptable to PGE against property damage or destruction in an amount not less than the cost of replacement of the Facility. Seller promptly shall notify PGE of any loss or damage to the Facility. Unless the Parties agree otherwise, Seller shall repair or replace the damaged or destroyed Facility, or if the facility is destroyed or substantially destroyed, it may terminate this Agreement. Such termination shall be effective upon receipt by PGE of written notice from Seller. Seller shall waive its insurers' rights of subrogation against PGE regarding Facility property losses.
- 11.3 Prior to the connection of the Facility to PGE's electric system and at all other times such insurance policies are renewed or changed, Seller shall provide PGE with a copy of each insurance policy required under this Section, certified as a true copy by an authorized representative of the issuing insurance company or, at the discretion of PGE, in lieu thereof, a certificate in a form satisfactory to PGE certifying the issuance of such insurance. If Seller fails to provide PGE with copies of such currently effective insurance policies or certificates of insurance, PGE at its sole discretion and without limitation of other remedies, may upon ten (10) days advance written notice by certified or registered mail to Seller either withhold payments due Seller until PGE has received such documents, or purchase the satisfactory insurance and offset the cost of obtaining such insurance from subsequent power purchase payments under this Agreement.

#### **SECTION 12: FORCE MAJEURE**

12.1 As used in this Agreement, "Force Majeure" or "an event of Force Majeure" means any cause beyond the reasonable control of the Seller or of PGE which, despite the exercise of due diligence, such Party is unable to prevent or overcome. By way of example, Force Majeure may include but is not limited to acts of God, fire, flood, storms, wars, hostilities, civil strife, strikes, and other labor disturbances, earthquakes, fires, lightning, epidemics, sabotage, restraint by court order or other delay or failure in the performance as a result of any action or inaction on behalf of a public authority which by the exercise of reasonable foresight such Party could not reasonably have been expected to avoid and by the exercise of due diligence, it shall be unable to overcome, subject, in each case, to the requirements of the first sentence of this paragraph. Force Majeure, however, specifically excludes the cost or availability of resources to operate the Facility, changes in market conditions that affect the price of energy or transmission, wind or water droughts, and obligations for the payment of money when due.

Deleted: A-

- 12.2 If either Party is rendered wholly or in part unable to perform its obligation under this Agreement because of an event of Force Majeure, that Party shall be excused from whatever performance is affected by the event of Force Majeure to the extent and for the duration of the Force Majeure, after which such Party shall recommence performance of such obligation, provided that:
- 12.2.1 the non-performing Party, shall, promptly, but in any case within one (1) week after the occurrence of the Force Majeure, give the other Party written notice describing the particulars of the occurrence; and
- 12.2.2 the suspension of performance shall be of no greater scope and of no longer duration than is required by the Force Majeure; and
- 12.2.3 the non-performing Party uses its best efforts to remedy its inability to perform its obligations under this Agreement.
- 12.3 No obligations of either Party which arose before the Force Majeure causing the suspension of performance shall be excused as a result of the Force Majeure.
- 12.4 Neither Party shall be required to settle any strike, walkout, lockout or other labor dispute on terms which, in the sole judgment of the Party involved in the dispute, are contrary to the Party's best interests.

#### **SECTION 13: SEVERAL OBLIGATIONS**

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

#### SECTION 14: CHOICE OF LAW

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

#### SECTION 15: PARTIAL INVALIDITY AND PURPA REPEAL

It is not the intention of the Parties to violate any laws governing the subject matter of this Agreement. If any of the terms of the Agreement are finally held or determined to be invalid, illegal or void as being contrary to any applicable law or public policy, all other terms of the Agreement shall remain in effect. If any terms are finally held or determined to be invalid, illegal or void, the Parties shall enter into negotiations

concerning the terms affected by such decision for the purpose of achieving conformity with requirements of any applicable law and the intent of the Parties to this Agreement.

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

#### **SECTION 16: WAIVER**

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

#### SECTION 17: GOVERNMENTAL JURISDICTION AND AUTHORIZATIONS

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

#### SECTION 18: SUCCESSORS AND ASSIGNS

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

#### SECTION 19: ENTIRE AGREEMENT

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

#### **SECTION 20: NOTICES**

20.1 All notices except as otherwise provided in this Agreement shall be in writing, shall be directed as follows and shall be considered delivered if delivered in

| person or when deposited mail and return receipt rec | d in the U.S. Mail, postage prepaid by certified or registered quested:   |  |  |  |  |
|--|---|--|--|--|--|
| To Seller:   |   |  |  |  |  |
|  |   |  |  |  |  |
|  |   |  |  |  |  |
| with a copy to:                                      |   |  |  |  |  |
|  |   |  |  |  |  |
| To PGE:  | Contracts Manager<br>QF Contracts, 3WTC0306<br>PGE - 121 SW Salmon St.<br>Portland, Oregon 97204                          |  |  |  |  |
|  | may change the person to whom such notices are addressed, oviding written notices thereof in accordance with this Section |  |  |  |  |
|  | EREOF, the Parties hereto have caused this Agreement to be ve names as of the Effective Date.                             |  |  |  |  |
| PGE  |   |  |  |  |  |
| By:  |   |  |  |  |  |
| (Nama Callan)  |   |  |  |  |  |
| (Name Seller)  |   |  |  |  |  |
| By:  |   |  |  |  |  |
| EXHIBIT A MONTHLY MINIMUM NET OUTPUT                 |   |  |  |  |  |

In this Exhibit, Seller may designate an alternative Monthly Minimum Net Output to the default of 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. An Alternative Minimum Amount may be separately set for each month during a Contract Year.

EXHIBIT B
DESCRIPTION OF SELLER'S FACILITY

[Seller to Complete]

**Comment [A9]:** Changes made to clarify that QF can choose separate monthly minimum net outputs to reflect seasonal or other characteristics.

# EXHIBIT C REQUIRED FACILITY DOCUMENTS

[Seller list all permits and authorizations required for this project]

Sellers Generation Interconnection Agreement

#### EXHIBIT D START-UP TESTING

#### [Seller identify appropriate tests]

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

- 1. Pressure tests of all steam system equipment;
- 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;
- 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 [Attach currently in-effect Schedule 201]

# BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

# **UM 1931**

| COMPANY,                    | ) |
|-----------------------------|---|
| Complainant,                | ) |
| v.                          | ) |
| ALFALFA SOLAR I LLC, et al. | ) |
| Defendants.                 | ) |

# **EXHIBIT CREA-NIPPC-REC/209**

GREG ADAMS EMAIL ON SEPTEMBER 2, 2014 (WITHOUT ALL ATTACHMENTS)

**December 28, 2018** 

From: Greg Adams < Greg@richardsonadams.com>

Sent: Tuesday, September 2, 2014 10:13 AM

**To:** Barbara Parr; 'dockets@oregoncub.org'; 'dockets@oseia.org'; 'oregondockets@pacificorp.com';

'dockets@renewablenw.org'; 'paul.ackerman@constellation.com'; 'da@thenescogroup.com'; 'brittany.andrus@state.or.us'; 'stephanie.andrus@state.or.us'; 'james@utilityadvocates.org';

'kacia.brockman@state.or.us'; 'dbrown@obsidianfinance.com'; 'wcarey@gorge.net';

'bryce.dalley@pacificorp.com'; 'megan@renewablenw.org'; 'bill@oneenergyrenewables.com';

'dlchain@wvi.com'; 'renee.m.france@doj.state.or.us'; Richard George; 'tgregory@obsidianrenewables.com'; 'john.harvey@exeloncorp.com';

'dhenkels@cleantechlawpartners.com'; 'jhilton@idahopower.com'; 'bob@oregoncub.org';

'kaufmann@lklaw.com'; 'matt.krumenauer@state.or.us'; 'dlokting@stollberne.com'; 'rlorenz@cablehuston.com'; 'lovinger@lklaw.com'; 'jravenesanmarcos@yahoo.com'; 'mmcarthur@aocweb.org'; 'catriona@oregoncub.org'; 'nelson@thnelson.com';

'k.a.newman@frontier.com'; 'mpengilly@gmail.com'; 'tcp@dvclaw.com'; 'dockets@mcd-law.com'; Peter Richardson; 'thad.roth@energytrust.org'; 'tmroush@wvi.com'; 'irion@sanger-law.com';

'cstokes@cablehuston.com'; 'dustin.till@pacificorp.com'; PGE OPUC Filings;

'david.tooze@portlandoregon.gov'; 'bvc@dvclaw.com'; 'john.volkman@energytrust.org';

'dwalker@idahopower.com'

Subject: RE: PGE UM 1610 Workshop Notice & PPAs - Settlement Communication

Attachments: PGE UM 1610 Schedule 201 Sch 201\_CREA edit to PGE 8-20-14.docx; PGE UM 1610 Schedule 201-

COMPARISON-Off-System Variable-081914- CREA edits.docx; PGE UM 1610 Schedule 201-

COMPARISON-RENEWABLE In-System Non-Variable-081914 - CREA edits.docx

# Everyone,

Our proposed edits to PGE's settlement PPA and Schedule are attached. These are edits that show the changes PGE proposed from its existing approved contracts and Schedule 201 in redline, with our proposed edits on top of that and highlighted. Most are explained in the comment bubbles. We propose the same edits to the corresponding sections of the renewable rate, off-system, variable PPA circulated last week.

The one item that could use further explanation is the proposed changes to the Annual Minimum Net Output requirement in the non-variable contract and the proposed inclusion of a monthly minimum output accounting in both contracts. CREA is willing to agree to limited acceptance of the concept of a more accurate monthly output projection as set forth in the changes made in these attached PPAs, but not to a departure from the Commission's existing directive in Order 06-538 at 21-25 that the requirement is to provide the minimum output on an annual basis. We would be willing to agree to have any further proposed revisions addressed in Phase two. If our proposed revisions are not acceptable on the monthly output issue, then we would recommend simply deleting all of PGE's proposed changes to sections 1.1, 1.7, 1.8, 1.16, 1.19, 2.3, 4.2, 4.3, 9.4, and Exhibit A, in the In-System, Non-Variable PPA, as being beyond the scope of Phase 1 of UM 1610.

Another issue we will need to discuss is the assumption that the PTC is still in effect in the renewable rates. We would note that PacifiCorp agreed to remove the assumption that the PTC is in effect for purposes of this compliance filing, reserving the right to debate the issue in Phase 2. We would propose similar treatment in this compliance filing and may be willing to compromise on the other rate calculation issues if we can reach agreement on that issue.

Thanks again to Rich George for circulating these documents well in advance of the workshop. We look forward to discussing these issues tomorrow.

# **Greg Adams**

Richardson Adams, PLLC 515 N. 27th Street, 83702 P.O. Box 7218, 83707

Boise, Idaho

Voice: 208.938.2236 Facsimile: 208.938.7904

Information contained in this electronic message and in any attachments hereto may contain information that is confidential, protected by the attorney/client privilege and/or attorney work product doctrine. This email is intended only for the use of the individual or entity named above. Inadvertent disclosure of the contents of this email or its attachments to unintended recipients is not intended to and does not constitute a waiver of the attorney/client privilege and/or attorney work product doctrine. This transmission is further covered by the Electronic Communication Privacy Act, 18 U.S.C. §§ 2510-2521.

If you have received this email in error, immediately notify the sender of the erroneous receipt and destroy this email and any attachments of the same either electronic or printed. Any disclosure, dissemination, distribution, copying or use of the contents or information received in error is strictly prohibited.

Thank you.

**From:** Barbara Parr [mailto:Barbara.Parr@pgn.com]

Sent: Wednesday, August 20, 2014 6:39 PM

To: 'dockets@oregoncub.org'; 'dockets@oseia.org'; 'oregondockets@pacificorp.com'; 'dockets@renewablenw.org'; 'paul.ackerman@constellation.com'; Greg Adams; 'da@thenescogroup.com'; 'brittany.andrus@state.or.us'; 'stephanie.andrus@state.or.us'; 'james@utilityadvocates.org'; 'kacia.brockman@state.or.us'; 'dbrown@obsidianfinance.com'; 'wcarey@gorge.net'; 'bryce.dalley@pacificorp.com'; 'megan@renewablenw.org'; 'bill@oneenergyrenewables.com'; 'dlchain@wvi.com'; 'renee.m.france@doj.state.or.us'; Richard George; 'tgregory@obsidianrenewables.com'; 'john.harvey@exeloncorp.com'; 'dhenkels@cleantechlawpartners.com'; 'jhilton@idahopower.com'; 'bob@oregoncub.org'; 'kaufmann@lklaw.com'; 'matt.krumenauer@state.or.us'; 'dlokting@stollberne.com'; 'rlorenz@cablehuston.com'; 'lovinger@lklaw.com'; 'jravenesanmarcos@yahoo.com'; 'mmcarthur@aocweb.org'; 'catriona@oregoncub.org'; 'nelson@thnelson.com'; 'k.a.newman@frontier.com'; 'mpengilly@gmail.com'; 'tcp@dvclaw.com'; 'dockets@mcd-law.com'; Peter Richardson; 'thad.roth@energytrust.org'; 'tmroush@wvi.com'; 'irion@sanger-law.com'; 'cstokes@cablehuston.com'; 'dustin.till@pacificorp.com'; PGE OPUC Filings; 'david.tooze@portlandoregon.gov'; 'bvc@dvclaw.com'; 'john.volkman@energytrust.org'; 'dwalker@idahopower.com'

Portland General Electric Company (PGE) UM 1610 workshop will be held on **Wednesday, September 3** from 1:00 p.m. to 4:00 p.m. (PST) at PGE Legal Offices, 121 SW Salmon Street, 1WTC 13<sup>th</sup> floor, Legal A Conference Room, Portland.

# WebEx meeting information:

Meeting Number: 968 582 129 Meeting Password: Portland1

# To start or join the online meeting: go

to https://pgn.webex.com/pgn/j.php?MTID=m90c43b2cebe0eacd6db048233fadb147

<u>Audio conference information</u>: To join the meeting, call-in toll-free number (US/Canada): **1-877-668-4490** OR Call-in toll number (US/Canada): **1-408-792-6300**; Enter the access code: **968 582 129** 

\_\_\_\_\_\_

\_\_\_\_\_\_

Please find attached two standard PPAs (four redlines) and PGE's Schedule 201 (two redlines) for use in the next UM 1610 compliance filing workshop on September 3.

The PPAs should be representative of substantially all the changes previously discussed in the prior workshops. One PPA is variable, thus containing the MAG changes, and off-system, thus including the scheduling provisions. The other PPA is renewable and firm, so it contains the environmental attribute changes and the monthly minimum net output requirements and corresponding damages calculations. These documents reflect the input from the various stakeholders and PGE's proposal to address requested stakeholder changes. We include explanatory comments within the documents. For the most part, we have accepted requested changes. In a few instances, we have requested issues to be considered in Phase II. The two redlines of each PPA show: 1) the changes made to the May compliance filing to address stakeholder input; and 2) cumulative changes from the currently in-effect PPAs.

The Schedule also reflects stakeholder input and includes specifically suggested wording changes from ODOE and other parties. The redlines show 1) changes from the May compliance filing; and 2) cumulative changes to the schedule currently in effect.

We will discuss these proposed compliance documents at our next workshop on September 3, but if there are questions or comments prior to then, please do not hesitate to contact me.

Rich



**Richard George | Assistant General Counsel** 

Portland General Electric Co. | 121 SW Salmon Street, 1WTC1301 | Portland, OR 97204

**2** 503-464-7611

503-863-1248 | ₹ 503-464-2200 | ☐ Richard.George@pgn.com

www.portlandgeneral.com

\*\*\*\*\*\*\* Privilege/Confidentiality Statement \*\*\*\*\*\*\*\*\*\*

This e-mail message, including any attachments, is the property of Portland General Electric Company. Since it is a communication by its Legal Department, it may contain attorney privileged and/or confidential information. The review, disclosure, distribution, or copying of this message by or to anyone other than the named addressee(s) is strictly prohibited. If you have received this message in error, please immediately notify the sender by reply e-mail and delete the original email and all copies of the message. Thank you.

# 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 P.P.As, 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.

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

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 <a href="either-the-filed-standard">either</a> the filed <a href="either-the-filed-standard">Standard</a> Avoided Costs or <a href="Renewable-Avoided Costs">Renewable Avoided Costs</a> in effect at that Deleted: Contracts

Deleted: ower Deleted: urchase Deleted: greement

Deleted: Contract Power Purchase Agreement

**Deleted:** Contract Power Purchase Agreement (Standard Contract)

Deleted: out

Deleted: Contract

Deleted: POWER PURCHASE AGREEMENT

Deleted: out

Comment [MD1]: CREA proposed

Deleted: ower

Deleted: urchase

Deleted: greement

Deleted: Power Purchase Agreement

Comment [MD2]: Clarification made to differentiate between Standard and Renewable Avoided Costs and Fixed Price Options

Effective for service on and after September 3, 2014 Comment [MD3]: Need to change effective date when this is filed.

Deleted: February 20, 2014

# Sheet No. 201-2

# SCHEDULE 201 (Continued)

### 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 www.por The available Standard PPAs are:

- Ştandard <u>In-System Non-Variable</u> Power Purchase Agreement
- Standard Off-System Non-Variable Power Purchase Agreement
- Standard In-System Variable Resources Power Purchase Agreement
- Standard Off-System Variable Resources 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 Resources Power Purchase Agreement Standard Renewable Off-System Variable Resources 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-SYSTEMPPA

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.

> Effective for service on and after September 3, 2014

# Deleted: CONTRACTS

Deleted: Contract

Deleted: Contract (Apr endix 1 to this schedule

Deleted: Contract

Deleted: Contracts

Deleted:

Deleted: Contract

Deleted:

Deleted: Contract

Deleted: Off Deleted:

Deleted: Contract

Comment [MD4]: CREA proposed striking "Integrated" from titles

Deleted:

Deleted: Contract for

Deleted: Off

Deleted: Intermittent

Comment [MD5]: CREA proposed striking "Integrated" from titles.

Deleted:

Deleted: Contracts

Deleted: Intermittent

Deleted: In order t

Deleted: Contract

Deleted: Contract

Deleted: Contract

Deleted: Contract Deleted: Contract

Deleted: completely

Deleted: power purchase agreement

Deleted: Contract Deleted: OFF

Deleted: POWER PURCHASE AGREEMENT

Deleted: power purchase agreement

Deleted: standard

Deleted: negotiated

# Sheet No. 201-3

# SCHEDULE 201 (Continued)

### 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 facilities, such utility would generate itself or purchase from another source."

Monthly On-Peak prices are included in both the <u>Standard</u> 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-PEAKPERIOD

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

#### OFF-PEAKPERIOD

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 OF 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 pr Renewable Avoided Costs in effect at the time the agreement is executed.

Comment [MD6]: For consistency purposes changed rates to prices throughout document

Deleted: rates

Deleted: T

Deleted: 2

Deleted: below include monthly On- and Off-

Deleted: December 2014

Deleted: period 2015 through 2030

Deleted: OPTIONS

Deleted: CONTRACTS
Deleted: options

Deleted: Contract

Comment [MD7]: Clarification made to differentiate between Standard and Renewable Avoided Costs and Fixed Price Options

Deleted: Contract

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 PA; (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.)

Deleted: Under the Fixed Price Option, t

Deleted:

Deleted: Contract

Deleted: ,

Deleted: o
Deleted: Appendix 1,

Deleted: Standard Contract

Effective for service on and after September 3, 2014

1

# Sheet No. 201-4

### SCHEDULE 201 (Continued)

# PRICING FOR STANDARD PPA (Continued)

# 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 \_nuside of PGE's Balancing Authority Area, 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.

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.

Deleted: OPTIONS

Deleted: CONTRACTS

Deleted: ¶
Four pricing options are available for Standard Contracts. The pricing options include one Fixed Rate Option and three Market Based Options. ¶

#### Deleted:

**Deleted:** Sellers with contracts exceeding 15 years will make a one time election at execution to select a Market-Based Option for all years up to five in excess of the initial 15.

Deleted: Under the Fixed Price Option, p

#### Deleted: 2

Deleted: for a term of up to 15 years

Comment [MD8]: ODOE: "This clarifies that run of river hydro and other QF types are eligible for the Base Load QF prices."

Comment [MD9]: ODOE: "Changes to this paragraph clarify the adjustments for capacity contribution."

Comment [MD10]: ODOE: "Changes to this paragraph clarify the adjustments for integration."

Deleted: s

Commented [q1]: Terminology from Order 14-058 at 14. BA is the more correct term to use here. A QF could easily be "offsystem" under FERC's rules in 18 CFR 292.303(d) and required to interconnect and deliver over another utility's lines to the purchasing utility, yet still be in the purchasing utility's BA. A BA is different from the physical transmission and distribution system.

Deleted: off-system

Formatted: Highlight

Formatted: Highlight

Formatted: Highlight Formatted: Highlight

Formatted: Highlight

|      |        |        |        |          |          | ABLE 1a   |         |         |        |        |        |        |
|------|--------|--------|--------|----------|----------|-----------|---------|---------|--------|--------|--------|--------|
|      |        |        |        |          |          | ided Cos  |         |         |        |        |        |        |
|      |        |        | St     | andard F |          |           |         | Load QF |        |        |        |        |
|      |        |        |        | C        | n-Peak F | orecast ( | \$/MWH) |         |        |        |        |        |
| Year | Jan    | Feb    | Mar    | Apr      | May      | Jun       | Jul     | Aug     | Sep    | Oct    | Nov    | Dec    |
| 2014 | 48.13  | 56.88  | 48.63  | 30.38    | 30.88    | 31.03     | 45.53   | 54.78   | 50.38  | 46.88  | 48.63  | 54.38  |
| 2015 | 50.13  | 47.79  | 42.72  | 36.07    | 30.77    | 28.80     | 44.64   | 50.90   | 45.10  | 43.25  | 44.68  | 48.21  |
| 2016 | 49.77  | 47.46  | 42.45  | 35.88    | 30.65    | 28.70     | 44.34   | 50.53   | 44.80  | 42.97  | 44.38  | 47.87  |
| 2017 | 52.43  | 49.99  | 44.70  | 37.76    | 32.23    | 30.17     | 46.70   | 53.23   | 47.18  | 45.25  | 46.74  | 50.42  |
| 2018 | 56.37  | 53.74  | 48.04  | 40.57    | 34.61    | 32.40     | 50.20   | 57.24   | 50.72  | 48.64  | 50.25  | 54.21  |
| 2019 | 59.33  | 56.56  | 50.56  | 42.69    | 36.42    | 34.09     | 52.83   | 60.24   | 53.38  | 51.19  | 52.88  | 57.06  |
| 2020 | 61.12  | 58.27  | 52.09  | 43.99    | 37.53    | 35.13     | 54.43   | 62.06   | 55.00  | 52.74  | 54.48  | 58.78  |
| 2021 | 83.08  | 82.73  | 81.25  | 79.21    | 79.28    | 79.32     | 79.11   | 79.15   | 79.34  | 79.80  | 83.82  | 85.55  |
| 2022 | 86.66  | 86.03  | 84.34  | 82.31    | 82.46    | 82.52     | 82.71   | 82.73   | 82.93  | 83.42  | 88.08  | 90.31  |
| 2023 | 91.20  | 90.41  | 88.76  | 86.86    | 86.34    | 86.36     | 86.66   | 86.48   | 86.85  | 87.37  | 92.37  | 95.36  |
| 2024 | 96.86  | 95.81  | 93.35  | 91.39    | 90.70    | 90.78     | 91.16   | 91.09   | 91.49  | 92.15  | 95.30  | 98.7   |
| 2025 | 99.69  | 97.48  | 94.10  | 92.12    | 92.10    | 92.18     | 92.56   | 92.48   | 92.85  | 93.52  | 96.54  | 100.08 |
| 2026 | 100.47 | 99.38  | 96.00  | 93.83    | 93.32    | 93.40     | 93.80   | 93.72   | 94.12  | 94.68  | 98.25  | 101.90 |
| 2027 | 101.02 | 99.29  | 96.15  | 93.26    | 93.22    | 93.29     | 93.66   | 93.56   | 93.97  | 94.55  | 99.45  | 102.71 |
| 2028 | 101.10 | 99.49  | 95.85  | 93.39    | 93.31    | 93.37     | 93.58   | 93.64   | 93.87  | 94.58  | 102.56 | 105.58 |
| 2029 | 107.98 | 107.22 | 103.29 | 100.04   | 100.08   | 100.00    | 100.54  | 100.64  | 100.90 | 101.50 | 107.20 | 110.79 |
| 2030 | 112.59 | 109.12 | 104.07 | 99.81    | 99.56    | 99.58     | 100.09  | 100.18  | 100.44 | 101.29 | 110.03 | 113.81 |
| 2031 | 115.26 | 111.15 | 106.88 | 103.09   | 103.23   | 103.23    | 104.04  | 104.14  | 104.41 | 105.06 | 111.68 | 115.10 |
| 2032 | 117.17 | 112.98 | 108.63 | 104.76   | 104.90   | 104.90    | 105.73  | 105.83  | 106.11 | 106.77 | 113.52 | 117.00 |
| 2033 | 119.82 | 115.54 | 111.10 | 107.17   | 107.31   | 107.31    | 108.16  | 108.26  | 108.54 | 109.21 | 116.10 | 119.64 |
| 2034 | 122.26 | 117.90 | 113.38 | 109.36   | 109.51   | 109.51    | 110.37  | 110.48  | 110.77 | 111.45 | 118.47 | 122.08 |

Effective for service on and after September 3, 2014

| Year | Jan    | Feb    | Ma   |
|------|--------|--------|------|
| 2013 |        |        |      |
| 2014 | 39.69  | 37.26  | 33.  |
| 2015 | 42.51  | 39.92  | 35.  |
| 2016 | 45.84  | 43.04  | 38.  |
| 2017 | 49.18  | 46.16  | 41.  |
| 2018 | 51.97  | 48.79  | 43.  |
| 2019 | 52.98  | 49.74  | 44.  |
| 2020 | 54.01  | 50.71  | 45.  |
| 2021 | 94.39  | 94.07  | 93.  |
| 2022 | 96.83  | 97.06  | 96.  |
| 2023 | 103.96 | 104.17 | 104. |
| 2024 | 107.88 | 107.12 | 105. |
| 2025 | 108.72 | 107.70 | 107. |
| 2026 | 109.48 | 108.65 | 107. |
| 2027 | 110.46 | 110.28 | 109. |
| 2028 | 111.58 | 111.33 | 109. |
| 2029 | 113.60 | 113.53 | 113. |
| 2030 | 117.21 | 116.96 | 116. |
| 2031 | 119.39 | 119.54 | 118. |
| 2032 | 121.58 | 121.74 | 120. |
| 2033 | 123.82 | 123.98 | 123. |
| 2034 | 125.65 | 125.82 | 124. |

Deleted Deleted

PRICING OPTIONS FOR STANDARD PPA (Continued)

<u>Standard Fixed Price Option (Continued)</u>

|      |   |       |       |           |           | ABLE 1b   | -                   |        |       |       |       |       |  |
|------|---|-------|-------|-----------|-----------|-----------|---------------------|--------|-------|-------|-------|-------|--|
|      |   |       | 04    | andord Ei |           |           |                     | and OF |       |       |       |       |  |
|      | Standard Fixed Price Option for Base Load QF Off-Peak Forecast (\$/MWH) |       |       |           |           |           |                     |        |       |       |       |       |  |
|      |   |       |       |           | II-reak r | orecasi ( | <b>⊅/IVI VV □1)</b> |        |       |       |       |       |  |
| Year | Jan   | Feb   | Mar   | Apr       | May       | Jun       | Jul                 | Aug    | Sep   | Oct   | Nov   | Dec   |  |
| 2014 | 38.13   | 51.38 | 42.88 | 15.23     | 9.88      | 9.38      | 21.78               | 37.03  | 40.53 | 39.63 | 41.38 | 47.38 |  |
| 2015 | 43.19   | 41.41 | 36.99 | 23.85     | 16.69     | 12.34     | 24.12               | 36.59  | 34.18 | 37.49 | 38.44 | 41.46 |  |
| 2016 | 43.43   | 41.65 | 37.23 | 24.08     | 16.92     | 12.57     | 24.35               | 36.83  | 34.42 | 37.73 | 38.68 | 41.70 |  |
| 2017 | 45.56   | 43.69 | 39.04 | 25.21     | 17.67     | 13.09     | 25.49               | 38.61  | 36.08 | 39.56 | 40.56 | 43.74 |  |
| 2018 | 48.40   | 46.40 | 41.45 | 26.74     | 18.73     | 13.86     | 27.05               | 41.01  | 38.31 | 42.01 | 43.08 | 46.46 |  |
| 2019 | 51.44   | 49.32 | 44.06 | 28.40     | 19.87     | 14.69     | 28.72               | 43.58  | 40.71 | 44.65 | 45.79 | 49.38 |  |
| 2020 | 53.92   | 51.66 | 46.15 | 31.05     | 22.57     | 17.61     | 32.64               | 46.96  | 43.50 | 46.77 | 48.01 | 51.78 |  |
| 2021 | 43.71   | 43.36 | 41.88 | 39.84     | 39.91     | 39.95     | 39.74               | 39.78  | 39.97 | 40.43 | 44.45 | 46.18 |  |
| 2022 | 46.52   | 45.90 | 44.20 | 42.18     | 42.33     | 42.38     | 42.58               | 42.60  | 42.80 | 43.29 | 47.95 | 50.18 |  |
| 2023 | 50.16   | 49.37 | 47.72 | 45.82     | 45.30     | 45.32     | 45.62               | 45.44  | 45.81 | 46.33 | 51.34 | 54.32 |  |
| 2024 | 55.29   | 54.25 | 51.79 | 49.83     | 49.14     | 49.22     | 49.60               | 49.52  | 49.92 | 50.59 | 53.74 | 57.15 |  |
| 2025 | 57.19   | 54.98 | 51.60 | 49.62     | 49.59     | 49.67     | 50.06               | 49.98  | 50.35 | 51.02 | 54.04 | 57.58 |  |
| 2026 | 57.15   | 56.06 | 52.68 | 50.51     | 50.00     | 50.08     | 50.48               | 50.40  | 50.80 | 51.36 | 54.93 | 58.58 |  |
| 2027 | 56.86   | 55.13 | 51.99 | 49.10     | 49.07     | 49.13     | 49.50               | 49.41  | 49.81 | 50.39 | 55.29 | 58.55 |  |
| 2028 | 56.09   | 54.48 | 50.84 | 48.38     | 48.30     | 48.36     | 48.57               | 48.63  | 48.86 | 49.57 | 57.55 | 60.57 |  |
| 2029 | 62.10   | 61.34 | 57.41 | 54.16     | 54.20     | 54.12     | 54.66               | 54.76  | 55.02 | 55.62 | 61.33 | 64.92 |  |
| 2030 | 65.82   | 62.35 | 57.31 | 53.05     | 52.79     | 52.82     | 53.33               | 53.42  | 53.68 | 54.53 | 63.27 | 67.0  |  |
| 2031 | 67.60   | 63.48 | 59.21 | 55.42     | 55.56     | 55.56     | 56.37               | 56.47  | 56.75 | 57.39 | 64.02 | 67.43 |  |
| 2032 | 68.90   | 64.70 | 60.35 | 56.48     | 56.63     | 56.63     | 57.46               | 57.56  | 57.84 | 58.49 | 65.24 | 68.73 |  |
| 2033 | 70.29   | 66.02 | 61.58 | 57.64     | 57.79     | 57.79     | 58.63               | 58.73  | 59.02 | 59.69 | 66.57 | 70.12 |  |
| 2034 | 71.62   | 67.26 | 62.74 | 58.72     | 58.87     | 58.87     | 59.73               | 59.84  | 60.13 | 60.81 | 67.83 | 71.4  |  |

Formatted: Normal, Justified, Indent: Left: 0.5", Tab stops: 0.5", Left
Formatted: Font: Bold

| Year | Jan   | Feb   | Mar  |
|------|-------|-------|------|
| 2013 |       |       |      |
| 2014 | 33.48 | 32.34 | 30.5 |
| 2015 | 36.25 | 35.02 | 33.0 |
| 2016 | 38.77 | 37.44 | 35.3 |
| 2017 | 41.60 | 40.17 | 37.9 |
| 2018 | 44.42 | 42.90 | 40.4 |
| 2019 | 45.29 | 43.74 | 41.2 |
| 2020 | 46.18 | 44.61 | 42.1 |
| 2021 | 38.36 | 38.05 | 37.1 |
| 2022 | 39.96 | 40.19 | 39.9 |
| 2023 | 45.85 | 46.06 | 46.3 |
| 2024 | 48.71 | 47.94 | 46.0 |
| 2025 | 48.26 | 47.24 | 46.6 |
| 2026 | 48.31 | 47.47 | 46.7 |
| 2027 | 47.96 | 47.78 | 46.6 |
| 2028 | 47.93 | 47.68 | 46.1 |
| 2029 | 48.78 | 48.70 | 48.5 |
| 2030 | 51.19 | 50.95 | 50.0 |
| 2031 | 52.16 | 52.31 | 51.3 |
| 2032 | 53.11 | 53.27 | 52.3 |
| 2033 | 54.09 | 54.25 | 53.2 |
| 2034 | 55.09 | 55.26 | 54.2 |

Effective for service on and after September 3, 2014

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

|      |       |       |       |          | T.       | ABLE 2a    |           |       |       |       |       |       |
|------|-------|-------|-------|----------|----------|------------|-----------|-------|-------|-------|-------|-------|
|      |       |       |       |          | Avo      | ided Cost  | s         |       |       |       |       |       |
|      |       |       |       | Standard | Fixed Pr | rice Optic | n for Wir | nd QF |       |       |       |       |
|      |       |       |       | 0        | n-Peak F | orecast (  | \$/MWH)   |       |       |       |       |       |
|      |       |       |       |          |          |            |           |       |       |       |       |       |
| Year | Jan   | Feb   | Mar   | Apr      | May      | Jun        | Jul       | Aug   | Sep   | Oct   | Nov   | Dec   |
| 2014 | 44.43 | 53.18 | 44.93 | 26.68    | 27.18    | 27.33      | 41.83     | 51.08 | 46.68 | 43.18 | 44.93 | 50.68 |
| 2015 | 46.36 | 44.02 | 38.95 | 32.30    | 27.00    | 25.03      | 40.87     | 47.13 | 41.33 | 39.48 | 40.91 | 44.44 |
| 2016 | 45.93 | 43.62 | 38.61 | 32.04    | 26.81    | 24.86      | 40.50     | 46.69 | 40.96 | 39.13 | 40.54 | 44.03 |
| 2017 | 48.52 | 46.08 | 40.79 | 33.85    | 28.32    | 26.26      | 42.79     | 49.32 | 43.27 | 41.34 | 42.83 | 46.51 |
| 2018 | 52.38 | 49.75 | 44.05 | 36.58    | 30.62    | 28.41      | 46.21     | 53.25 | 46.73 | 44.65 | 46.26 | 50.22 |
| 2019 | 55.26 | 52.49 | 46.49 | 38.62    | 32.35    | 30.02      | 48.76     | 56.17 | 49.31 | 47.12 | 48.81 | 52.99 |
| 2020 | 56.97 | 54.12 | 47.94 | 39.84    | 33.38    | 30.98      | 50.28     | 57.91 | 50.85 | 48.59 | 50.33 | 54.63 |
| 2021 | 41.45 | 41.10 | 39.61 | 37.58    | 37.65    | 37.69      | 37.48     | 37.52 | 37.70 | 38.17 | 42.19 | 43.92 |
| 2022 | 44.22 | 43.60 | 41.90 | 39.88    | 40.03    | 40.08      | 40.28     | 40.29 | 40.49 | 40.99 | 45.65 | 47.87 |
| 2023 | 47.82 | 47.03 | 45.38 | 43.48    | 42.96    | 42.98      | 43.28     | 43.11 | 43.47 | 43.99 | 49.00 | 51.98 |
| 2024 | 52.90 | 51.85 | 49.40 | 47.44    | 46.75    | 46.83      | 47.21     | 47.13 | 47.53 | 48.19 | 51.35 | 54.75 |
| 2025 | 54.76 | 52.54 | 49.16 | 47.18    | 47.16    | 47.24      | 47.62     | 47.54 | 47.91 | 48.59 | 51.61 | 55.14 |
| 2026 | 54.66 | 53.58 | 50.20 | 48.02    | 47.52    | 47.60      | 47.99     | 47.91 | 48.32 | 48.87 | 52.44 | 56.10 |
| 2027 | 54.33 | 52.60 | 49.46 | 46.57    | 46.53    | 46.60      | 46.97     | 46.87 | 47.28 | 47.86 | 52.76 | 56.02 |
| 2028 | 53.51 | 51.90 | 48.26 | 45.80    | 45.72    | 45.78      | 45.99     | 46.05 | 46.28 | 46.99 | 54.97 | 57.99 |
| 2029 | 59.48 | 58.72 | 54.79 | 51.54    | 51.57    | 51.49      | 52.03     | 52.13 | 52.40 | 52.99 | 58.70 | 62.29 |
| 2030 | 63.14 | 59.67 | 54.62 | 50.37    | 50.11    | 50.13      | 50.64     | 50.74 | 51.00 | 51.85 | 60.59 | 64.36 |
| 2031 | 64.86 | 60.74 | 56.47 | 52.68    | 52.82    | 52.82      | 53.64     | 53.74 | 54.01 | 54.65 | 61.28 | 64.69 |
| 2032 | 66.10 | 61.90 | 57.55 | 53.69    | 53.83    | 53.83      | 54.66     | 54.76 | 55.04 | 55.69 | 62.45 | 65.93 |
| 2033 | 67.46 | 63.18 | 58.75 | 54.81    | 54.95    | 54.95      | 55.80     | 55.90 | 56.19 | 56.85 | 63.74 | 67.29 |
| 2034 | 68.73 | 64.37 | 59.85 | 55.83    | 55.98    | 55.98      | 56.84     | 56.95 | 57.24 | 57.92 | 64.94 | 68.55 |

Deleted: CONTRACTS

Deleted: ¶
\*. "First of Month" means the first such monthly issuance.¶

Effective for service on and after September 3, 2014

PRICING OPTIONS FOR STANDARD PPA (Continued)

Standard Fixed Price Option (Continued)

|      |   |       |       |       | T/    | ABLE 2b |       |       |       |       |       |       |  |
|------|---|-------|-------|-------|-------|---------|-------|-------|-------|-------|-------|-------|--|
|      |   |       |       |       |       |         |       |       |       |       |       |       |  |
|      | Standard Fixed Price Option for Wind QF |       |       |       |       |         |       |       |       |       |       |       |  |
| -    | Off-Peak Forecast (\$/MWH)              |       |       |       |       |         |       |       |       |       |       |       |  |
| Year | Jan                                     | Feb   | Mar   | Apr   | May   | Jun     | Jul   | Aug   | Sep   | Oct   | Nov   | Dec   |  |
| 2014 | 34.43                                   | 47.68 | 39.18 | 11.53 | 6.18  | 5.68    | 18.08 | 33.33 | 36.83 | 35.93 | 37.68 | 43.68 |  |
|      |   |       |       |       |       |         |       |       |       |       |       |       |  |
| 2016 | 39.59                                   | 37.81 | 33.39 | 20.24 | 13.08 | 8.73    | 20.51 | 32.99 | 30.58 | 33.89 | 34.84 | 37.86 |  |
| 2017 | 41.65                                   | 39.78 | 35.13 | 21.30 | 13.76 | 9.18    | 21.58 | 34.70 | 32.17 | 35.65 | 36.65 | 39.83 |  |
| 2018 | 44.41                                   | 42.41 | 37.46 | 22.75 | 14.74 | 9.87    | 23.06 | 37.02 | 34.32 | 38.02 | 39.09 | 42.47 |  |
| 2019 | 47.37                                   | 45.25 | 39.99 | 24.33 | 15.80 | 10.62   | 24.65 | 39.51 | 36.64 | 40.58 | 41.72 | 45.31 |  |
| 2020 | 49.77                                   | 47.51 | 42.00 | 26.90 | 18.42 | 13.46   | 28.49 | 42.81 | 39.35 | 42.62 | 43.86 | 47.63 |  |
| 2021 | 39.48                                   | 39.13 | 37.65 | 35.61 | 35.68 | 35.72   | 35.51 | 35.55 | 35.74 | 36.20 | 40.22 | 41.95 |  |
| 2022 | 42.21                                   | 41.59 | 39.89 | 37.87 | 38.02 | 38.07   | 38.27 | 38.29 | 38.49 | 38.98 | 43.64 | 45.87 |  |
| 2023 | 45.77                                   | 44.98 | 43.33 | 41.43 | 40.91 | 40.93   | 41.23 | 41.05 | 41.42 | 41.94 | 46.95 | 49.93 |  |
| 2024 | 50.82                                   | 49.78 | 47.32 | 45.36 | 44.67 | 44.75   | 45.13 | 45.05 | 45.45 | 46.12 | 49.27 | 52.68 |  |
| 2025 | 52.63                                   | 50.42 | 47.04 | 45.06 | 45.03 | 45.11   | 45.50 | 45.42 | 45.79 | 46.46 | 49.48 | 53.02 |  |
| 2026 | 52.50                                   | 51.41 | 48.03 | 45.86 | 45.35 | 45.43   | 45.83 | 45.75 | 46.15 | 46.71 | 50.28 | 53.93 |  |
| 2027 | 52.12                                   | 50.39 | 47.25 | 44.36 | 44.33 | 44.39   | 44.76 | 44.67 | 45.07 | 45.65 | 50.55 | 53.81 |  |
| 2028 | 51.26                                   | 49.65 | 46.01 | 43.55 | 43.47 | 43.53   | 43.74 | 43.80 | 44.03 | 44.74 | 52.72 | 55.74 |  |
| 2029 | 57.18                                   | 56.42 | 52.49 | 49.24 | 49.28 | 49.20   | 49.74 | 49.84 | 50.10 | 50.70 | 56.41 | 60.00 |  |
| 2030 | 60.80                                   | 57.33 | 52.29 | 48.03 | 47.77 | 47.80   | 48.31 | 48.40 | 48.66 | 49.51 | 58.25 | 62.03 |  |
| 2031 | 62.48                                   | 58.36 | 54.09 | 50.30 | 50.44 | 50.44   | 51.25 | 51.35 | 51.63 | 52.27 | 58.90 | 62.31 |  |
| 2032 | 63.69                                   | 59.49 | 55.14 | 51.27 | 51.42 | 51.42   | 52.25 | 52.35 | 52.63 | 53.28 | 60.03 | 63.52 |  |
| 2033 | 64.98                                   | 60.71 | 56.27 | 52.33 | 52.48 | 52.48   | 53.32 | 53.42 | 53.71 | 54.38 | 61.26 | 64.81 |  |
| 2034 | 66.20                                   | 61.84 | 57.32 | 53.30 | 53.45 | 53.45   | 54.31 | 54.42 | 54.71 | 55.39 | 62.41 | 66.02 |  |

Effective for service

on and after September 3, 2014

Deleted: CONTRACTS

Deleted:

Deleted: MARKET BASED PRICE OPTIONS (Continued)

Deleted: Tables 3 and 4 below list applicable rates for Options 2 (Deadband Index Gas Price Option) and 3 (Index Gas Price Option) and 3 (Index Gas Price Option) for the period through 2014. The monthly On- and Off-Peak prices will be applied for all Market Based Price Options.¶

| Feb | Mar | Г | į |
|-----|-----|---|---|

| Year | Jan   | Feb   | Mar   | Apr  |
|------|-------|-------|-------|------|
| 2013 |       |       |       |      |
| 2014 | 39.69 | 37.26 | 33.40 | 34.2 |
| 2015 | 42.51 | 39.92 | 35.78 | 36.6 |
| 2016 | 45.84 | 43.04 | 38.57 | 39.5 |
| 2017 | 49.18 | 46.16 | 41.36 | 42.3 |
| 2018 | 51.97 | 48.79 | 43.72 | 44.8 |
| 2019 | 52.98 | 49.74 | 44.58 | 45.6 |
| 2020 | 54.01 | 50.71 | 45.46 | 46.5 |
| -    |       |       |       |      |

Off-Pea

| Year | Jan   | Feb   | Mar   | Apr  |
|------|-------|-------|-------|------|
| 2013 |       |       |       |      |
| 2014 | 33.48 | 32.34 | 30.53 | 18.8 |
| 2015 | 36.25 | 35.02 | 33.05 | 20.4 |
| 2016 | 38.77 | 37.44 | 35.34 | 21.7 |
| 2017 | 41.60 | 40.17 | 37.91 | 23.3 |
| 2018 | 44.42 | 42.90 | 40.49 | 24.8 |
| 2019 | 45.29 | 43.74 | 41.29 | 25.3 |
| 2020 | 46.18 | 44.61 | 42.11 | 25.9 |

PRICING OPTIONS FOR STANDARD PPA (Continued)

|      |                           |       |       |         | T         | ABLE 3a   |           |        |       |       |       |       |  |
|------|---------------------------|-------|-------|---------|-----------|-----------|-----------|--------|-------|-------|-------|-------|--|
|      |                           |       |       |         | Avo       | ided Cos  | ts        |        |       |       |       |       |  |
|      |                           |       |       | Standar | d Fixed P | rice Opti | on for So | lar QF |       |       |       |       |  |
|      | On-Peak Forecast (\$/MWH) |       |       |         |           |           |           |        |       |       |       |       |  |
| Year | Jan                       | Feb   | Mar   | Apr     | May       | Jun       | Jul       | Aug    | Sep   | Oct   | Nov   | Dec   |  |
| 2014 | 48.13                     | 56.88 | 48.63 | 30.38   | 30.88     | 31.03     | 45.53     | 54.78  | 50.38 | 46.88 | 48.63 | 54.38 |  |
| 2015 | 50.13                     | 47.79 | 42.72 | 36.07   | 30.77     | 28.80     | 44.64     | 50.90  | 45.10 | 43.25 | 44.68 | 48.21 |  |
| 2016 | 49.77                     | 47.46 | 42.45 | 35.88   | 30.65     | 28.70     | 44.34     | 50.53  | 44.80 | 42.97 | 44.38 | 47.87 |  |
| 2017 | 52.43                     | 49.99 | 44.70 | 37.76   | 32.23     | 30.17     | 46.70     | 53.23  | 47.18 | 45.25 | 46.74 | 50.42 |  |
| 2018 | 56.37                     | 53.74 | 48.04 | 40.57   | 34.61     | 32.40     | 50.20     | 57.24  | 50.72 | 48.64 | 50.25 | 54.21 |  |
| 2019 | 59.33                     | 56.56 | 50.56 | 42.69   | 36.42     | 34.09     | 52.83     | 60.24  | 53.38 | 51.19 | 52.88 | 57.06 |  |
| 2020 | 61.12                     | 58.27 | 52.09 | 43.99   | 37.53     | 35.13     | 54.43     | 62.06  | 55.00 | 52.74 | 54.48 | 58.78 |  |
| 2021 | 45.68                     | 45.33 | 43.84 | 41.81   | 41.88     | 41.92     | 41.71     | 41.75  | 41.93 | 42.40 | 46.42 | 48.15 |  |
| 2022 | 48.53                     | 47.91 | 46.21 | 44.19   | 44.34     | 44.39     | 44.59     | 44.60  | 44.80 | 45.30 | 49.96 | 52.18 |  |
| 2023 | 52.21                     | 51.42 | 49.77 | 47.87   | 47.35     | 47.37     | 47.67     | 47.50  | 47.86 | 48.38 | 53.39 | 56.37 |  |
| 2024 | 57.37                     | 56.32 | 53.87 | 51.91   | 51.22     | 51.30     | 51.68     | 51.60  | 52.00 | 52.66 | 55.82 | 59.22 |  |
| 2025 | 59.32                     | 57.10 | 53.72 | 51.74   | 51.72     | 51.80     | 52.18     | 52.10  | 52.47 | 53.15 | 56.17 | 59.70 |  |
| 2026 | 59.31                     | 58.23 | 54.85 | 52.67   | 52.17     | 52.25     | 52.64     | 52.56  | 52.97 | 53.52 | 57.09 | 60.75 |  |
| 2027 | 59.07                     | 57.34 | 54.20 | 51.31   | 51.27     | 51.34     | 51.71     | 51.61  | 52.02 | 52.60 | 57.50 | 60.76 |  |
| 2028 | 58.34                     | 56.73 | 53.09 | 50.63   | 50.55     | 50.61     | 50.82     | 50.88  | 51.11 | 51.82 | 59.80 | 62.82 |  |
| 2029 | 64.40                     | 63.64 | 59.71 | 56.46   | 56.49     | 56.41     | 56.95     | 57.05  | 57.32 | 57.91 | 63.62 | 67.21 |  |
| 2030 | 68.16                     | 64.69 | 59.64 | 55.39   | 55.13     | 55.15     | 55.66     | 55.76  | 56.02 | 56.87 | 65.61 | 69.38 |  |
| 2031 | 69.98                     | 65.86 | 61.59 | 57.80   | 57.94     | 57.94     | 58.76     | 58.86  | 59.13 | 59.77 | 66.40 | 69.81 |  |
| 2032 | 71.31                     | 67.11 | 62.76 | 58.90   | 59.04     | 59.04     | 59.87     | 59.97  | 60.25 | 60.90 | 67.66 | 71.14 |  |
| 2033 | 72.77                     | 68.49 | 64.06 | 60.12   | 60.26     | 60.26     | 61.11     | 61.21  | 61.50 | 62.16 | 69.05 | 72.60 |  |
| 2034 | 74.15                     | 69.79 | 65.27 | 61.25   | 61.40     | 61.40     | 62.26     | 62.37  | 62.66 | 63.34 | 70.36 | 73.97 |  |

Deleted: CONTRACTS

Deleted: MARKET BASED PRICE OPTIONS (Continued)¶

(Continued)

Deleted: Under the Fixed Price Option, the
Company will pay Seller the Off-Peak Avoided
Cost pursuant to Table 2 for: (a) all Net Output
ellivered prior to the Commercial Operation
Date; (b) all Net Output deliveries greater than
Maximum Net Output in any Contract Year; (c)
any generation subject to and as adjusted by the
provisions of Section 4.3 of the Standard
Contract; (d) Net Output delivered in the OffPeak Period; and (e) deliveries above the
nameplate capacity in any hour. The Company
will pay the Seller the On-Peak Avoided Cost
pursuant to Table 1 for all other output. (See
Appendix 1, the Standard Contract for defined
terms.)

MARKET BASED PRICE OPTIONS: 1

MARKET BASED PRICE OPTIONS: . ¶

Market Based Price Options include Option 2,
Deadband Index Gas Price; Option 3, Index Gas
Price; and Option 4, The Intercontinental
Exchange Mid-Columbia Daily on- and off-peak
Electricity Firm Price Index (ICE-Mid-C Firm
Index). The price components for pricing
Options 2 and 3 are defined as follows:¶

¶ On Peak Price:

Deleted: ¶

| Effective for service on and after September 3, 2014 | Deleted: February 20, 2014 |
|--|----------------------------|
|  |                            |
|  |                            |
|  |                            |
|  |                            |
|  |                            |
|  |                            |
|  |                            |
|  |                            |
|  |                            |
|  |                            |
|  |                            |
|  |                            |
|  |                            |
|  |                            |
|  |                            |
|  |                            |
|  |                            |
|  |                            |
|  |                            |
|  |                            |
|  |                            |
|  |                            |

### Sheet No. 201-9

# SCHEDULE 201 (Continued)

PRICING OPTIONS FOR STANDARD PPA (Continued)

| •    |  |       |       |       | T/    | ABLE 3b  |       |       |       |       |       |       |  |
|------|--|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|-------|--|
|      |  |       |       |       | Avo   | ided Cos | s     |       |       |       |       |       |  |
|      | Standard Fixed Price Option for Solar QF |       |       |       |       |          |       |       |       |       |       |       |  |
|      | Off-Peak Forecast (\$/MWH)               |       |       |       |       |          |       |       |       |       |       |       |  |
| Year | Jan                                      | Feb   | Mar   | Apr   | May   | Jun      | Jul   | Aug   | Sep   | Oct   | Nov   | Dec   |  |
| 2014 | 38.13                                    | 51.38 | 42.88 | 15.23 | 9.88  | 9.38     | 21.78 | 37.03 | 40.53 | 39.63 | 41.38 | 47.38 |  |
| 2015 | 43.19                                    | 41.41 | 36.99 | 23.85 | 16.69 | 12.34    | 24.12 | 36.59 | 34.18 | 37.49 | 38.44 | 41.46 |  |
| 2016 | 43.43                                    | 41.65 | 37.23 | 24.08 | 16.92 | 12.57    | 24.35 | 36.83 | 34.42 | 37.73 | 38.68 | 41.70 |  |
| 2017 | 45.56                                    | 43.69 | 39.04 | 25.21 | 17.67 | 13.09    | 25.49 | 38.61 | 36.08 | 39.56 | 40.56 | 43.74 |  |
| 2018 | 48.40                                    | 46.40 | 41.45 | 26.74 | 18.73 | 13.86    | 27.05 | 41.01 | 38.31 | 42.01 | 43.08 | 46.46 |  |
| 2019 | 51.44                                    | 49.32 | 44.06 | 28.40 | 19.87 | 14.69    | 28.72 | 43.58 | 40.71 | 44.65 | 45.79 | 49.38 |  |
| 2020 | 53.92                                    | 51.66 | 46.15 | 31.05 | 22.57 | 17.61    | 32.64 | 46.96 | 43.50 | 46.77 | 48.01 | 51.78 |  |
| 2021 | 43.71                                    | 43.36 | 41.88 | 39.84 | 39.91 | 39.95    | 39.74 | 39.78 | 39.97 | 40.43 | 44.45 | 46.18 |  |
| 2022 | 46.52                                    | 45.90 | 44.20 | 42.18 | 42.33 | 42.38    | 42.58 | 42.60 | 42.80 | 43.29 | 47.95 | 50.18 |  |
| 2023 | 50.16                                    | 49.37 | 47.72 | 45.82 | 45.30 | 45.32    | 45.62 | 45.44 | 45.81 | 46.33 | 51.34 | 54.32 |  |
| 2024 | 55.29                                    | 54.25 | 51.79 | 49.83 | 49.14 | 49.22    | 49.60 | 49.52 | 49.92 | 50.59 | 53.74 | 57.15 |  |
| 2025 | 57.19                                    | 54.98 | 51.60 | 49.62 | 49.59 | 49.67    | 50.06 | 49.98 | 50.35 | 51.02 | 54.04 | 57.58 |  |
| 2026 | 57.15                                    | 56.06 | 52.68 | 50.51 | 50.00 | 50.08    | 50.48 | 50.40 | 50.80 | 51.36 | 54.93 | 58.58 |  |
| 2027 | 56.86                                    | 55.13 | 51.99 | 49.10 | 49.07 | 49.13    | 49.50 | 49.41 | 49.81 | 50.39 | 55.29 | 58.55 |  |
| 2028 | 56.09                                    | 54.48 | 50.84 | 48.38 | 48.30 | 48.36    | 48.57 | 48.63 | 48.86 | 49.57 | 57.55 | 60.57 |  |
| 2029 | 62.10                                    | 61.34 | 57.41 | 54.16 | 54.20 | 54.12    | 54.66 | 54.76 | 55.02 | 55.62 | 61.33 | 64.92 |  |
| 2030 | 65.82                                    | 62.35 | 57.31 | 53.05 | 52.79 | 52.82    | 53.33 | 53.42 | 53.68 | 54.53 | 63.27 | 67.05 |  |
| 2031 | 67.60                                    | 63.48 | 59.21 | 55.42 | 55.56 | 55.56    | 56.37 | 56.47 | 56.75 | 57.39 | 64.02 | 67.43 |  |
| 2032 | 68.90                                    | 64.70 | 60.35 | 56.48 | 56.63 | 56.63    | 57.46 | 57.56 | 57.84 | 58.49 | 65.24 | 68.73 |  |
| 2033 | 70.29                                    | 66.02 | 61.58 | 57.64 | 57.79 | 57.79    | 58.63 | 58.73 | 59.02 | 59.69 | 66.57 | 70.12 |  |
| 2034 | 71.62                                    | 67.26 | 62.74 | 58.72 | 58.87 | 58.87    | 59.73 | 59.84 | 60.13 | 60.81 | 67.83 | 71.44 |  |

Effective for service

on and after Se

# Deleted: CONTRACTS

Deleted: MARKET BASED PRICE OPTIONS (Continued)¶

#### Deleted: Index Gas Price Option¶

Deleted: Index Gas Price Option¶

The Index Gas Price Option is the simple average of the First of Month gas indices for Sumas and AECO trading hubs used in establishing the Avoided Costs. The Sumas Gas Index will be as reported in Platts Inside FERC's Gas Market Report. The AECO Gas Index will be as reported in the Canadian Gas. Price Reporter Natural Gas Market Report (in US dollars).¶

The price paid per MWh will be.¶

The price paid per MWh will be.¶

The price paid per MWh will be:¶

P<sub>Prick</sub> = . GP<sub>M</sub>\*HR/1,000/(1-Losses) +VFG +C¶
P<sub>OH</sub> = . GP<sub>M</sub>\*HR/1,000/(1-Losses) +VFG +C¶
Under the Index Gas Price, the Company will
pay Seller the Off-Peak Prices for: (a) for all Net
Output delivered prior to the Commercial
Operation Date; (b) all Net Output delivered
Gortract Year; (c) any generation subject to and
as adjusted by the provisions of Section 4.3 of
the Standard Contract; (d) for Net Output
delivered in the Off-Peak Pricric4, and
deliveries above the nameplate capacity in any
hour. All other purchases will be at On-Peak
prices. (See Appendix 1, the Standard Contract
for defined terms.)¶

Portland General Electric Company Sheet No. 201-10 SCHEDULE 201 (Continued) PRICING OPTIONS FOR STANDARD PPA (Continued) Deleted: CONTRACTS Deleted: MARKET BASED PRICE OPTIONS (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 compley 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. Deleted: effective at execution. QFs using any resource type other than wind and solar are assumed to be Base Load QFs., Deleted 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 Comment [MD11]: Changes reflect narrowing the definition as discussed in the workshops. Used CREA's language for PAC as template. Definition below. Commented [g2]: Comment below on definition Company during the Renewable Resource Deficiency Period and retains all other Formatted: Highlight nvironmental Attributes (if any). Comment [MD12]: DODE: "This new paragraph explains the capacity contribution, and mirrors the for the long provided on Sheet 201-4 for the Standard Fixed Price Option." Formatted: Highlight 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 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, outside of PGE's Balancing Authority Area the Seller is paid the wind integration charges in Table 7, in addition to the prices listed in Tables 5a and 5b. Deleted: is off-system Formatted: Highlight Commented [g3]: Same comment as above Sellers with PPAs exceeding 15 years will receive pricing equal to the Mid-C Index Formatted: Highlight Comment [MD13]: ODOE: "This clarifies that RECs are not ceded after the Seller stops receiving deficiency period avoided cost prices." Price and will retain all Environmental Attributes generated by the facility for all years up to five in excess of the initial 15.

Effective for service on and after September 3, 2014 Deleted: February 20, 2014

Sheet No. 201-11

# SCHEDULE 201 (Continued)

PRICING OPTIONS FOR STANDARD PPA (Continued)

Renewable Fixed Price Option (Continued)

|      | TABLE 4a  |        |        |        |          |           |         |        |        |        |        |        |
|------|---|--------|--------|--------|----------|-----------|---------|--------|--------|--------|--------|--------|
|      | Renewable Avoided Costs Renewable Fixed Price Option for Base Load QF |        |        |        |          |           |         |        |        |        |        |        |
|      |   |        |        |        |          |           |         |        |        |        |        |        |
|      |   |        |        | C      | n-Peak F | orecast ( | \$/MWH) |        |        |        |        |        |
| Year | Jan   | Feb    | Mar    | Apr    | May      | Jun       | Jul     | Aug    | Sep    | Oct    | Nov    | Dec    |
| 2014 | 48.13   | 56.88  | 48.63  | 30.38  | 30.88    | 31.03     | 45.53   | 54.78  | 50.38  | 46.88  | 48.63  | 54.38  |
| 2015 | 50.13   | 47.79  | 42.72  | 36.07  | 30.77    | 28.80     | 44.64   | 50.90  | 45.10  | 43.25  | 44.68  | 48.21  |
| 2016 | 49.77   | 47.46  | 42.45  | 35.88  | 30.65    | 28.70     | 44.34   | 50.53  | 44.80  | 42.97  | 44.38  | 47.87  |
| 2017 | 52.43   | 49.99  | 44.70  | 37.76  | 32.23    | 30.17     | 46.70   | 53.23  | 47.18  | 45.25  | 46.74  | 50.42  |
| 2018 | 56.37   | 53.74  | 48.04  | 40.57  | 34.61    | 32.40     | 50.20   | 57.24  | 50.72  | 48.64  | 50.25  | 54.21  |
| 2019 | 59.33   | 56.56  | 50.56  | 42.69  | 36.42    | 34.09     | 52.83   | 60.24  | 53.38  | 51.19  | 52.88  | 57.06  |
| 2020 | 110.96  | 110.94 | 110.27 | 110.67 | 113.50   | 112.71    | 112.43  | 112.33 | 111.19 | 110.33 | 111.07 | 110.17 |
| 2021 | 113.45  | 113.66 | 112.32 | 113.27 | 115.79   | 115.12    | 114.61  | 115.06 | 113.73 | 112.83 | 113.98 | 112.81 |
| 2022 | 115.87  | 115.76 | 114.08 | 115.61 | 118.24   | 117.33    | 116.93  | 116.90 | 115.93 | 115.04 | 116.30 | 115.03 |
| 2023 | 118.52  | 118.14 | 116.39 | 118.22 | 120.38   | 119.73    | 119.43  | 119.10 | 118.36 | 117.33 | 118.85 | 117.87 |
| 2024 | 120.08  | 120.21 | 118.48 | 120.27 | 122.67   | 121.77    | 121.68  | 121.44 | 121.28 | 119.17 | 120.06 | 120.17 |
| 2025 | 122.82  | 123.11 | 121.17 | 123.25 | 126.29   | 125.25    | 124.41  | 124.53 | 123.80 | 121.82 | 122.85 | 122.54 |
| 2026 | 125.83  | 125.53 | 124.24 | 126.17 | 130.11   | 127.03    | 127.04  | 127.39 | 127.14 | 124.44 | 126.06 | 125.22 |
| 2027 | 128.29  | 127.90 | 126.44 | 128.31 | 133.59   | 129.53    | 129.20  | 130.48 | 129.45 | 126.96 | 128.10 | 127.68 |
| 2028 | 130.68  | 129.75 | 127.97 | 130.93 | 135.83   | 131.54    | 132.16  | 132.17 | 131.40 | 129.63 | 130.58 | 129.89 |
| 2029 | 133.40  | 133.19 | 130.84 | 133.83 | 142.67   | 135.11    | 135.17  | 135.18 | 135.22 | 132.25 | 132.97 | 132.87 |
| 2030 | 136.15  | 135.90 | 133.88 | 136.43 | 146.30   | 139.26    | 137.36  | 137.25 | 138.47 | 134.83 | 135.33 | 135.37 |
| 2031 | 138.67  | 138.23 | 136.79 | 139.75 | 149.10   | 143.07    | 139.93  | 140.76 | 140.94 | 137.57 | 138.55 | 138.16 |
| 2032 | 140.80  | 140.35 | 138.89 | 141.90 | 151.40   | 145.27    | 142.07  | 142.92 | 143.11 | 139.68 | 140.67 | 140.28 |
| 2033 | 144.07  | 143.61 | 142.12 | 145.19 | 154.90   | 148.64    | 145.37  | 146.23 | 146.43 | 142.92 | 143.94 | 143.54 |
| 2034 | 147.01  | 146.54 | 145.02 | 148.15 | 158.05   | 151.67    | 148.34  | 149.22 | 149.42 | 145.84 | 146.88 | 146.47 |

Deleted: CONTRACTS

Deleted: Table 5 contains the gas pricing components for Option 1 (Fixed Price Option) and Option 2 (Deadband Index Gas Price Option).¶ 1

Forecasted Gas Pr

| Year | Jan  | Feb  | Mar  | Apr |
|------|------|------|------|-----|
| 2021 | 5.56 | 5.52 | 5.38 | 5.2 |
| 2022 | 5.79 | 5.83 | 5.79 | 5.6 |
| 2023 | 6.64 | 6.67 | 6.71 | 6.5 |
| 2024 | 7.05 | 6.94 | 6.66 | 6.4 |
| 2025 | 6.99 | 6.84 | 6.76 | 6.5 |
| 2026 | 6.99 | 6.87 | 6.78 | 6.5 |
| 2027 | 6.95 | 6.92 | 6.77 | 6.6 |
| 2028 | 6.94 | 6.91 | 6.68 | 6.5 |
| 2029 | 7.07 | 7.06 | 7.04 | 6.8 |
| 2030 | 7.41 | 7.38 | 7.26 | 7.0 |
| 2031 | 7.56 | 7.58 | 7.44 | 7.2 |
| 2032 | 7.70 | 7.72 | 7.58 | 7.3 |
| 2033 | 7.84 | 7.86 | 7.72 | 7.5 |
| 1    |      |      |      |     |

Effective for service

on and after Septemb

Sheet No. 201-12 Deleted: 11

SCHEDULE 201 (Continued)

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

|      | TABLE 4b<br>Renewable Avoided Costs<br>Renewable Fixed Price Ontion for Base Load QF |       |       |          |           |          |          |         |       |       |       |       |
|------|--|-------|-------|----------|-----------|----------|----------|---------|-------|-------|-------|-------|
|      |  |       |       |          |           |          |          |         |       |       |       |       |
|      |  |       | Rer   | ewable F | ixed Pric | e Option | tor Base | Load QF |       |       |       |       |
|      |  |       |       |          |           |          |          |         |       |       |       |       |
| Year | Jan  | Feb   | Mar   | Apr      | May       | Jun      | Jul      | Aug     | Sep   | Oct   | Nov   | Dec   |
| 2014 | 38.13  | 51.38 | 42.88 | 15.23    | 9.88      | 9.38     | 21.78    | 37.03   | 40.53 | 39.63 | 41.38 | 47.38 |
| 2015 | 43.19  | 41.41 | 36.99 | 23.85    | 16.69     | 12.34    | 24.12    | 36.59   | 34.18 | 37.49 | 38.44 | 41.46 |
| 2016 | 43.43  | 41.65 | 37.23 | 24.08    | 16.92     | 12.57    | 24.35    | 36.83   | 34.42 | 37.73 | 38.68 | 41.70 |
| 2017 | 45.56  | 43.69 | 39.04 | 25.21    | 17.67     | 13.09    | 25.49    | 38.61   | 36.08 | 39.56 | 40.56 | 43.74 |
| 2018 | 48.40  | 46.40 | 41.45 | 26.74    | 18.73     | 13.86    | 27.05    | 41.01   | 38.31 | 42.01 | 43.08 | 46.46 |
| 2019 | 51.44  | 49.32 | 44.06 | 28.40    | 19.87     | 14.69    | 28.72    | 43.58   | 40.71 | 44.65 | 45.79 | 49.38 |
| 2020 | 59.57  | 59.79 | 61.16 | 60.06    | 57.06     | 57.27    | 57.53    | 58.56   | 59.35 | 60.44 | 60.26 | 60.65 |
| 2021 | 61.57  | 60.88 | 62.38 | 61.17    | 58.60     | 58.64    | 59.22    | 59.52   | 60.55 | 62.35 | 60.20 | 61.71 |
| 2022 | 62.46  | 62.17 | 64.15 | 62.14    | 59.45     | 59.78    | 61.11    | 60.25   | 61.70 | 63.51 | 61.19 | 62.84 |
| 2023 | 63.29  | 63.33 | 65.41 | 63.80    | 59.88     | 60.91    | 62.14    | 61.65   | 62.79 | 64.80 | 62.12 | 64.11 |
| 2024 | 63.85  | 63.91 | 66.70 | 63.71    | 60.26     | 62.68    | 61.65    | 61.97   | 63.30 | 65.11 | 64.00 | 64.56 |
| 2025 | 65.15  | 65.14 | 68.08 | 64.68    | 60.34     | 63.09    | 62.95    | 63.83   | 63.92 | 66.54 | 66.09 | 65.54 |
| 2026 | 65.53  | 66.33 | 68.47 | 65.19    | 61.03     | 64.01    | 63.86    | 64.48   | 63.86 | 67.45 | 66.33 | 66.37 |
| 2027 | 67.71  | 67.69 | 69.31 | 66.85    | 60.98     | 65.19    | 65.48    | 64.93   | 65.29 | 69.40 | 67.14 | 67.59 |
| 2028 | 68.66  | 69.20 | 71.42 | 68.49    | 60.54     | 66.63    | 66.77    | 65.60   | 66.82 | 69.99 | 67.94 | 69.66 |
| 2029 | 69.19  | 69.91 | 72.73 | 69.82    | 56.36     | 66.99    | 67.94    | 66.73   | 68.08 | 70.78 | 69.92 | 70.87 |
| 2030 | 70.29  | 71.09 | 74.22 | 70.05    | 56.23     | 67.61    | 68.62    | 68.76   | 68.60 | 72.12 | 71.56 | 72.33 |
| 2031 | 71.80  | 72.85 | 75.23 | 70.47    | 57.37     | 67.52    | 70.07    | 70.21   | 68.84 | 73.33 | 73.18 | 72.51 |
| 2032 | 72.99  | 74.06 | 76.48 | 71.64    | 58.32     | 68.64    | 71.23    | 71.37   | 69.98 | 74.54 | 74.39 | 73.71 |
| 2033 | 74.59  | 75.68 | 78.16 | 73.20    | 59.59     | 70.14    | 72.79    | 72.94   | 71.51 | 76.17 | 76.02 | 75.32 |
| 2034 | 76.04  | 77.15 | 79.67 | 74.62    | 60.75     | 71.50    | 74.20    | 74.35   | 72.90 | 77.65 | 77.49 | 76.79 |

Deleted: CONTRACTS

Deleted: Table 6 contains the Variable O&M and Fixed Costs that are derived from a natural gas-fired CCCT.¶

|      | ,    | Variable | O&M, Fix | ced Co |
|------|------|----------|----------|--------|
|      |      |          |          |        |
| Year | Jan  | Feb      | Mar      | Apr    |
| 2021 | 0.19 | 0.19     | 0.18     | 0.1    |
| 2022 | 0.18 | 0.18     | 0.16     | 0.1    |
| 2023 | 0.19 | 0.19     | 0.19     | 0.1    |
| 2024 | 0.28 | 0.28     | 0.29     | 0.2    |
| 2025 | 0.32 | 0.31     | 0.27     | 0.2    |
| 2026 | 0.31 | 0.29     | 0.28     | 0.2    |
| 2027 | 0.29 | 0.27     | 0.26     | 0.2    |
| 2028 | 0.27 | 0.26     | 0.24     | 0.2    |
| 2029 | 0.25 | 0.25     | 0.22     | 0.2    |
| 2030 | 0.27 | 0.27     | 0.26     | 0.2    |
| 2031 | 0.28 | 0.28     | 0.26     | 0.2    |
| 2032 | 0.29 | 0.29     | 0.27     | 0.2    |
| 2033 | 0.29 | 0.29     | 0.28     | 0.2    |
| Ī    |      |          |          |        |

Effective for service

on and after September 3, 2014

Sheet No. 201-13

Deleted: 12

# SCHEDULE 201 (Continued)

PRICING OPTIONS FOR STANDARD PPA (Continued)

Renewable Fixed Price Option (Continued)

|      | TABLE 5a                |       |       |         |            |           |           |       |       |       |       |       |
|------|-------------------------|-------|-------|---------|------------|-----------|-----------|-------|-------|-------|-------|-------|
|      | Renewable Avoided Costs |       |       |         |            |           |           |       |       |       |       |       |
|      |                         |       | F     | Renewab | le Fixed P | rice Opti | on for Wi | nd QF |       |       |       |       |
|      |                         |       |       |         | n-Peak F   | orecast ( | \$/MWH)   |       |       |       |       |       |
|      |                         |       |       |         |            |           |           |       |       |       |       |       |
|      |                         |       |       |         |            |           |           |       |       |       |       |       |
| 2014 | 44.43                   | 53.18 | 44.93 | 26.68   | 27.18      | 27.33     | 41.83     | 51.08 | 46.68 | 43.18 | 44.93 | 50.68 |
| 2015 | 46.36                   | 44.02 | 38.95 | 32.30   | 27.00      | 25.03     | 40.87     | 47.13 | 41.33 | 39.48 | 40.91 | 44.44 |
| 2016 | 45.93                   | 43.62 | 38.61 | 32.04   | 26.81      | 24.86     | 40.50     | 46.69 | 40.96 | 39.13 | 40.54 | 44.03 |
| 2017 | 48.52                   | 46.08 | 40.79 | 33.85   | 28.32      | 26.26     | 42.79     | 49.32 | 43.27 | 41.34 | 42.83 | 46.51 |
| 2018 | 52.38                   | 49.75 | 44.05 | 36.58   | 30.62      | 28.41     | 46.21     | 53.25 | 46.73 | 44.65 | 46.26 | 50.22 |
| 2019 | 55.26                   | 52.49 | 46.49 | 38.62   | 32.35      | 30.02     | 48.76     | 56.17 | 49.31 | 47.12 | 48.81 | 52.99 |
| 2020 | 70.23                   | 70.21 | 69.54 | 69.95   | 72.77      | 71.98     | 71.70     | 71.60 | 70.46 | 69.60 | 70.34 | 69.44 |
| 2021 | 71.82                   | 72.02 | 70.69 | 71.64   | 74.15      | 73.48     | 72.97     | 73.43 | 72.09 | 71.20 | 72.35 | 71.18 |
| 2022 | 73.43                   | 73.32 | 71.64 | 73.18   | 75.80      | 74.90     | 74.50     | 74.47 | 73.49 | 72.61 | 73.87 | 72.59 |
| 2023 | 75.14                   | 74.76 | 73.01 | 74.84   | 77.01      | 76.36     | 76.05     | 75.73 | 74.98 | 73.96 | 75.47 | 74.50 |
| 2024 | 76.13                   | 76.26 | 74.53 | 76.31   | 78.72      | 77.82     | 77.72     | 77.49 | 77.33 | 75.22 | 76.10 | 76.21 |
| 2025 | 77.89                   | 78.17 | 76.24 | 78.31   | 81.36      | 80.32     | 79.47     | 79.59 | 78.87 | 76.88 | 77.91 | 77.60 |
| 2026 | 80.02                   | 79.73 | 78.44 | 80.37   | 84.30      | 81.23     | 81.23     | 81.59 | 81.34 | 78.64 | 80.25 | 79.42 |
| 2027 | 81.60                   | 81.21 | 79.75 | 81.62   | 86.90      | 82.84     | 82.51     | 83.79 | 82.77 | 80.27 | 81.41 | 80.99 |
| 2028 | 83.09                   | 82.17 | 80.38 | 83.34   | 88.24      | 83.95     | 84.57     | 84.59 | 83.81 | 82.04 | 82.99 | 82.30 |
| 2029 | 84.89                   | 84.68 | 82.34 | 85.32   | 94.16      | 86.60     | 86.67     | 86.67 | 86.71 | 83.74 | 84.46 | 84.36 |
| 2030 | 86.71                   | 86.45 | 84.43 | 86.99   | 96.86      | 89.81     | 87.91     | 87.81 | 89.03 | 85.38 | 85.88 | 85.92 |
| 2031 | 88.27                   | 87.83 | 86.39 | 89.35   | 98.69      | 92.67     | 89.52     | 90.35 | 90.54 | 87.17 | 88.14 | 87.76 |
| 2032 | 89.73                   | 89.28 | 87.82 | 90.83   | 100.32     | 94.20     | 91.00     | 91.85 | 92.04 | 88.61 | 89.60 | 89.21 |
| 2033 | 91.71                   | 91.25 | 89.76 | 92.83   | 102.54     | 96.28     | 93.01     | 93.88 | 94.07 | 90.56 | 91.58 | 91.18 |
| 2034 | 93.48                   | 93.01 | 91.49 | 94.62   | 104.52     | 98.14     | 94.81     | 95.69 | 95.89 | 92.31 | 93.35 | 92.94 |

Deleted: CONTRACTS

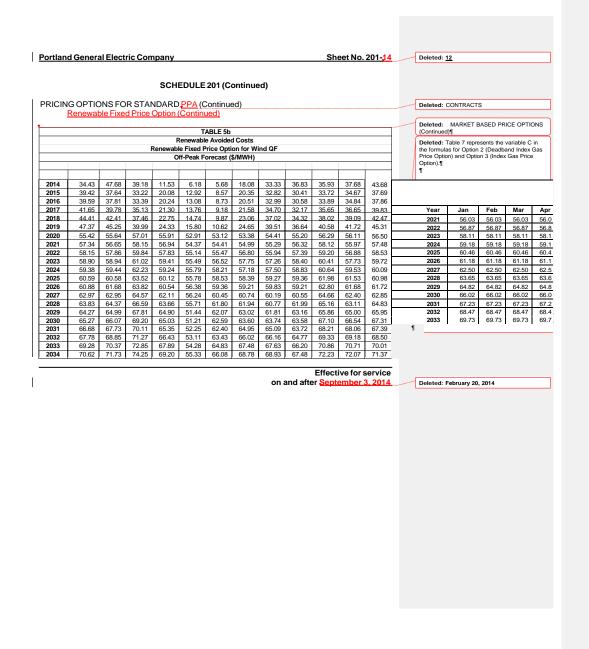
Deleted: MARKET BASED PRICE OPTIONS (Continued)¶

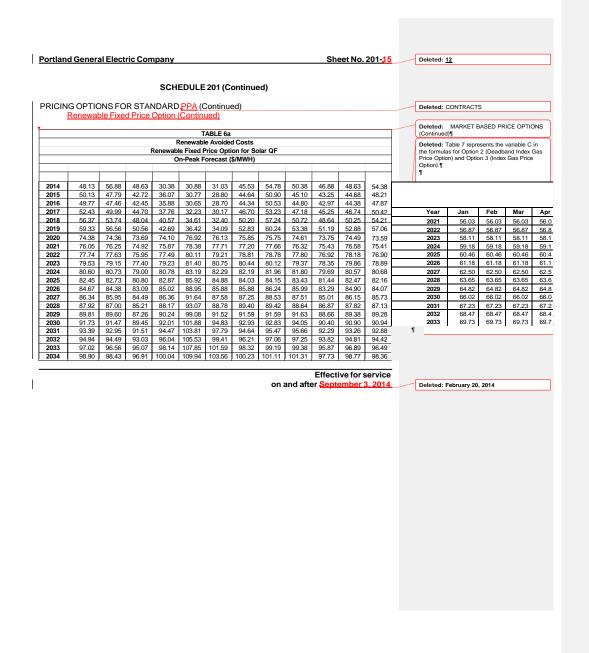
Deleted: Table 7 represents the variable C in the formulas for Option 2 (Deadband Index Gas Price Option) and Option 3 (Index Gas Price Option).¶

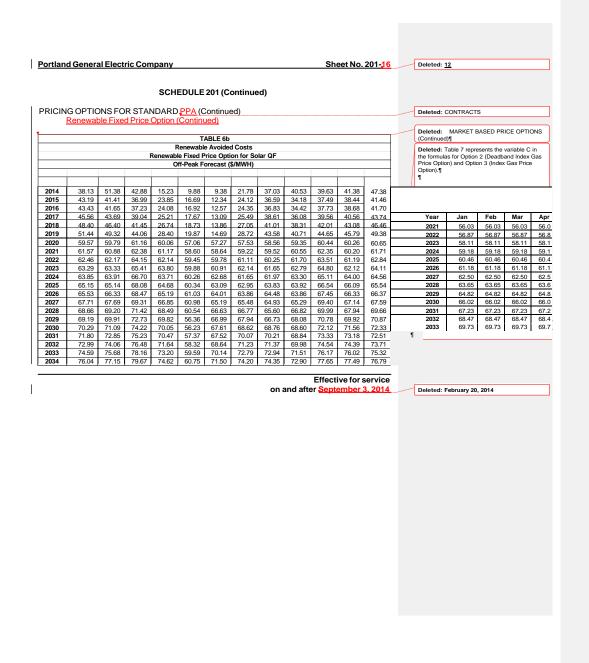
| Year | Jan   | Feb   | Mar   | Apr  |
|------|-------|-------|-------|------|
| 2021 | 56.03 | 56.03 | 56.03 | 56.0 |
| 2022 | 56.87 | 56.87 | 56.87 | 56.8 |
| 2023 | 58.11 | 58.11 | 58.11 | 58.1 |
| 2024 | 59.18 | 59.18 | 59.18 | 59.1 |
| 2025 | 60.46 | 60.46 | 60.46 | 60.4 |
| 2026 | 61.18 | 61.18 | 61.18 | 61.1 |
| 2027 | 62.50 | 62.50 | 62.50 | 62.5 |
| 2028 | 63.65 | 63.65 | 63.65 | 63.6 |
| 2029 | 64.82 | 64.82 | 64.82 | 64.8 |
| 2030 | 66.02 | 66.02 | 66.02 | 66.0 |
| 2031 | 67.23 | 67.23 | 67.23 | 67.2 |
| 2032 | 68.47 | 68.47 | 68.47 | 68.4 |
| 2033 | 69.73 | 69.73 | 69.73 | 69.7 |
| Ī    |       |       |       |      |

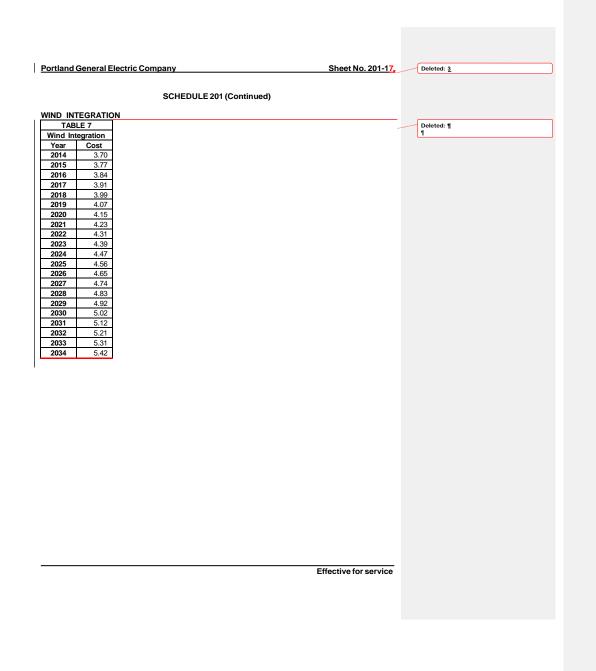
Effective for service

on and after September 3, 2014









on and after September 3, 2014 Deleted: February 20, 2014

Sheet No. 201-18,

Deleted: 3

### SCHEDULE 201 (Continued)

#### 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:

- 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.
- 2) 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.

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.

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.

Comment [MD14]: REC took issue when this was originally stricken. PGE proposes striking this as a part of Phase 2.

Deleted: Contract

Deleted: his/her

Effective for service on and after <u>September 3, 2014</u> Deleted: February 20, 2014

Sheet No. 201-19,

Deleted: 4

### SCHEDULE 201 (Continued)

# 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 <u>pricing under</u> the Standard <u>PPA</u> if the nameplate capacity of the QF, together with any other electric generating facility using the same motive force, owned or controlled by the <u>Same Person(s)</u> or <u>Affiliated Person(s)</u>, and located at the <u>Same Site</u>, does not exceed 10 MW.

### 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 <a href="mailto:pricing under">pricing under</a> the Standard <a href="mailto:PPA">PPA</a> 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 <a href="mailto:pricing under">pricing under</a> the Standard <a href="mailto:PPA">PPA</a> is sought.

# **Definition of Shared Interconnection and Infrastructure**

QFs otherwise meeting the above-described separate ownership test and thereby qualified for entitlement to <a href="mailto:pricing under">pricing under</a>, the Standard <a href="ppa">PPA</a>, 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 <a href="pricing under">pricing under</a> the Standard <a href="ppa">PPA</a> so long as the use of the shared interconnection complies with the interconnecting utility's safety and reliability standards, interconnection <a href="agreement requirements and Prudent Electrical Practices as that term is defined in the interconnecting utility's approved Standard <a href="ppa">PPA</a>.

# OTHER DEFINITIONS

Mid-C Index Price

Deleted: INTERCONNECTION REQUIREMENTS (Continued)¶

Comment [MD15]: Clarifies potential confusion around "Standard Fixed Price Option" and "Standard Prices in the Standard PPA"

# Deleted: STANDARD RATES¶ AND

Deleted: CONTRACT

Deleted: standard rates and

Deleted: Contract

Deleted: s

5 . . . .

Deleted: p

Deleted: s

Deleted: s

Deleted: p

Deleted: a

Deleted: s

Deleted: p

Deleted: a

Deleted: p

Comment [MD16]: Same as PAC's definition from their settlement

Deleted: s

eleted: a

Deleted: p

Deleted: standard rates and

Deleted: Contract
Deleted: standard rates and

Deleted: standard rates and

Deleted: contract

Deleted: standard rates and

Deleted: Contract

Deleted: standard rates and

Deleted: Standard rates

Deleted: contract

Deleted: Contract

Comment [MD17]: Clarifies that Mid-C Index price is the average and NOT the high or low. As used in this schedule, the daily Mid-C Index Price shall be the Day Ahead Intercontinental Exchange ("ICE") resolved 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.

Effective for service on and after September 3, 2014

Deleted: February 20, 2014

Sheet No. 201-20, Deleted: 15

# SCHEDULE 201 (Concluded)

# OTHER DEFINITIONS (Continued) "Definition of RPS Attributes

ule, RPS Attributes means (1) the Environmental Attributes associated with all Net Output, together with (2) all WREGIS Certificates; and (3) the Green Tag Reporting Rights associated with such energy, Environmental Attributes and WREGIS Certificates, however commercially transferred or traded under any or other product names, such as "Renewable Energy Credits," "Green-e Certified", or otherwise, One (1) Green Tag represents the Environmental Attributes made available by the generation of one (1) MWh of energy from the Facility. Provided however, that "Green Tags" 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 current or future credits, benefits, emissions reductions, environmental air quality credits, emissions reduction credits, offsets and allowances, howsoever entitled, resulting from the avoidance of the emission of any gas, chemical or other substance attributable to the Facility during the Term. or otherwise attributable to the generation, purchase, sale or use of energy from or by the Facility during the Term, including without limitation any of the same arising out of legislation or regulation concerned with oxides of nitrogen, sulfur or carbon, with particulate matter, soot or mercury, or implementing the United Nations Framework Convention on Climate Change (the "UNFCCC") or the Kyoto Protocol to the UNFCCC or crediting "early action" emissions reduction, or laws or regulations involving or administered by the Clean Air Markets Division of the Environmental Protection Agency or successor administrator, or any State or federal entity given jurisdiction over a program involving transferability of Environmental Attributes including the Oregon Renewable Portfolio Standards, and any Green Tag Reporting Rights to such Environmental Attributes.

# **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

is the period from the current year through 2019.

# **Definition of Renewable Resource Deficiency Period**

This is the period from 2020 through 2034.

# 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. Disputes may be presented to the Commission for resolution.

SPECIAL CONDITIONS

Deleted: ¶
DEFINITION OF A SMALL COGENERATION DEFINITION OF A SMALL COGENERA
FACILITY OR SMALL POWER¶
PRODUCTION FACILITY ELIGIBLE TO
RECEIVE THE STANDARD RATES¶ AND STANDARD CONTRACT (Continued)¶

Commented [q5]: This is from the PacifiCorp settlement definition of "Green Tags". We think it is easiest to just use the language in PacifiCorp's PPA and schedule 37 since it was thoroughly vetted. If not, we at request at a minimum the inclusion of the last sentence in this revised definition which was missing from PGE's proposed revision and is necessary to clarify that carbon offsets at a dairy digester or landfill gas plant are retained by the seller during the deficiency period.

Formatted: Highlight Formatted: Highlight Formatted: Highlight

Deleted: RPS Attr

Deleted: ¶

**Deleted: Dispute Resolution** 

Deleted: standard rates and Deleted: Contract

Deleted: Any d

**Deleted:** concerning a QF's entitlement to the standard rates and Standard Contract will

| 1. | Delivery of energy by Seller will be at a voltage, phase, frequency, and power factor as |
|----|--|
|    | specified by the Company.  |

- 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.
- 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.

Effective for service on and after September 3, 2014

Deleted: Contracts

Deleted: negotiated

**Deleted:** if the 1978 Public Utility Regulatory Policies Act (PURPA) is repealed

|  | Deleted: CONTRACT   |
|--|---|
| STANDARD RENEWABLE IN-SYSTEM NON-VARIABLE POWER PURCHASE   | Deleted. CONTRACT   |
| AGREEMENT  |   |
| THIS AGREEMENT, entered into this day, 20 is between ("Sceller") and Portland General Electric   | Deleted: 200  |
| Company ("PGE") (hereinafter each a "Party" or collectively, "Parties").   |   |
| RECITALS   |   |
| Seller intends to construct, own, operate and maintain a facility for the generation of electric power located in County, with a Nameplate Capacity Rating of 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 1.22, below, from the Facility in accordance with the terms and conditions of this Agreement.                                   | Deleted: 19   |
| 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. "Annual Minimum Net Output" means the sum of each Monthly Minimum   |   |
| Net Output in a Contract Year.   | Comment [A1]: Cleanup to address having different minimum monthly net output requirements   |
| 1.2. "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.                    | based on seasonality, etc. set by QF.   |
| 1.3. "Billing Period" means a period between PGE's readings of its power purchase billing meter at the Facility in the normal course of PGE's business. Such periods typically vary and may not coincide with calendar months.     |   |
| 1.4. "Cash Escrow" means an agreement by two parties to place money into the custody of a third party for delivery to a grantee only after the fulfillment of the conditions specified.  | Deleted: <#>"Capacity Value" has the meaning provided for in the Tariff (as defined below). |
|  |   |
| B-1  |   |

1.5. "Commercial Operation Date" means the date that the Facility is deemed by PGE to be fully operational and reliable. PGE may, at its discretion, require, among other things, that all of the following events have occurred:

1.5.1. (facilities with nameplate under 500 kW exempt from following requirement) PGE has received a certificate addressed to PGE from a Licensed Professional Engineer ("LPE") acceptable to PGE in its reasonable judgment stating that the Facility is able to generate electric power reliably in 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);

1.5.2. <u>(facilities with nameplate under 500 kW exempt from following requirement)</u> Start-Up Testing of the Facility has been completed in accordance with Section 1,32;

1.5.3. (facilities with nameplate under 500 kW exempt from following requirement) After PGE has received notice of completion of Start-Up Testing, PGE has received a certificate addressed to PGE from an LPE stating that the Facility has operated for testing purposes under this Agreement 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 or any subsequent testing period, the Facility shall promptly start a new Test Period and provide PGE forty-eight (48) hours written notice prior to the start of such testing period.

1.5.4. (facilities with nameplate under 500 kW exempt from following requirement) PGE has received a certificate addressed to PGE from an LPE stating that in accordance with the Generation Interconnection Agreement, all required interconnection facilities have been constructed, all required interconnection tests have been completed; and the Facility is physically interconnected with PGE's electric system.

1.5.5. (facilities with nameplate under 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;

 "Contract Price" means the applicable price, including on-peak and offpeak prices, as specified in the Schedule.

1.7. "Contract Month" means each calendar month of each Contract Year.

1.8. "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.

Deleted: which shall

Deleted: 5

Deleted: 27

Deleted:

Deleted: as selected by Seller in Section 5

**Deleted:** at 00:00 hours on January 1 and ending on 24:00 hours on December 31 falling at least partially in

**Deleted:** of this Agreement.

Comment [A2]: Changes to be consistent with other agreements. Ties requirements for minimum delivery to commercial operation, rather than start of the contract.

- 1.9. "Effective Date" has the meaning set forth in Section 2.1.
- 1.10. "Environmental Attributes" means any and all current or future credits, benefits, emissions reductions, environmental air quality credits, emissions reduction credits, offsets and allowances, howsoever entitled, resulting from the avoidance of the emission of any gas, chemical or other substance attributable to the Facility during the Term, or otherwise attributable to the generation, purchase, sale or use of energy from or by the Facility during the Term, including without limitation any of the same arising out of legislation or regulation concerned with oxides of nitrogen, sulfur or carbon, with particulate matter, soot or mercury, or implementing the United Nations Framework Convention on Climate Change (the "UNFCCC") or the Kyoto Protocol to the UNFCCC or crediting "early action" emissions reduction, or laws or regulations involving or administered by the Clean Air Markets Division of the Environmental Protection Agency or successor administrator, or any State or federal entity given jurisdiction over a program involving transferability of Environmental Attributes, including the Oregon Renewable Portfolio Standards, and any Green Tag Reporting Rights to such Environmental Attributes.
  - 1.11. "Facility" has the meaning set forth in the Recitals.
- 1.12. "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 at the 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)
- 1.13. "Generation Interconnection Agreement" means the generation interconnection agreement to be entered into separately between Seller and PGE, providing for the construction, operation, and maintenance of interconnection facilities required to accommodate deliveries of Seller's Net Output.
- 1.14. "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.
- 1.15. "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

Deleted: Receipt

Deleted: PGE's

Commented [g1]: This is a material change beyond the scope of Order 14-058 but CREA would be willing to agree with out other edits. appropriate engineering discipline for the required certification being made and be acceptable to PGE in its reasonable judgment.

1.16. Lost Energy Value means for a Contract Month: zero, unless the Contract Month's Net Output is less than the Monthly Minimum Net Output and the Contract Month's mean ime-weighted average of the Mid-C Index Price for On-Peak Hours, and Off-Peak Hours is greater than the the month's time-weighted average of the Contract Price for On-Peak Hours and Off-Peak Hours, in which case Lost Energy Value equals: (Monthly Minimum Net Output - Net Output for the Contract Month) X (the lower of the month's time-weighted average of the mean Contract Price for On-Peak Hours and Off-Peak Hours mean Mid-C Index Price month's time-weighted average of Contract Price for On-Peak Hours and Off-Peak Hours mean Contract Price for On-Peak Hours and Off-Peak Hours mean Contract Price for On-Peak Hours and Off-Peak Hours mean Contract Price). The time-weighted average in this section will reflect the relative proportions of On Peak Hours and Off-Peak Hours in each day.

1.17. "Mid-C Index Price" means the Day Ahead Intercontinental Exchange ("ICE") Index price for the bilateral OTC market for energy at the Mid-C 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.

1.18. "Mid-Columbia" means an area which includes points at any of the switchyards associated with the following four hydro projects: Rocky Reach, Rock Island, Wanapum and Priest Rapids. These switchyards include: Rocky Reach, Rock Island, Wanapum, McKenzie, Valhalla, Columbia, Midway and Vantage. Mid-Columbia shall also include points in the "Northwest Hub," as defined by Bonneville Power Administration. For scheduling purposes, the footprint described above shall dictate the delivery point name for the then current Western Electricity Coordinating Council ("WECC") scheduling protocols. If the footprint changes during the Term, a mutually agreed upon footprint that describes an area containing the most liquidity for trading purposes shall apply.

1.19. "Monthly Minim um Net Ou tput" shall have the meaning provided in tion 4.2 of this Agreement.

1.20. "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.

1.21. "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.

1.22. "Net Output" means all energy expressed in kWhs produced by the Facility, less station and other onsite use and less transformation and transmission losses. .

Deleted: Ye

Deleted: Intercontinental Exchange

Deleted:

Deleted: Mean Intercontinental Exchange

Deleted:

Comment [A3]: Providing the link for easy reference. We also added "average" as discussed in the last workshop.

1.23. "Off-Peak Hours" has the meaning provided in the Schedule. Commented [g2]: We have serious concerns with use of the term "mean" – which is the mid-point, not the average of the index prices in a given period. Also, there are issues regarding calculating and properly accounting for the fact that there are 8 light load hours and 16 heavy load hours in most days, so a simple average is also not accurate if the goal is to calculate a monthly contract and index rate that will apply to all hours in a given month. This type of ambiguity has led to disputes in Idaho that we'd like to avoid in the future. We've proposed edits that should avoid disputes, and are consistent with the recent Idaho Power Advice filing that was made to resolve disputes Idaho Power had encountered, —Idaho Power's Oregon filing contains a complicated algebraic formula but our proposed uses explanatory language consistent with PGE's existing contract.

Formatted: Highlight

**Commented [g3]:** Edit to clarify that we are relying on the index prices and not some recalculation of raw data that the index

might provide

Formatted: Highlight

C-1

1.24. "On-Peak Hours" has the meaning provided in the Schedule.

**Deleted:** Net Output does not include any environmental attributes

Deleted: Tariff

Deleted: Tariff

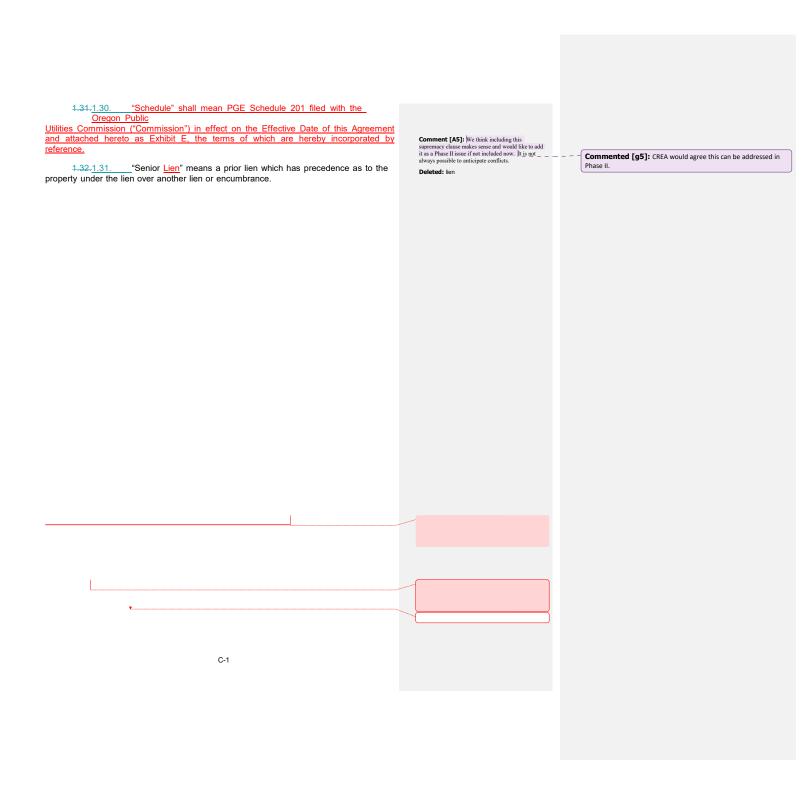
- 1.25. "Point of Delivery" means the high side of the generation step up transformer(s) located at the point of interconnection between the Facility and PGE's distribution or transmission system, as specified in the Generation Interconnection Agreement.
- 1.26. "Prime Rate" means the publicly announced 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.
- 1.27. "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.
- 1.28. "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.

1.29. "RPS Attributes" means (1) the Environmental Attributes associated with all Net Output, together with (2) all WREGIS Certificates; and (3) the Green Tag Reporting Rights associated with such energy, Environmental Attributes and WREGIS Certificates, however commercially transferred or traded under any or other product names, such as "Renewable Energy Credits." "Green-e Certified", or otherwise. One (1) Green Tag represents the Environmental Attributes made available by the generation of one (1) MWh of energy from the Facility. Provided however, that "Green Tags" 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 all attributes related to the Net Output generated by the Facility that are required in order to provide PGE with—"qualifying electricity," as-

1.30.1.29. 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.

Commented [g4]: This is from the PacifiCorp settlement definition of "Green Tags". We think it is easiest to just the language in PacifiCorp's PPA and schedule 37 since it was thoroughly vetted. If not, we at minimum request the inclusion of the last sentence in this revised definition which was missing from PGE's proposed revision and is necessary to clarify that carbon offsets at a dairy digester or landfill gas plant are retained by the seller during the deficiency period.

Comment [A4]: New definition to reflect that utility only gets attributes related to RPS during contract years as specified in schedule. Used Greg's language for Pacificorp as template



|  |  | Formatted                                    | [[1]  |
|--|--|--|-------|
|  |  | Commented [g6]: Consistent with other PGE co |       |
|  |  | Formatted                                    | [2]   |
|  |  | Formatted                                    | [4]   |
|  |  | Formatted                                    | [ [5] |
| 4.33.1.32. "Start-Up Testing" means the completion of applicable required  |  | Commented [g7]: In the proposed language we  |       |
| factory and start-up tests as set forth in Exhibit D.  |  | Formatted                                    | [[7]  |
| 1.34,1.33. "Step-in Rights" means the right of one party to assume an  | Deleted: rights  | Formatted                                    | [8]   |
| intervening position to satisfy all terms of an agreement in the event the other party fails   |  | Formatted                                    | [9]   |
| to perform its obligations under the agreement.  |  | Formatted                                    | [10]  |
| 1.35.1.34. "Term" shall mean the period beginning on the Effective Date  | Deleted: <#>"Tariff" shall mean PGE rate<br>Schedule 201 filed with the Oregon Public            | Formatted                                    | [[11] |
| and ending on the Termination Date.  | Utilities Commission in effect on the Effective<br>Date of this Agreement and attached hereto as | Formatted                                    | [12]  |
| 1.36.1.35. "Test Period" shall mean a period of sixty (60) days or a   | Exhibit E.¶  | Formatted                                    | [13]  |
| commercially reasonable period determined by the Seller.   |  | Formatted                                    | [14]  |
| 1.37.1.36. References to Recitals, Sections, and Exhibits are to be the  |  | Formatted                                    | [15]  |
| recitals, sections and exhibits of this Agreement.   |  | Formatted                                    | [16]  |
| SECTION 2: TERM; COMMERCIAL OPERATION DATE   | Deleted: SECTION   | Formatted                                    | [17]  |
|  |  | Formatted                                    | [18]  |
| 2.1 This Agreement shall become effective upon execution by both Parties ("Effective Date").   |  | Formatted                                    | [19]  |
| (Ellective Date ).   |  | Formatted                                    | [20]  |
| 2.2 Time is of the essence of this Agreement, and Seller's ability to meet   |  | Formatted                                    | [21]  |
| certain requirements prior to the Commercial Operation Date and to complete all requirements to establish the Commercial Operation Date is critically important. |  | Formatted                                    | [22]  |
| Therefore,   |  | Formatted                                    | [23]  |
| 2.2.1 By [date to be determined by the Seller Shall begin  |  | Formatted                                    | [24]  |
| 2.2.1 By[date to be determined by the Seller] Seller shall begin initial deliveries of Net Output; and   |  | Formatted                                    | [25]  |
|  | į,   | Formatted                                    | [26]  |
| 2.2.2 By[date to be determined by the Seller] Seller shall have completed all requirements under Section 1.4_and shall have established the                      | Deleted: 5   | Formatted                                    | [27]  |
| Commercial Operation Date.   |  | Formatted                                    | [28]  |
|  | #  | Formatted                                    | [29]  |
| 2.2.3 In the event Seller is unable to meet the requirements of Sections 2.2.1 and 2.2.2. If PGE is resource deficient (as defined by the Commission) PGE may    | <b>4</b>   | Formatted                                    | [30]  |
| terminate this agreement in accordance with Section 9. Otherwise, PGE may not  |  | Formatted                                    | [31]  |
| terminate, but -Seller shall pay damages equal to the Lost Energy Value for delay  | Deleted: account for any operational delay   | Formatted                                    | [32]  |
| beyond the date specified in Section 2.2.3. In calculating the Lost Energy Value in this section, the Monthly Minimum Net Output shall be                        |  | Formatted                                    | [33]  |
| reduced pro rata if the date specified in Section 2.2.2 falls on a   |  | Formatted                                    | [34]  |
| day other than the first date of the month. In calculating the Lost  |  | Formatted                                    | [35]  |
| Energy Value for use in this section, the Monthly Minimum Net Output shall be prorated if necessary when applied to the period of time between the Commercial    |  | Formatted                                    | [36]  |
| Operation Date and the date specified in 2.2.1,  |  | Formatted                                    | [37]  |
| <u>2.2.3</u>   |  | Formatted                                    | [38]  |
| 2.3 This Agreement shall terminate on, [date to be chosen by Sellen, or the date the Agreement is terminated in accordance with Section 9 or                     | Deleted: up to 20 years from the Effective   | Formatted                                    | [39]  |
| 11.2, whichever is earlier ("Termination Date").   | Date,  | Formatted                                    | [40]  |
|  | Deleted: 10  | Formatted                                    | [41]  |
| C-1  | Deleted: 12  |  |       |
|  |  |  |       |

#### SECTION 3: REPRESENTATIONS AND WARRANTIES

3.1 Seller and PGE represent, covenant, and warrant as follows:

| 3.1.1 | Seller warrants it is a_ | duly organized | under the | laws of |
|-------|--------------------------|----------------|-----------|---------|
|       | <del>-</del>             |                |           |         |

- 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 forceclose 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 kW.
- 3.1.9 Seller estimates that the average annual Net Output to be delivered by the Facility to PGE is\_\_\_\_\_kilowatt-hours ("kWh"), which amount PGE will include in its resource planning.
- 3.1.10 Seller will deliver from the Facility to PGE at the Point of Delivery Net Output not to exceed a maximum of kWh of Net Output during each Contract Year ("Maximum Net Output").

C-1

- 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.
- 3.1.14Seller warrants that it will comply with all requirements necessary for all renewable energy credits 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 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 RPS ATTRIBUTES

- 4.1 Commencing on the Effective Date and continuing through the Term of this Agreement, Seller shall sell to PGE the entire Net Output delivered from the Facility at the Point of Delivery. PGE shall pay Seller the Contract Price for all delivered Net Output.
- 4.2 Seller shall deliver to PGE from the Facility for each Contract Year Net Output equal to or greater than the Monthly Annual Minimum Net Output (either (a) if Seller does not select the Alternative Minimum Amount as defined in Exhibit A of his Agreement, seventy-five percent (75%) of its average annual Net Output divided by twelve (12) or (b) if selected by Seller, the Alternative Minimum Amount designated for each month), provided that such each month's Monthly Minimum Net Output that consistutes the Annual Minimum Output shall be reduced on a pro-rata basis for any, periods during a Contract Month(s) that the Facility was prevented from generating electricity for reasons of Force Majeure.
  - 4.3 Seller agrees that if Seller does not deliver the Monthly Annual Minimum

Deleted: 3.1.13

**Deleted:** Contract approved by the Commission at the time this Agreement is

Deleted: Buyer

Deleted: Buyer

Deleted: Buyer

Deleted: Public Utility

Deleted: of Oregon

**Commented [g8]:** This appears to be a change beyond the scope of Order 14-058 but CREA would be willing to agree with out other edits.

Moved (insertion) [1]

**Deleted:** Provided Seller has elected the \_\_\_ Contract Price options in Section 5.1, 5.2, or 5.3

Deleted: a minimum of

Deleted: b)

Deleted: as defined in Exhibit A during

Comment [A6]: Note, can have separate standards for each month set by QF. See also clarifying language in Exhibit A

**Deleted:** Contract Year (hereinafter "Minimum Net Output").

Deleted: Minimum Net Output for the first or last Contract Year during which Commercial Operations begins shall be reduced pro rata to reflect the Commercial Operation Date, and further provided that such

-Deleted: Year - - - -

Moved up [1]: PGE shall pay Seller the Contract Price for all delivered Net Output.

**Deleted:** Provided Seller has elected the Contract Price options in Section 5.1, 5.2, or 5.3

Deleted: Year

Formatted: Font: 9.5 pt, Highlight

Formatted: Font: 9.5 pt, Highlight
Formatted: Font: 9.5 pt, Highlight
Formatted: Font: 9.5 pt, Highlight

**Commented [g9]:** There are actions that PGE must take to make these transfers work, and this language is necessary to acknowledge that PGE has duties here too.

Formatted: Font: 9.5 pt, Highlight

**Commented [g10]:** We don't understand the reason to create a monthly minimum delivery obligation. This is inconsistent with Order No. 06-538 at 21-25 and a similar requirement in Idaho has caused a lot of disputes.

Formatted: Font: 9.5 pt, Highlight
Formatted: Font: 9.5 pt, Highlight
Formatted: Font: 9.5 pt, Highlight

Formatted: Font: 9.5 pt, Highlight

C-1

Net Output each Contract Month Year, PGE will suffer losses equal to the Lost Energy
Value for each Contract Month in the applicable year. As

Formatted: Font: 9.5 pt, Highlight

Commented [g13]: This will include non-"REC" attributes, like

damages for Seller's failure to deliver the Monthly-Annual 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 for each Contract Month in the applicable year is recovered. PGE and Seller shall work together in good faith to establish the period, in monthly amounts not more than 24 months), 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 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 To the extent not otherwise provided in the Generation Interconnection Agreement, all costs associated with the modifications to PGE's interconnection facilities or electric system occasioned by or related to the interconnection of the Facility with PGE's system, or any increase in generating capability of the Facility, or any increase of delivery of Net Dependable Capacity from the Facility, shall be borne by Seller
- 4.6 During the Renewable Resource Deficiency Period as specified in the Schedule Commencing on the Effective Date and centinuing through 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 retains ownership of all other Environmental Attributes (if any). Seller retains ownership of all Environmental Attributes (if any). Seller retains ownership of all Environmental Attributes during the Renewable Resource Sufficiency Period as specified in the Schedule and any period within the Term of this Agreement after completion of the first fifteen (15) years after the Commercial Operation Date. 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. With respect and REGSEnvironmental 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. REGs and PGE shall not report under such program that such Seller-Retained Environmental Attributes. REGs belong to the Seller-Retained Environmental Attributes. REGs belong to the Seller-Retained Environmental Attributes. REGs belong to the Seller-Retained Environmental Attributes.

Deleted: Commented [g11]: This is a material change unrelated to Order 14-058 but CREA would agree to it with the other edits we or under any applicable program as <u>belonging to it any of</u> the Transferred RECs, and Seller shall not report under such program that such Transferred RECs belong to it. SECTIO N 5: OPERA TION AND CONTR OL Commented [g12]: These edits are consistent with the PacifiCorp contract. QFs will need this clarity in the contract if they are going to be able to use the attributes that they retain. Formatted: Font: 9.5 pt, Highlight

C-

Deleted: Environmental Attributes produced with respect to the Facility

**Deleted:** Environmental Attributes

Deleted: ¶
SECTION 5: CONTRACT PRICE¶
SECTION 5: CONTRACT PRICE¶
PGE shall pay Seller for the price options 5.1, 5.2, 5.3 or 5.4, as selected below, pursuant to the Tariff. Seller shall indicate which price option it chooses by marking its choice below with an X. If Seller chooses the option in Section 5.1, it must mark below a single second option from Section 5.2, 5.3, or 5.4 for all Contract Years in excess of 15 until the remainder

Deleted: Term. Except

Deleted: provided herein, Sellers selection is for

Deleted: Term

Comment [A7]: Reflects new narrower RPS Attribute definition for when PGE is getting the attributes and broader Environmental Attributes definition for when QF is retaining.

**Deleted:** be changed during the Term.

Deleted: ¶

#> Fixed Price¶

#> Deadband Index Gas Price¶

#> Index Gas Price¶

#> Mid-C Index Rate Price¶

Deleted: 6

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

 $\underline{5.2}$ Seller agrees to provide sixty (60) days advance written notice of any scheduled maintenance that would require shut down of the Facility for any period of time

5.3If the Facility ceases operation for unscheduled maintenance, Seller immediately shall notify PGE of the necessity of such unscheduled maintenance, the time when such maintenance has occurred or will occur, and the anticipated duration of such maintenance. Seller shall take all reasonable measures and exercise its best efforts to avoid unscheduled maintenance, to limit the duration of such unscheduled maintenance, and to perform unscheduled maintenance during Off-Peak hours.

#### SECTION 6: CREDITWORTHINESS

In the event Seller: a) is unable to represent or warrant as required by Section 3 that it has not been a debtor in any bankruptcy proceeding within the past two (2) years; b) becomes such a debtor during the Term; or c) is not or will not be current on all its financial obligations, Seller shall immediately notify PGE and shall promptly (and in no less than 10 days after notifying PGE) provide default security in an amount reasonably acceptable to PGE in one of the following forms: Senior Lien, Step-in Rights, a Cash Escrow or Letter of Credit. The amount of such default security that shall be acceptable to PGE shall be equal to: (annual On Peak Hours) X (On Peak Price – Off Peak Price) X (Annual 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: METERING

7.1PGE shall design, furnish, install, own, inspect, test, maintain and replace all metering equipment at Seller's cost and as required pursuant to the Generation Interconnection Agreement.

Deleted: 6

Deleted: 7

Deleted: 8

Deleted:

Deleted: 7.2 Metering shall be performed at the location and in a manner consistent with this Agreement and as specified in the Generation Interconnection Agreement. All Net Output purchased hereunder shall be adjusted to account for electrical losses, if any, between the point of metering and the Point of Delivery, so that he purchased amount reflects the net amount of power flowing into PGE's system at the Point of Delivery. 7.3 PGE shall periodically inspect, test, repair and replace the metering equipment as provided in the Generation Interconnection Agreement. If any of the inspections or tests discloses an error exceeding two (2%) percent of the actual energy delivery, either fast or slow, proper correction, based upon the inaccuracy found, shall be made of previous readings for the actual period during which the metering equipment rendered inaccurate measurements if that period can be ascertained. If the actual period cannot be ascertained, the proper correction shall be made to the measurements taken during the time the metering equipment was in service since last tested, but not exceeding three (3) months, in the amount the metering equipment shall have been shown to be in error by such test. Any correction in billings or payments resulting from a correction in the meter records shall be made in the next monthly billing or payment rendered. Such correction, when made, shall constitute full adjustment of any claim between Seller and PGE arising out of such inaccuracy of metering equipment. 7.4 To the extent not otherwise provided in the Generation Interconnection Agreement, all of PGE's costs relating to all metering equipment installed to accommodate Seller's Facility shall be borne by Seller. Deleted: 9 SECTION 8: BILLINGS, COMPUTATIONS AND PAYMENTS Deleted: 9 On or before the thirtieth (30th) day following the end of each Billing Period, PGE shall send to Seller payment for Seller's deliveries of Net Output to PGE, together with computations supporting such payment. PGE may offset any such payment to reflect amounts owing from Seller to PGE pursuant to this Agreement, the Generation Interconnection Agreement, and any other agreement related to the Facility between the Parties or otherwise. Deleted: 9 8.2 Any amounts owing after the due date thereof shall bear interest at the Prime Rate plus two percent (2%) from the date due until paid; provided, however, that the interest rate shall at no time exceed the maximum rate allowed by applicable law. Deleted: 10 SECTION 9: DEFAULT, REMEDIES AND TERMINATION Deleted: 10 9.1 In addition to any other event that may constitute a default under this Agreement, the following events shall constitute defaults under this Agreement: Deleted: 10 Breach by Seller or PGE of a representation or warranty, except for Section 3.1.4, set forth in this Agreement. C-1

| 0.4.0. Callada failusa da mandida dafault accounts, if namelinad by Caption C. mila   | Deleted: 10 |
|---|-------------|
| 9.1.2 Seller's failure to provide default security, if required by Section 6, prior to delivery of any Net Output to PGE or within 10 days of notice.                         | Deleted: 7  |
| 9.1.3 Seller's failure to deliver the Annual Minimum Net Output for two   | Deleted: 10 |
| consecutive Contract Years.   |             |
| 9.1.4 If Seller is no longer a Qualifying Facility.   | Deleted: 10 |
| 9.1.5 Failure of PGE to make any required payment pursuant to Section 8.1.  | Deleted: 10 |
|   | Deleted: 9  |
| 9.2 In the event of a default hereunder, the non-defaulting party may   | Deleted: 10 |
| 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 |             |
| 9.1.3 by a QF sized at 100 kW or smaller, may pursue any and all legal or equitable   | Deleted: 10 |
| 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   | Deleted: 21 |
| Section 9 are cumulative such that the exercise of one or more rights shall not   | Deleted: 10 |
| constitute a waiver of any other rights.  |             |
| 9.3If this Agreement is terminated as provided in this Section 9 PGE shall  | Deleted: 10 |
| 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.  |             |
| l   |             |
| 9.4 If this Agreement is terminated as a result of Seller's default, Seller shall   | Deleted: 10 |
| pay PGE the positive difference, if any, obtained by subtracting the Contract Price from  |             |
| the sum of the Forward Replacement Price for the Monthly Minimum Net Output that  |             |
| Seller was otherwise obligated to provide for a period of twenty-four (24) months from  |             |
| the date of termination. Accounts owed by Seller pursuant to this paragraph shall be due within five (5) business days after any invoice from PGE for the same.               |             |
| due within live (3) business days after any invoice from FGE for the same.  |             |
| 9.5 In the event PGE terminates this Agreement pursuant to this Section 9,  | Deleted: 10 |
| and Seller wishes to again sell Net Output to PGE following such termination, PGE in its  | Deleted: 10 |
| 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.   | Deleted: 10 |
| 1   | Deleted: 10 |
| 9.6 Sections 9.1 9.3 9.4 9.5, 10, and 19.2 shall survive termination of this  | Deleted: 10 |
| Agreement.  | Deleted: 10 |
|   | Deleted: 10 |
| SECTION 10: INDEMNIFICATION AND LIABILITY   | Deleted: 11 |
| •   | Deleted: 20 |
|   | Deleted: 11 |
|   |             |
| C-1   |             |
|   |             |

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.

 $\underline{10.4}$  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

Deleted: 12

Comment [A8]: PGE's policies regarding insurance company ratings have changed since Order 06-538. PGE is willing to make this change, but requests this issue be addressed in Phase II.

Deleted: days'

**Commented [g14]:** CREA would agree to allow this to be addressed in Phase II as part of a settlement here.

C-1

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

42.1 As used in this Agreement, "Force Majeure" or "an event of Force Majeure" means any cause beyond the reasonable control of the Seller or of PGE which, despite the exercise of due diligence, such Party is unable to prevent or overcome. By way of example, Force Majeure may include but is not limited to acts of God, fire, flood, storms, wars, hostilities, civil strife, strikes, and other labor disturbances, earthquakes, fires, lightning, epidemics, sabotage, restraint by court order or other delay or failure in the performance as a result of any action or inaction on behalf of a public authority which by the exercise of reasonable foresight such Party could not reasonably have been expected to avoid and by the exercise of due diligence, it shall be unable to overcome, subject, in each case, to the requirements of the first sentence of this paragraph. Force Majeure, however, specifically excludes the cost or availability of resources to operate the Facility, changes in market conditions that affect the price of energy or transmission, wind or water droughts, and obligations for the payment of money when due.

Deleted: shall

Deleted: million

Deleted: 200kW

Deleted: 13

Deleted: 13

If either Party is rendered wholly or in part unable to perform its Deleted: 13 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 re-commence performance of such obligation, provided that: Deleted: 13  $\underline{12.2.1}$  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 Deleted: 13 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 Deleted: 13 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 Deleted: 13 Majeure. Deleted: 13 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. Deleted: 14 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. Deleted: 15 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. Deleted: 16 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 C-1

|   | concerning the terms affected by such decision for the purpose of achieving conformity with requirements of any applicable law and the intent of the Parties to this Agreement.   |                 |
|---|---|-----------------|
|   | In the event the Public Utility Regulatory Policies Act (PURPA) is repealed, this Agreement shall not terminate prior to the Termination Date, unless such termination is mandated by state or federal law.   |                 |
|   | SECTION 16: WAIVER  | Deleted: 17     |
| ' | 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  | Deleted: 18     |
| 1 | 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  | Deleted: 19     |
| 1 | This Agreement and all of the terms hereof shall be binding upon and inure to the benefit of the respective successors and assigns of the Parties. No assignment hereof by either Party shall become effective without the written consent of the other Party being first obtained and such consent shall not be unreasonably withheld. Notwithstanding the foregoing, either Party may assign this Agreement without the other Party's consent as part of (a) a sale of all or substantially all of the assigning Party's assets, or (b) a merger, consolidation or other reorganization of the assigning Party. |                 |
|   | SECTION 19: ENTIRE AGREEMENT  | Deleted: 20     |
|   | 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.   | Deleted: 20     |
|   | 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.   | Deleted: 20     |
| ١ | SECTION 20: NOTICES   | <br>Deleted: 21 |
|   | 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   |                 |
|   | C-1   |                 |
|   |   |                 |

| person or when deposit  | ted in the U.S. Mail, postage prepaid by certified or registered  |                   |
|---|---|-------------------|
| mail and return receipt r   |   |                   |
|   |   |                   |
| To Seller:  |   |                   |
|   |   |                   |
|   | - <u></u> -   |                   |
|   |   |                   |
| with a copy to:   |   |                   |
|   |   |                   |
|   |   |                   |
| To PGE:   | Contracts Manager   |                   |
| TO T OL.  | QF Contracts, 3WTC0306  | Deleted: 3WTCBR06 |
|   | PGE - 121 SW Salmon St.<br>Portland, Oregon 97204   |                   |
|   | Fortiand, Oregon 97204  |                   |
|   | s may change the person to whom such notices are addressed,   | Deleted: 21       |
|   |   |                   |
|   | providing written notices thereof in accordance with this Section   | Polotodi 21       |
| 20  |   | Deleted: 21       |
| 20. IN WITNESS WE   | HEREOF, the Parties hereto have caused this Agreement to be   | Deleted: 21       |
| IN WITNESS WH executed in their respec  |   | Deleted: 21       |
| 20. IN WITNESS WE   | HEREOF, the Parties hereto have caused this Agreement to be   | Deleted: 21       |
| 20.  IN WITNESS WH executed in their respect  | HEREOF, the Parties hereto have caused this Agreement to be tive names as of the Effective Date.  | Deleted: 21       |
| IN WITNESS WH executed in their respect PGE  By: Name:  | HEREOF, the Parties hereto have caused this Agreement to be tive names as of the Effective Date.  | Deleted: 21       |
| IN WITNESS WE executed in their respect PGE  By: Name: Title:   | HEREOF, the Parties hereto have caused this Agreement to be tive names as of the Effective Date.  | Deleted: 21       |
| IN WITNESS WH executed in their respect PGE  By: Name:  | HEREOF, the Parties hereto have caused this Agreement to be tive names as of the Effective Date.  | Deleted: 21       |
| IN WITNESS WH executed in their respect PGE  By:Name:Title:   | HEREOF, the Parties hereto have caused this Agreement to be tive names as of the Effective Date.  | Deleted: 21       |
| IN WITNESS WE executed in their respect PGE  By: Name: Title:   | HEREOF, the Parties hereto have caused this Agreement to be tive names as of the Effective Date.  | Deleted: 21       |
| IN WITNESS WH executed in their respect PGE  By: Name: Title: Date:  (Name Seller)                        | HEREOF, the Parties hereto have caused this Agreement to be tive names as of the Effective Date.  | Deleted: 21       |
| IN WITNESS We executed in their respect PGE  By:  | HEREOF, the Parties hereto have caused this Agreement to be tive names as of the Effective Date.  | Deleted: 21       |
| IN WITNESS WH executed in their respect PGE  By: Name: Title: Date:  (Name Seller)  By:                   | HEREOF, the Parties hereto have caused this Agreement to be tive names as of the Effective Date.  | Deleted: 21       |
| IN WITNESS We executed in their respect PGE  By:  | HEREOF, the Parties hereto have caused this Agreement to be tive names as of the Effective Date.  | Deleted: 21       |
| IN WITNESS WH executed in their respect PGE  By: Name: Title: Date:  (Name Seller)  By: Name: Title:      | HEREOF, the Parties hereto have caused this Agreement to be tive names as of the Effective Date.  | Deleted: 21       |
| IN WITNESS WH executed in their respect PGE  By: Name: Title: Date:  (Name Seller)  By: Name: Title:      | HEREOF, the Parties hereto have caused this Agreement to be tive names as of the Effective Date.  | Deleted: 21       |
| IN WITNESS WH executed in their respect PGE  By: Name: Title: Date:  (Name Seller)  By: Name: Title:      | HEREOF, the Parties hereto have caused this Agreement to be tive names as of the Effective Date.  | Deleted: 21       |
| IN WITNESS WH executed in their respect PGE  By: Name: Title: Date:  (Name Seller)  By: Name: Title:      | HEREOF, the Parties hereto have caused this Agreement to be tive names as of the Effective Date.  EXHIBIT A  MONTHLY MINIMUM NET OUTPUT | Deleted: 21       |
| 20.  IN WITNESS WH executed in their respect PGE  By: Name: Title: Date:  (Name Seller)  By: Name: Title: | HEREOF, the Parties hereto have caused this Agreement to be tive names as of the Effective Date.  | Deleted: 21       |
| 20.  IN WITNESS WH executed in their respect PGE  By: Name: Title: Date:  (Name Seller)  By: Name: Title: | HEREOF, the Parties hereto have caused this Agreement to be tive names as of the Effective Date.  EXHIBIT A  MONTHLY MINIMUM NET OUTPUT | Deleted: 21       |

In this Exhibit, Seller may designate an alternative Monthly Minimum Net Output to the default of 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. An Alternative Minimum Amount may be separately set for each month during a Contract Year.

EXHIBIT B
DESCRIPTION OF SELLER'S FACILITY

[Seller to Complete]

Deleted: this exhibit

Comment [A9]: Changes made to clarify that QF can choose separate monthly minimum net outputs to reflect seasonal or other characteristics.

### EXHIBIT C REQUIRED FACILITY DOCUMENTS

[Seller list all permits and authorizations required for this project]

Sellers Generation Interconnection Agreement

#### EXHIBIT D START-UP TESTING

#### [Seller identify appropriate tests]

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

- Pressure tests of all steam system equipment;
- 2. Calibration of all pressure, level, flow, temperature and monitoring
- 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; Tests required by manufacturer of equipment; and
- Complete pre-parallel checks with PGE.

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

- Turbine/generator mechanical runs including shaft, vibration, and bearing 1. 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. 7.
- Stator windings dielectric test;
  Armature and field windings resistance tests;
  Load rejection tests in incremental stages from 5, 25, 50, 75 and 100 8 percent load;
- 9. . Heat runs;
- 10. Tests required by manufacturer of equipment;
- Excitation and voltage regulation operation tests;
- 12. Open circuit and short circuit; saturation tests;
- 13. Governor system steady state stability test;
- Phase angle and magnitude of all PT and CT secondary voltages and 14. currents to protective relays, indicating instruments and metering;
- 15. Auto stop/start sequence;
- Level control system tests; and 16.
- Completion of all state and federal environmental testing requirements. 17.

EXHIBIT E

<u>SCHEDULE</u>

[Attach currently in-effect Schedule 201] Deleted: TARIFF¶ Deleted: rate E-1

| Page 8: [1] Formatted   | greg                              | 8/27/2014 3:15:00 PM             |
|---|-----------------------------------|----------------------------------|
| Indent: First line: 0.41", Right: 2.42",                      | Space Before: 3.95 pt, Outline    | numbered + Level: 3 + Numbering  |
| Style: 1, 2, 3, + Start at: 1 + Alignmer                      | •                                 | _                                |
| Left + Not at 1.1"  |                                   |                                  |
| Page 8: [2] Formatted   | greg                              | 8/27/2014 3:16:00 PM             |
| Highlight   |                                   |                                  |
| Page 8: [3] Commented [g6]                                    | greg                              | 8/27/2014 3:49:00 PM             |
| Consistent with other PGE contract provid                     | ed and with PacifiCorp contract.  |                                  |
| Page 8: [4] Formatted   | greg                              | 8/27/2014 3:16:00 PM             |
| Highlight   |                                   |                                  |
| Page 8: [5] Formatted   | greg                              | 8/27/2014 11:49:00 AM            |
| Highlight   |                                   |                                  |
| Page 8: [6] Commented [g7]                                    | greg                              | 8/27/2014 3:49:00 PM             |
| In the proposed language we don't unders captures the intent. | tand what is being prorated, or w | hy, or how. I think our revision |
| Page 8: [7] Formatted   | greg                              | 8/27/2014 11:49:00 AM            |
| Highlight   |                                   |                                  |
| Page 8: [8] Formatted   | greg                              | 8/27/2014 11:49:00 AM            |
| Font: 9.5 pt, Highlight                                       |                                   |                                  |
| Page 8: [9] Formatted   | greg                              | 8/27/2014 11:49:00 AM            |
| Font: 9.5 pt, Highlight                                       |                                   |                                  |
| Page 8: [10] Formatted  | greg                              | 8/27/2014 11:46:00 AM            |
| Font: 9.5 pt, Highlight                                       |                                   |                                  |
| Page 8: [11] Formatted  | greg                              | 8/27/2014 11:46:00 AM            |
| Highlight   |                                   |                                  |
| Page 8: [12] Formatted  | greg                              | 8/27/2014 11:46:00 AM            |
| Font: 9.5 pt, Expanded by 1.1 pt                              |                                   |                                  |
| Page 8: [13] Formatted  | greg                              | 8/27/2014 11:46:00 AM            |
| Font: 9.5 pt, Expanded by 1.1 pt                              |                                   |                                  |
| Page 8: [14] Formatted  | greg                              | 8/27/2014 11:46:00 AM            |
| Font: 9.5 pt, Condensed by 0.05 pt                            |                                   |                                  |
| Page 8: [15] Formatted  | greg                              | 8/27/2014 11:46:00 AM            |
| Font: 9.5 pt, Expanded by 1.05 pt                             |                                   |                                  |
| Page 8: [16] Formatted  | greg                              | 8/27/2014 11:46:00 AM            |
| Font: 9.5 pt, Expanded by 0.9 pt                              |                                   |                                  |
| Page 8: [17] Formatted  | greg                              | 8/27/2014 11:46:00 AM            |
| Font: 9.5 pt, Expanded by 0.95 pt                             |                                   |                                  |
| Page 8: [18] Formatted  | greg                              | 8/27/2014 11:46:00 AM            |

Font: 9.5 pt, Expanded by 0.95 pt

| Page 8: [19] Formatted                        | greg        | 8/27/2014 11:46:00 AM |
|---|-------------|-----------------------|
| Font: 9.5 pt, Expanded by 1.05 pt             |             |                       |
| Page 8: [20] Formatted                        | greg        | 8/27/2014 11:46:00 AM |
| Font: 9.5 pt, Expanded by 0.95 pt             |             |                       |
| Page 8: [21] Formatted                        | greg        | 8/27/2014 11:46:00 AM |
| Font: 9.5 pt, Expanded by 0.95 pt             |             |                       |
| Page 8: [22] Formatted                        | greg        | 8/27/2014 11:46:00 AM |
| Font: 9.5 pt, Condensed by 0.05 pt            |             |                       |
| Page 8: [23] Formatted                        | greg        | 8/27/2014 11:46:00 AM |
| Font: 9.5 pt, Expanded by 0.95 pt             |             |                       |
| Page 8: [24] Formatted                        | greg        | 8/27/2014 11:46:00 AM |
| Font: 9.5 pt, Expanded by 1.1 pt              |             |                       |
| Page 8: [25] Formatted                        | greg        | 8/27/2014 11:46:00 AM |
| Font: 9.5 pt, Expanded by 0.95 pt             |             |                       |
| Page 8: [26] Formatted                        | greg        | 8/27/2014 11:46:00 AM |
| Font: 9.5 pt, Character scale: 102%, Expanded | l by 1.5 pt |                       |
| Page 8: [27] Formatted                        | greg        | 8/27/2014 11:46:00 AM |
| Font: 9.5 pt, Expanded by 0.95 pt             |             |                       |
| Page 8: [28] Formatted                        | greg        | 8/27/2014 11:46:00 AM |
| Font: 9.5 pt, Expanded by 0.95 pt             |             |                       |
| Page 8: [29] Formatted                        | greg        | 8/27/2014 11:46:00 AM |
| Font: 9.5 pt, Expanded by 0.9 pt              |             |                       |
| Page 8: [30] Formatted                        | greg        | 8/27/2014 11:46:00 AM |
| Font: 9.5 pt, Expanded by 0.9 pt              |             |                       |
| Page 8: [31] Formatted                        | greg        | 8/27/2014 11:46:00 AM |
| Font: 9.5 pt, Expanded by 0.85 pt             |             |                       |
| Page 8: [32] Formatted                        | greg        | 8/27/2014 11:46:00 AM |
| Font: 9.5 pt, Expanded by 1 pt                |             |                       |
| Page 8: [33] Formatted                        | greg        | 8/27/2014 11:46:00 AM |
| Font: 9.5 pt, Condensed by 0.05 pt            |             |                       |
| Page 8: [34] Formatted                        | greg        | 8/27/2014 11:46:00 AM |
| Font: 9.5 pt, Expanded by 0.9 pt              |             |                       |
| Page 8: [35] Formatted                        | greg        | 8/27/2014 11:46:00 AM |
| Font: 9.5 pt, Expanded by 0.9 pt              |             |                       |
| Page 8: [36] Formatted                        | greg        | 8/27/2014 11:46:00 AM |
| Font: 9.5 pt, Expanded by 0.85 pt             |             |                       |
| Page 8: [37] Formatted                        | greg        | 8/27/2014 11:46:00 AM |
| Font: 9.5 pt, Expanded by 0.85 pt             |             |                       |

| Page 8: [38] Formatted             | greg | 8/27/2014 11:46:00 AM |
|------------------------------------|------|-----------------------|
| Font: 9.5 pt, Condensed by 0.05 pt |      |                       |
| Page 8: [39] Formatted             | greg | 8/27/2014 11:46:00 AM |
| Font: 9.5 pt, Expanded by 0.75 pt  |      |                       |
| Page 8: [40] Formatted             | greg | 8/27/2014 11:46:00 AM |
| Font: 9.5 pt, Expanded by 1.7 pt   |      |                       |
| Page 8: [41] Formatted             | greg | 8/27/2014 11:46:00 AM |
| Font: 5 pt                         |      |                       |

# BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

#### **UM 1931**

| PORTLAND GENERAL ELECTRIC COMPANY, | ) |
|------------------------------------|---|
| Complainant,                       | ) |
| v.                                 | ) |
| ALFALFA SOLAR I LLC, et al.        | ) |
| Defendants.                        | ) |
|                                    | ) |

#### **EXHIBIT CREA-NIPPC-REC/210**

## BARBARA PARR EMAIL ON OCTOBER 3, 2014 (WITHOUT ALL ATTACHMENTS)

**December 28, 2018** 

From: Barbara Parr <Barbara.Parr@pgn.com>

**Sent:** Friday, October 3, 2014 4:18 PM

**To:** 'dockets@oregoncub.org'; 'dockets@oseia.org'; 'oregondockets@pacificorp.com';

'dockets@renewablenw.org'; 'paul.ackerman@constellation.com'; Greg Adams;

'da@thenescogroup.com'; 'brittany.andrus@state.or.us'; 'stephanie.andrus@state.or.us'; 'james@utilityadvocates.org'; 'kacia.brockman@state.or.us'; 'dbrown@obsidianfinance.com';

'wcarey@gorge.net'; 'bryce.dalley@pacificorp.com'; 'megan@renewablenw.org';

'bill@oneenergyrenewables.com'; 'dlchain@wvi.com'; 'renee.m.france@doj.state.or.us'; Richard

George; 'tgregory@obsidianrenewables.com'; 'john.harvey@exeloncorp.com';

'dhenkels@cleantechlawpartners.com'; 'jhilton@idahopower.com'; 'bob@oregoncub.org';

'kaufmann@lklaw.com'; 'matt.krumenauer@state.or.us'; 'dlokting@stollberne.com'; 'rlorenz@cablehuston.com'; 'lovinger@lklaw.com'; 'jravenesanmarcos@yahoo.com'; 'mmcarthur@aocweb.org'; 'catriona@oregoncub.org'; 'nelson@thnelson.com';

'k.a.newman@frontier.com'; 'mpengilly@gmail.com'; 'tcp@dvclaw.com'; 'dockets@mcd-law.com'; Peter Richardson; 'thad.roth@energytrust.org'; 'tmroush@wvi.com'; 'irion@sanger-law.com'; Denise

Saunders; 'cstokes@cablehuston.com'; 'dustin.till@pacificorp.com'; PGE OPUC Filings; 'david.tooze@portlandoregon.gov'; 'bvc@dvclaw.com'; 'john.volkman@energytrust.org';

'dwalker@idahopower.com'

**Cc:** Mihir Desu; Rob Macfarlane; John Morton; Bruce True

**Subject:** PGE UM 1610 Redlined PPAs & Schedule 201

Attachments: PGE UM 1610-COMPARISON - Renewable In-System PPA-100314.pdf; PGE UM 1610-COMPARISON

- Off System Variable PPA-100314.pdf; PGE UM 1610 Settlement Version - Renewable In-System PPA-100314.pdf; PGE UM 1610 Settlement Version - Off System Variable PPA-100314.pdf; PGE UM 1610 Schedule 201 Avoided Cost Update\_Sch 201\_original\_redline\_03OCT2014.pdf; PGE UM 1610

Schedule 201 Avoided Cost Update\_Sch 201\_filing\_redline\_03OCT2014.pdf

Please find attached two standard PPAs (four redlines) and PGE's Schedule 201 (two redlines) for use in the next UM 1610 compliance filing.

The PPAs should be representative of substantially all the changes previously discussed in the September 3 workshop and other prior workshops. One PPA is variable, thus containing the MAG changes, and off-system, thus including the scheduling provisions. The other PPA is renewable and firm, so it contains the environmental attribute changes and the monthly minimum net output requirements and corresponding damages calculations. We include explanatory comments within the documents. For the most part, we have accepted requested changes. In a few instances, we have requested issues to be considered in Phase II. The two redlines of each PPA show: 1) the changes made from the September 3 settlement workshop; and 2) cumulative changes from the currently in effect PPAs.

The Schedule also reflects stakeholder input and includes specifically suggested wording changes from CREA, ODOE and other parties. The redlines show 1) changes from the September 3 settlement workshop; and 2) cumulative changes to the schedule currently in effect.

If parties are okay with the these versions, PGE will make corresponding changes to the other PPAs and submit them to the PUC as an amendment to our earlier compliance filing. Because PGE was not included in the Pac and Idaho compliance filing proceeding opened by the Commission, we do not believe a stipulation is required.

If you have any questions or comments, please do not hesitate to contact me.

Rich



Richard George | Assistant General Counsel
Portland General Electric Co. | 121 SW Salmon Street, 1WTC1301 | Portland, OR 97204

**☎** 503-464-7611

503-863-1248 | ₹ 503-464-2200 | ★ Richard.George@pgn.com

www.portlandgeneral.com

This e-mail message, including any attachments, is the property of Portland General Electric Company. Since it is a communication by its Legal Department, it may contain attorney privileged and/or confidential information. The review, disclosure, distribution, or copying of this message by or to anyone other than the named addressee(s) is strictly prohibited. If you have received this message in error, please immediately notify the sender by reply e-mail and delete the original email and all copies of the message. Thank you.

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.

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.

Effective for service on and after September 3, 2014

Comment [MD1]: Need to change effective date when this is filed.

Sheet No. 201-2

#### SCHEDULE 201 (Continued)

#### 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 Resources Power Purchase Agreement
- Standard Off-SystemVariable Resources 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 Resources Power Purchase Agreement
- Standard Renewable Off-System Variable Resources 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.

Effective for service on and after September 3, 2014

Sheet No. 201-3

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

#### **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.)

Effective for service on and after September 3, 2014

Sheet No. 201-4

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

PRICING FOR STANDARD PPA (Continued)

#### 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 off-system, 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.

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.

Comment [MD2]: CREA suggested
language

|      | TABLE 1a  |        |        |        |        |        |        |        |        |        |        |        |
|------|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|      | Avoided Costs                                       |        |        |        |        |        |        |        |        |        |        |        |
|      | Standard Fixed Price Option for Base Load QF        |        |        |        |        |        |        |        |        |        |        |        |
|      | On-Peak Forecast (\$/MWH)                           |        |        |        |        |        |        |        |        |        |        |        |
|      | <del>v   .   .   .   .   .   .   .   .   .   </del> |        |        |        |        |        |        |        |        |        |        |        |
| Year | Jan   | Feb    | Mar    | Apr    | May    | Jun    | Jul    | Aug    | Sep    | Oct    | Nov    | Dec    |
| 2014 | 48.13   | 56.88  | 48.63  | 30.38  | 30.88  | 31.03  | 45.53  | 54.78  | 50.38  | 46.88  | 48.63  | 54.38  |
| 2015 | 50.13   | 47.79  | 42.72  | 36.07  | 30.77  | 28.80  | 44.64  | 50.90  | 45.10  | 43.25  | 44.68  | 48.21  |
| 2016 | 49.77   | 47.46  | 42.45  | 35.88  | 30.65  | 28.70  | 44.34  | 50.53  | 44.80  | 42.97  | 44.38  | 47.87  |
| 2017 | 52.43   | 49.99  | 44.70  | 37.76  | 32.23  | 30.17  | 46.70  | 53.23  | 47.18  | 45.25  | 46.74  | 50.42  |
| 2018 | 56.37   | 53.74  | 48.04  | 40.57  | 34.61  | 32.40  | 50.20  | 57.24  | 50.72  | 48.64  | 50.25  | 54.21  |
| 2019 | 59.33   | 56.56  | 50.56  | 42.69  | 36.42  | 34.09  | 52.83  | 60.24  | 53.38  | 51.19  | 52.88  | 57.06  |
| 2020 | 61.12   | 58.27  | 52.09  | 43.99  | 37.53  | 35.13  | 54.43  | 62.06  | 55.00  | 52.74  | 54.48  | 58.78  |
| 2021 | 83.08   | 82.73  | 81.25  | 79.21  | 79.28  | 79.32  | 79.11  | 79.15  | 79.34  | 79.80  | 83.82  | 85.55  |
| 2022 | 86.66   | 86.03  | 84.34  | 82.31  | 82.46  | 82.52  | 82.71  | 82.73  | 82.93  | 83.42  | 88.08  | 90.31  |
| 2023 | 91.20   | 90.41  | 88.76  | 86.86  | 86.34  | 86.36  | 86.66  | 86.48  | 86.85  | 87.37  | 92.37  | 95.36  |
| 2024 | 96.86   | 95.81  | 93.35  | 91.39  | 90.70  | 90.78  | 91.16  | 91.09  | 91.49  | 92.15  | 95.30  | 98.71  |
| 2025 | 99.69   | 97.48  | 94.10  | 92.12  | 92.10  | 92.18  | 92.56  | 92.48  | 92.85  | 93.52  | 96.54  | 100.08 |
| 2026 | 100.47  | 99.38  | 96.00  | 93.83  | 93.32  | 93.40  | 93.80  | 93.72  | 94.12  | 94.68  | 98.25  | 101.90 |
| 2027 | 101.02  | 99.29  | 96.15  | 93.26  | 93.22  | 93.29  | 93.66  | 93.56  | 93.97  | 94.55  | 99.45  | 102.71 |
| 2028 | 101.10  | 99.49  | 95.85  | 93.39  | 93.31  | 93.37  | 93.58  | 93.64  | 93.87  | 94.58  | 102.56 | 105.58 |
| 2029 | 107.98  | 107.22 | 103.29 | 100.04 | 100.08 | 100.00 | 100.54 | 100.64 | 100.90 | 101.50 | 107.20 | 110.79 |
| 2030 | 112.59  | 109.12 | 104.07 | 99.81  | 99.56  | 99.58  | 100.09 | 100.18 | 100.44 | 101.29 | 110.03 | 113.81 |
| 2031 | 115.26  | 111.15 | 106.88 | 103.09 | 103.23 | 103.23 | 104.04 | 104.14 | 104.41 | 105.06 | 111.68 | 115.10 |
| 2032 | 117.17  | 112.98 | 108.63 | 104.76 | 104.90 | 104.90 | 105.73 | 105.83 | 106.11 | 106.77 | 113.52 | 117.00 |
| 2033 | 119.82  | 115.54 | 111.10 | 107.17 | 107.31 | 107.31 | 108.16 | 108.26 | 108.54 | 109.21 | 116.10 | 119.64 |
| 2034 | 122.26  | 117.90 | 113.38 | 109.36 | 109.51 | 109.51 | 110.37 | 110.48 | 110.77 | 111.45 | 118.47 | 122.08 |

Effective for service on and after September 3, 2014

Sheet No. 201-5

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

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

|      | TABLE 1b                                     |       |       |       |       |       |       |       |       |       |       |       |
|------|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|      | Avoided Costs                                |       |       |       |       |       |       |       |       |       |       |       |
|      | Standard Fixed Price Option for Base Load QF |       |       |       |       |       |       |       |       |       |       |       |
|      | Off-Peak Forecast (\$/MWH)                   |       |       |       |       |       |       |       |       |       |       |       |
|      |  |       |       |       |       |       |       |       |       |       |       |       |
| Year | Jan  | Feb   | Mar   | Apr   | May   | Jun   | Jul   | Aug   | Sep   | Oct   | Nov   | Dec   |
| 2014 | 38.13  | 51.38 | 42.88 | 15.23 | 9.88  | 9.38  | 21.78 | 37.03 | 40.53 | 39.63 | 41.38 | 47.38 |
| 2015 | 43.19  | 41.41 | 36.99 | 23.85 | 16.69 | 12.34 | 24.12 | 36.59 | 34.18 | 37.49 | 38.44 | 41.46 |
| 2016 | 43.43  | 41.65 | 37.23 | 24.08 | 16.92 | 12.57 | 24.35 | 36.83 | 34.42 | 37.73 | 38.68 | 41.70 |
| 2017 | 45.56  | 43.69 | 39.04 | 25.21 | 17.67 | 13.09 | 25.49 | 38.61 | 36.08 | 39.56 | 40.56 | 43.74 |
| 2018 | 48.40  | 46.40 | 41.45 | 26.74 | 18.73 | 13.86 | 27.05 | 41.01 | 38.31 | 42.01 | 43.08 | 46.46 |
| 2019 | 51.44  | 49.32 | 44.06 | 28.40 | 19.87 | 14.69 | 28.72 | 43.58 | 40.71 | 44.65 | 45.79 | 49.38 |
| 2020 | 53.92  | 51.66 | 46.15 | 31.05 | 22.57 | 17.61 | 32.64 | 46.96 | 43.50 | 46.77 | 48.01 | 51.78 |
| 2021 | 43.71  | 43.36 | 41.88 | 39.84 | 39.91 | 39.95 | 39.74 | 39.78 | 39.97 | 40.43 | 44.45 | 46.18 |
| 2022 | 46.52  | 45.90 | 44.20 | 42.18 | 42.33 | 42.38 | 42.58 | 42.60 | 42.80 | 43.29 | 47.95 | 50.18 |
| 2023 | 50.16  | 49.37 | 47.72 | 45.82 | 45.30 | 45.32 | 45.62 | 45.44 | 45.81 | 46.33 | 51.34 | 54.32 |
| 2024 | 55.29  | 54.25 | 51.79 | 49.83 | 49.14 | 49.22 | 49.60 | 49.52 | 49.92 | 50.59 | 53.74 | 57.15 |
| 2025 | 57.19  | 54.98 | 51.60 | 49.62 | 49.59 | 49.67 | 50.06 | 49.98 | 50.35 | 51.02 | 54.04 | 57.58 |
| 2026 | 57.15  | 56.06 | 52.68 | 50.51 | 50.00 | 50.08 | 50.48 | 50.40 | 50.80 | 51.36 | 54.93 | 58.58 |
| 2027 | 56.86  | 55.13 | 51.99 | 49.10 | 49.07 | 49.13 | 49.50 | 49.41 | 49.81 | 50.39 | 55.29 | 58.55 |
| 2028 | 56.09  | 54.48 | 50.84 | 48.38 | 48.30 | 48.36 | 48.57 | 48.63 | 48.86 | 49.57 | 57.55 | 60.57 |
| 2029 | 62.10  | 61.34 | 57.41 | 54.16 | 54.20 | 54.12 | 54.66 | 54.76 | 55.02 | 55.62 | 61.33 | 64.92 |
| 2030 | 65.82  | 62.35 | 57.31 | 53.05 | 52.79 | 52.82 | 53.33 | 53.42 | 53.68 | 54.53 | 63.27 | 67.05 |
| 2031 | 67.60  | 63.48 | 59.21 | 55.42 | 55.56 | 55.56 | 56.37 | 56.47 | 56.75 | 57.39 | 64.02 | 67.43 |
| 2032 | 68.90  | 64.70 | 60.35 | 56.48 | 56.63 | 56.63 | 57.46 | 57.56 | 57.84 | 58.49 | 65.24 | 68.73 |
| 2033 | 70.29  | 66.02 | 61.58 | 57.64 | 57.79 | 57.79 | 58.63 | 58.73 | 59.02 | 59.69 | 66.57 | 70.12 |
| 2034 | 71.62  | 67.26 | 62.74 | 58.72 | 58.87 | 58.87 | 59.73 | 59.84 | 60.13 | 60.81 | 67.83 | 71.44 |

Effective for service on and after September 3, 2014

# **SCHEDULE 201 (Continued)**

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

|      |       |       |       |          |            | ABLE 2a   |                 |        |       |       |       |       |
|------|-------|-------|-------|----------|------------|-----------|-----------------|--------|-------|-------|-------|-------|
|      |       |       |       |          |            | ided Cos  | ho.             |        |       |       |       |       |
|      |       |       |       | Standard |            |           | ເຣ<br>on for Wi | nd OF  |       |       |       |       |
|      |       |       |       |          |            | orecast ( |                 | iiu wi |       |       |       |       |
|      |       |       |       |          | II-I Cak I | orecast ( | Ψ/ IVIV V I I)  |        |       |       |       |       |
| Year | Jan   | Feb   | Mar   | Apr      | May        | Jun       | Jul             | Aug    | Sep   | Oct   | Nov   | Dec   |
| 2014 | 44.43 | 53.18 | 44.93 | 26.68    | 27.18      | 27.33     | 41.83           | 51.08  | 46.68 | 43.18 | 44.93 | 50.68 |
| 2015 | 46.36 | 44.02 | 38.95 | 32.30    | 27.00      | 25.03     | 40.87           | 47.13  | 41.33 | 39.48 | 40.91 | 44.44 |
| 2016 | 45.93 | 43.62 | 38.61 | 32.04    | 26.81      | 24.86     | 40.50           | 46.69  | 40.96 | 39.13 | 40.54 | 44.03 |
| 2017 | 48.52 | 46.08 | 40.79 | 33.85    | 28.32      | 26.26     | 42.79           | 49.32  | 43.27 | 41.34 | 42.83 | 46.51 |
| 2018 | 52.38 | 49.75 | 44.05 | 36.58    | 30.62      | 28.41     | 46.21           | 53.25  | 46.73 | 44.65 | 46.26 | 50.22 |
| 2019 | 55.26 | 52.49 | 46.49 | 38.62    | 32.35      | 30.02     | 48.76           | 56.17  | 49.31 | 47.12 | 48.81 | 52.99 |
| 2020 | 56.97 | 54.12 | 47.94 | 39.84    | 33.38      | 30.98     | 50.28           | 57.91  | 50.85 | 48.59 | 50.33 | 54.63 |
| 2021 | 41.45 | 41.10 | 39.61 | 37.58    | 37.65      | 37.69     | 37.48           | 37.52  | 37.70 | 38.17 | 42.19 | 43.92 |
| 2022 | 44.22 | 43.60 | 41.90 | 39.88    | 40.03      | 40.08     | 40.28           | 40.29  | 40.49 | 40.99 | 45.65 | 47.87 |
| 2023 | 47.82 | 47.03 | 45.38 | 43.48    | 42.96      | 42.98     | 43.28           | 43.11  | 43.47 | 43.99 | 49.00 | 51.98 |
| 2024 | 52.90 | 51.85 | 49.40 | 47.44    | 46.75      | 46.83     | 47.21           | 47.13  | 47.53 | 48.19 | 51.35 | 54.75 |
| 2025 | 54.76 | 52.54 | 49.16 | 47.18    | 47.16      | 47.24     | 47.62           | 47.54  | 47.91 | 48.59 | 51.61 | 55.14 |
| 2026 | 54.66 | 53.58 | 50.20 | 48.02    | 47.52      | 47.60     | 47.99           | 47.91  | 48.32 | 48.87 | 52.44 | 56.10 |
| 2027 | 54.33 | 52.60 | 49.46 | 46.57    | 46.53      | 46.60     | 46.97           | 46.87  | 47.28 | 47.86 | 52.76 | 56.02 |
| 2028 | 53.51 | 51.90 | 48.26 | 45.80    | 45.72      | 45.78     | 45.99           | 46.05  | 46.28 | 46.99 | 54.97 | 57.99 |
| 2029 | 59.48 | 58.72 | 54.79 | 51.54    | 51.57      | 51.49     | 52.03           | 52.13  | 52.40 | 52.99 | 58.70 | 62.29 |
| 2030 | 63.14 | 59.67 | 54.62 | 50.37    | 50.11      | 50.13     | 50.64           | 50.74  | 51.00 | 51.85 | 60.59 | 64.36 |
| 2031 | 64.86 | 60.74 | 56.47 | 52.68    | 52.82      | 52.82     | 53.64           | 53.74  | 54.01 | 54.65 | 61.28 | 64.69 |
| 2032 | 66.10 | 61.90 | 57.55 | 53.69    | 53.83      | 53.83     | 54.66           | 54.76  | 55.04 | 55.69 | 62.45 | 65.93 |
| 2033 | 67.46 | 63.18 | 58.75 | 54.81    | 54.95      | 54.95     | 55.80           | 55.90  | 56.19 | 56.85 | 63.74 | 67.29 |
| 2034 | 68.73 | 64.37 | 59.85 | 55.83    | 55.98      | 55.98     | 56.84           | 56.95  | 57.24 | 57.92 | 64.94 | 68.55 |

# **SCHEDULE 201 (Continued)**

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

|      |       |       |       |          | Т.        | ABLE 2b  |                 |       |       |       |       |       |
|------|-------|-------|-------|----------|-----------|----------|-----------------|-------|-------|-------|-------|-------|
|      |       |       |       |          |           | ded Cost | e               |       |       |       |       |       |
|      |       |       |       | Standard | Fixed P   |          |                 | nd QF |       |       |       |       |
|      |       |       |       |          | ff-Peak F |          |                 |       |       |       |       |       |
|      |       |       |       |          |           |          | <del>•</del> ,, |       |       |       |       |       |
| Year | Jan   | Feb   | Mar   | Apr      | May       | Jun      | Jul             | Aug   | Sep   | Oct   | Nov   | Dec   |
| 2014 | 34.43 | 47.68 | 39.18 | 11.53    | 6.18      | 5.68     | 18.08           | 33.33 | 36.83 | 35.93 | 37.68 | 43.68 |
| 2015 | 39.42 | 37.64 | 33.22 | 20.08    | 12.92     | 8.57     | 20.35           | 32.82 | 30.41 | 33.72 | 34.67 | 37.69 |
| 2016 | 39.59 | 37.81 | 33.39 | 20.24    | 13.08     | 8.73     | 20.51           | 32.99 | 30.58 | 33.89 | 34.84 | 37.86 |
| 2017 | 41.65 | 39.78 | 35.13 | 21.30    | 13.76     | 9.18     | 21.58           | 34.70 | 32.17 | 35.65 | 36.65 | 39.83 |
| 2018 | 44.41 | 42.41 | 37.46 | 22.75    | 14.74     | 9.87     | 23.06           | 37.02 | 34.32 | 38.02 | 39.09 | 42.47 |
| 2019 | 47.37 | 45.25 | 39.99 | 24.33    | 15.80     | 10.62    | 24.65           | 39.51 | 36.64 | 40.58 | 41.72 | 45.31 |
| 2020 | 49.77 | 47.51 | 42.00 | 26.90    | 18.42     | 13.46    | 28.49           | 42.81 | 39.35 | 42.62 | 43.86 | 47.63 |
| 2021 | 39.48 | 39.13 | 37.65 | 35.61    | 35.68     | 35.72    | 35.51           | 35.55 | 35.74 | 36.20 | 40.22 | 41.95 |
| 2022 | 42.21 | 41.59 | 39.89 | 37.87    | 38.02     | 38.07    | 38.27           | 38.29 | 38.49 | 38.98 | 43.64 | 45.87 |
| 2023 | 45.77 | 44.98 | 43.33 | 41.43    | 40.91     | 40.93    | 41.23           | 41.05 | 41.42 | 41.94 | 46.95 | 49.93 |
| 2024 | 50.82 | 49.78 | 47.32 | 45.36    | 44.67     | 44.75    | 45.13           | 45.05 | 45.45 | 46.12 | 49.27 | 52.68 |
| 2025 | 52.63 | 50.42 | 47.04 | 45.06    | 45.03     | 45.11    | 45.50           | 45.42 | 45.79 | 46.46 | 49.48 | 53.02 |
| 2026 | 52.50 | 51.41 | 48.03 | 45.86    | 45.35     | 45.43    | 45.83           | 45.75 | 46.15 | 46.71 | 50.28 | 53.93 |
| 2027 | 52.12 | 50.39 | 47.25 | 44.36    | 44.33     | 44.39    | 44.76           | 44.67 | 45.07 | 45.65 | 50.55 | 53.81 |
| 2028 | 51.26 | 49.65 | 46.01 | 43.55    | 43.47     | 43.53    | 43.74           | 43.80 | 44.03 | 44.74 | 52.72 | 55.74 |
| 2029 | 57.18 | 56.42 | 52.49 | 49.24    | 49.28     | 49.20    | 49.74           | 49.84 | 50.10 | 50.70 | 56.41 | 60.00 |
| 2030 | 60.80 | 57.33 | 52.29 | 48.03    | 47.77     | 47.80    | 48.31           | 48.40 | 48.66 | 49.51 | 58.25 | 62.03 |
| 2031 | 62.48 | 58.36 | 54.09 | 50.30    | 50.44     | 50.44    | 51.25           | 51.35 | 51.63 | 52.27 | 58.90 | 62.31 |
| 2032 | 63.69 | 59.49 | 55.14 | 51.27    | 51.42     | 51.42    | 52.25           | 52.35 | 52.63 | 53.28 | 60.03 | 63.52 |
| 2033 | 64.98 | 60.71 | 56.27 | 52.33    | 52.48     | 52.48    | 53.32           | 53.42 | 53.71 | 54.38 | 61.26 | 64.81 |
| 2034 | 66.20 | 61.84 | 57.32 | 53.30    | 53.45     | 53.45    | 54.31           | 54.42 | 54.71 | 55.39 | 62.41 | 66.02 |

# **SCHEDULE 201 (Continued)**

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

|      |       |       |       |       |          | ABLE 3a   |            |        |       |       |       |       |
|------|-------|-------|-------|-------|----------|-----------|------------|--------|-------|-------|-------|-------|
|      |       |       |       | O4 1  |          | ided Cos  |            |        |       |       |       |       |
|      |       |       |       |       | Fixed P  |           |            | iar QF |       |       |       |       |
|      |       |       |       |       | n-Peak F | orecast ( | ⊅/IVIVV H) |        |       |       |       |       |
| Year | Jan   | Feb   | Mar   | Apr   | May      | Jun       | Jul        | Aug    | Sep   | Oct   | Nov   | Dec   |
| 2014 | 48.13 | 56.88 | 48.63 | 30.38 | 30.88    | 31.03     | 45.53      | 54.78  | 50.38 | 46.88 | 48.63 | 54.38 |
| 2015 | 50.13 | 47.79 | 42.72 | 36.07 | 30.77    | 28.80     | 44.64      | 50.90  | 45.10 | 43.25 | 44.68 | 48.21 |
| 2016 | 49.77 | 47.46 | 42.45 | 35.88 | 30.65    | 28.70     | 44.34      | 50.53  | 44.80 | 42.97 | 44.38 | 47.87 |
| 2017 | 52.43 | 49.99 | 44.70 | 37.76 | 32.23    | 30.17     | 46.70      | 53.23  | 47.18 | 45.25 | 46.74 | 50.42 |
| 2018 | 56.37 | 53.74 | 48.04 | 40.57 | 34.61    | 32.40     | 50.20      | 57.24  | 50.72 | 48.64 | 50.25 | 54.21 |
| 2019 | 59.33 | 56.56 | 50.56 | 42.69 | 36.42    | 34.09     | 52.83      | 60.24  | 53.38 | 51.19 | 52.88 | 57.06 |
| 2020 | 61.12 | 58.27 | 52.09 | 43.99 | 37.53    | 35.13     | 54.43      | 62.06  | 55.00 | 52.74 | 54.48 | 58.78 |
| 2021 | 45.68 | 45.33 | 43.84 | 41.81 | 41.88    | 41.92     | 41.71      | 41.75  | 41.93 | 42.40 | 46.42 | 48.15 |
| 2022 | 48.53 | 47.91 | 46.21 | 44.19 | 44.34    | 44.39     | 44.59      | 44.60  | 44.80 | 45.30 | 49.96 | 52.18 |
| 2023 | 52.21 | 51.42 | 49.77 | 47.87 | 47.35    | 47.37     | 47.67      | 47.50  | 47.86 | 48.38 | 53.39 | 56.37 |
| 2024 | 57.37 | 56.32 | 53.87 | 51.91 | 51.22    | 51.30     | 51.68      | 51.60  | 52.00 | 52.66 | 55.82 | 59.22 |
| 2025 | 59.32 | 57.10 | 53.72 | 51.74 | 51.72    | 51.80     | 52.18      | 52.10  | 52.47 | 53.15 | 56.17 | 59.70 |
| 2026 | 59.31 | 58.23 | 54.85 | 52.67 | 52.17    | 52.25     | 52.64      | 52.56  | 52.97 | 53.52 | 57.09 | 60.75 |
| 2027 | 59.07 | 57.34 | 54.20 | 51.31 | 51.27    | 51.34     | 51.71      | 51.61  | 52.02 | 52.60 | 57.50 | 60.76 |
| 2028 | 58.34 | 56.73 | 53.09 | 50.63 | 50.55    | 50.61     | 50.82      | 50.88  | 51.11 | 51.82 | 59.80 | 62.82 |
| 2029 | 64.40 | 63.64 | 59.71 | 56.46 | 56.49    | 56.41     | 56.95      | 57.05  | 57.32 | 57.91 | 63.62 | 67.21 |
| 2030 | 68.16 | 64.69 | 59.64 | 55.39 | 55.13    | 55.15     | 55.66      | 55.76  | 56.02 | 56.87 | 65.61 | 69.38 |
| 2031 | 69.98 | 65.86 | 61.59 | 57.80 | 57.94    | 57.94     | 58.76      | 58.86  | 59.13 | 59.77 | 66.40 | 69.81 |
| 2032 | 71.31 | 67.11 | 62.76 | 58.90 | 59.04    | 59.04     | 59.87      | 59.97  | 60.25 | 60.90 | 67.66 | 71.14 |
| 2033 | 72.77 | 68.49 | 64.06 | 60.12 | 60.26    | 60.26     | 61.11      | 61.21  | 61.50 | 62.16 | 69.05 | 72.60 |
| 2034 | 74.15 | 69.79 | 65.27 | 61.25 | 61.40    | 61.40     | 62.26      | 62.37  | 62.66 | 63.34 | 70.36 | 73.97 |

# **SCHEDULE 201 (Continued)**

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

| _    |       |       |       |          |          |           |             |        |       |       |       |       |
|------|-------|-------|-------|----------|----------|-----------|-------------|--------|-------|-------|-------|-------|
|      |       |       |       |          |          | ABLE 3b   |             |        |       |       |       |       |
|      |       |       |       |          |          | ided Cos  |             |        |       |       |       |       |
|      |       |       |       | Standard |          |           |             | lar QF |       |       |       |       |
|      |       |       |       | 0        | п-Реак г | orecast ( | \$/IVIVV H) |        |       |       |       |       |
|      |       |       |       |          |          |           |             |        |       |       |       |       |
| Year | Jan   | Feb   | Mar   | Apr      | May      | Jun       | Jul         | Aug    | Sep   | Oct   | Nov   | Dec   |
| 2014 | 38.13 | 51.38 | 42.88 | 15.23    | 9.88     | 9.38      | 21.78       | 37.03  | 40.53 | 39.63 | 41.38 | 47.38 |
| 2015 | 43.19 | 41.41 | 36.99 | 23.85    | 16.69    | 12.34     | 24.12       | 36.59  | 34.18 | 37.49 | 38.44 | 41.46 |
| 2016 | 43.43 | 41.65 | 37.23 | 24.08    | 16.92    | 12.57     | 24.35       | 36.83  | 34.42 | 37.73 | 38.68 | 41.70 |
| 2017 | 45.56 | 43.69 | 39.04 | 25.21    | 17.67    | 13.09     | 25.49       | 38.61  | 36.08 | 39.56 | 40.56 | 43.74 |
| 2018 | 48.40 | 46.40 | 41.45 | 26.74    | 18.73    | 13.86     | 27.05       | 41.01  | 38.31 | 42.01 | 43.08 | 46.46 |
| 2019 | 51.44 | 49.32 | 44.06 | 28.40    | 19.87    | 14.69     | 28.72       | 43.58  | 40.71 | 44.65 | 45.79 | 49.38 |
| 2020 | 53.92 | 51.66 | 46.15 | 31.05    | 22.57    | 17.61     | 32.64       | 46.96  | 43.50 | 46.77 | 48.01 | 51.78 |
| 2021 | 43.71 | 43.36 | 41.88 | 39.84    | 39.91    | 39.95     | 39.74       | 39.78  | 39.97 | 40.43 | 44.45 | 46.18 |
| 2022 | 46.52 | 45.90 | 44.20 | 42.18    | 42.33    | 42.38     | 42.58       | 42.60  | 42.80 | 43.29 | 47.95 | 50.18 |
| 2023 | 50.16 | 49.37 | 47.72 | 45.82    | 45.30    | 45.32     | 45.62       | 45.44  | 45.81 | 46.33 | 51.34 | 54.32 |
| 2024 | 55.29 | 54.25 | 51.79 | 49.83    | 49.14    | 49.22     | 49.60       | 49.52  | 49.92 | 50.59 | 53.74 | 57.15 |
| 2025 | 57.19 | 54.98 | 51.60 | 49.62    | 49.59    | 49.67     | 50.06       | 49.98  | 50.35 | 51.02 | 54.04 | 57.58 |
| 2026 | 57.15 | 56.06 | 52.68 | 50.51    | 50.00    | 50.08     | 50.48       | 50.40  | 50.80 | 51.36 | 54.93 | 58.58 |
| 2027 | 56.86 | 55.13 | 51.99 | 49.10    | 49.07    | 49.13     | 49.50       | 49.41  | 49.81 | 50.39 | 55.29 | 58.55 |
| 2028 | 56.09 | 54.48 | 50.84 | 48.38    | 48.30    | 48.36     | 48.57       | 48.63  | 48.86 | 49.57 | 57.55 | 60.57 |
| 2029 | 62.10 | 61.34 | 57.41 | 54.16    | 54.20    | 54.12     | 54.66       | 54.76  | 55.02 | 55.62 | 61.33 | 64.92 |
| 2030 | 65.82 | 62.35 | 57.31 | 53.05    | 52.79    | 52.82     | 53.33       | 53.42  | 53.68 | 54.53 | 63.27 | 67.05 |
| 2031 | 67.60 | 63.48 | 59.21 | 55.42    | 55.56    | 55.56     | 56.37       | 56.47  | 56.75 | 57.39 | 64.02 | 67.43 |
| 2032 | 68.90 | 64.70 | 60.35 | 56.48    | 56.63    | 56.63     | 57.46       | 57.56  | 57.84 | 58.49 | 65.24 | 68.73 |
| 2033 | 70.29 | 66.02 | 61.58 | 57.64    | 57.79    | 57.79     | 58.63       | 58.73  | 59.02 | 59.69 | 66.57 | 70.12 |
| 2034 | 71.62 | 67.26 | 62.74 | 58.72    | 58.87    | 58.87     | 59.73       | 59.84  | 60.13 | 60.81 | 67.83 | 71.44 |

## **SCHEDULE 201 (Continued)**

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 during the Renewable Resource Deficiency Period.

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 off system, 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 and will retain all Environmental Attributes generated by the facility for all years up to five in excess of the initial 15.

Comment [MD3]: CREA suggested language

# **SCHEDULE 201 (Continued)**

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

|      |        |        |        |           | T.       | ABLE 4a   |         |        |        |        |        |        |
|------|--------|--------|--------|-----------|----------|-----------|---------|--------|--------|--------|--------|--------|
|      |        |        |        | F         | Renewabl | e Avoide  | d Costs |        |        |        |        |        |
|      |        |        | Rer    | newable F |          |           |         | Load Q | F      |        |        |        |
|      |        |        |        | 0         | n-Peak F | orecast ( | \$/MWH) |        |        |        |        |        |
| Year | Jan    | Feb    | Mar    | Apr       | May      | Jun       | Jul     | Aug    | Sep    | Oct    | Nov    | Dec    |
| 2014 | 48.13  | 56.88  | 48.63  | 30.38     | 30.88    | 31.03     | 45.53   | 54.78  | 50.38  | 46.88  | 48.63  | 54.38  |
| 2015 | 50.13  | 47.79  | 42.72  | 36.07     | 30.77    | 28.80     | 44.64   | 50.90  | 45.10  | 43.25  | 44.68  | 48.21  |
| 2016 | 49.77  | 47.46  | 42.45  | 35.88     | 30.65    | 28.70     | 44.34   | 50.53  | 44.80  | 42.97  | 44.38  | 47.87  |
| 2017 | 52.43  | 49.99  | 44.70  | 37.76     | 32.23    | 30.17     | 46.70   | 53.23  | 47.18  | 45.25  | 46.74  | 50.42  |
| 2018 | 56.37  | 53.74  | 48.04  | 40.57     | 34.61    | 32.40     | 50.20   | 57.24  | 50.72  | 48.64  | 50.25  | 54.21  |
| 2019 | 59.33  | 56.56  | 50.56  | 42.69     | 36.42    | 34.09     | 52.83   | 60.24  | 53.38  | 51.19  | 52.88  | 57.06  |
| 2020 | 130.42 | 130.40 | 129.50 | 130.04    | 133.82   | 132.76    | 132.39  | 132.24 | 130.72 | 129.58 | 130.57 | 129.37 |
| 2021 | 133.36 | 133.64 | 131.86 | 133.13    | 136.49   | 135.59    | 134.91  | 135.51 | 133.73 | 132.54 | 134.08 | 132.51 |
| 2022 | 136.24 | 136.10 | 133.85 | 135.90    | 139.41   | 138.20    | 137.67  | 137.62 | 136.32 | 135.14 | 136.83 | 135.12 |
| 2023 | 139.39 | 138.88 | 136.54 | 138.99    | 141.88   | 141.01    | 140.60  | 140.17 | 139.18 | 137.81 | 139.83 | 138.52 |
| 2024 | 141.20 | 141.38 | 139.07 | 141.45    | 144.67   | 143.46    | 143.33  | 143.02 | 142.81 | 139.99 | 141.17 | 141.32 |
| 2025 | 144.44 | 144.83 | 142.24 | 145.02    | 149.08   | 147.69    | 146.57  | 146.72 | 145.76 | 143.11 | 144.48 | 144.07 |
| 2026 | 148.08 | 147.69 | 145.96 | 148.54    | 153.80   | 149.69    | 149.69  | 150.17 | 149.84 | 146.23 | 148.39 | 147.27 |
| 2027 | 150.98 | 150.46 | 148.51 | 151.01    | 158.07   | 152.64    | 152.20  | 153.90 | 152.54 | 149.20 | 150.73 | 150.17 |
| 2028 | 153.78 | 152.55 | 150.16 | 154.12    | 160.66   | 154.93    | 155.77  | 155.78 | 154.75 | 152.38 | 153.65 | 152.73 |
| 2029 | 157.02 | 156.74 | 153.60 | 157.59    | 169.40   | 159.30    | 159.39  | 159.39 | 159.45 | 155.48 | 156.44 | 156.31 |
| 2030 | 160.28 | 159.94 | 157.24 | 160.66    | 173.84   | 164.43    | 161.89  | 161.75 | 163.38 | 158.51 | 159.18 | 159.23 |
| 2031 | 163.23 | 162.64 | 160.72 | 164.67    | 177.15   | 169.11    | 164.90  | 166.01 | 166.26 | 161.75 | 163.06 | 162.54 |
| 2032 | 165.75 | 165.16 | 163.21 | 167.22    | 179.91   | 171.73    | 167.46  | 168.59 | 168.84 | 164.26 | 165.59 | 165.06 |
| 2033 | 169.59 | 168.98 | 166.98 | 171.09    | 184.06   | 175.70    | 171.33  | 172.48 | 172.74 | 168.06 | 169.41 | 168.88 |
| 2034 | 173.01 | 172.39 | 170.36 | 174.55    | 187.76   | 179.24    | 174.79  | 175.97 | 176.23 | 171.46 | 172.84 | 172.29 |

|      |        |        |        |        | Т        | ABLE 4a   |          |          |        |        |        |        |
|------|--------|--------|--------|--------|----------|-----------|----------|----------|--------|--------|--------|--------|
|      |        |        |        | F      | Renewabl |           | d Costs  |          |        |        |        |        |
|      |        |        | Rei    |        |          |           |          | e Load Q | F      |        |        |        |
|      |        |        |        | 0      | n-Peak F | orecast ( | (\$/MWH) |          |        |        |        |        |
|      |        |        |        |        |          |           |          |          |        |        |        |        |
| Year | Jan    | Feb    | Mar    | Apr    | May      | Jun       | Jul      | Aug      | Sep    | Oct    | Nov    | Dec    |
| 2014 | 48.13  | 56.88  | 48.63  | 30.38  | 30.88    | 31.03     | 45.53    | 54.78    | 50.38  | 46.88  | 48.63  | 54.38  |
| 2015 | 50.13  | 47.79  | 42.72  | 36.07  | 30.77    | 28.80     | 44.64    | 50.90    | 45.10  | 43.25  | 44.68  | 48.21  |
| 2016 | 49.77  | 47.46  | 42.45  | 35.88  | 30.65    | 28.70     | 44.34    | 50.53    | 44.80  | 42.97  | 44.38  | 47.87  |
| 2017 | 52.43  | 49.99  | 44.70  | 37.76  | 32.23    | 30.17     | 46.70    | 53.23    | 47.18  | 45.25  | 46.74  | 50.42  |
| 2018 | 56.37  | 53.74  | 48.04  | 40.57  | 34.61    | 32.40     | 50.20    | 57.24    | 50.72  | 48.64  | 50.25  | 54.21  |
| 2019 | 59.33  | 56.56  | 50.56  | 42.69  | 36.42    | 34.09     | 52.83    | 60.24    | 53.38  | 51.19  | 52.88  | 57.06  |
| 2020 | 110.96 | 110.94 | 110.27 | 110.67 | 113.50   | 112.71    | 112.43   | 112.33   | 111.19 | 110.33 | 111.07 | 110.17 |
| 2021 | 113.45 | 113.66 | 112.32 | 113.27 | 115.79   | 115.12    | 114.61   | 115.06   | 113.73 | 112.83 | 113.98 | 112.81 |
| 2022 | 115.87 | 115.76 | 114.08 | 115.61 | 118.24   | 117.33    | 116.93   | 116.90   | 115.93 | 115.04 | 116.30 | 115.03 |
| 2023 | 118.52 | 118.14 | 116.39 | 118.22 | 120.38   | 119.73    | 119.43   | 119.10   | 118.36 | 117.33 | 118.85 | 117.87 |
| 2024 | 120.08 | 120.21 | 118.48 | 120.27 | 122.67   | 121.77    | 121.68   | 121.44   | 121.28 | 119.17 | 120.06 | 120.17 |
| 2025 | 122.82 | 123.11 | 121.17 | 123.25 | 126.29   | 125.25    | 124.41   | 124.53   | 123.80 | 121.82 | 122.85 | 122.54 |
| 2026 | 125.83 | 125.53 | 124.24 | 126.17 | 130.11   | 127.03    | 127.04   | 127.39   | 127.14 | 124.44 | 126.06 | 125.22 |
| 2027 | 128.29 | 127.90 | 126.44 | 128.31 | 133.59   | 129.53    | 129.20   | 130.48   | 129.45 | 126.96 | 128.10 | 127.68 |
| 2028 | 130.68 | 129.75 | 127.97 | 130.93 | 135.83   | 131.54    | 132.16   | 132.17   | 131.40 | 129.63 | 130.58 | 129.89 |
| 2029 | 133.40 | 133.19 | 130.84 | 133.83 | 142.67   | 135.11    | 135.17   | 135.18   | 135.22 | 132.25 | 132.97 | 132.87 |
| 2030 | 136.15 | 135.90 | 133.88 | 136.43 | 146.30   | 139.26    | 137.36   | 137.25   | 138.47 | 134.83 | 135.33 | 135.37 |
| 2031 | 138.67 | 138.23 | 136.79 | 139.75 | 149.10   | 143.07    | 139.93   | 140.76   | 140.94 | 137.57 | 138.55 | 138.16 |
| 2032 | 140.80 | 140.35 | 138.89 | 141.90 | 151.40   | 145.27    | 142.07   | 142.92   | 143.11 | 139.68 | 140.67 | 140.28 |
| 2033 | 144.07 | 143.61 | 142.12 | 145.19 | 154.90   | 148.64    | 145.37   | 146.23   | 146.43 | 142.92 | 143.94 | 143.54 |
| 2034 | 147.01 | 146.54 | 145.02 | 148.15 | 158.05   | 151.67    | 148.34   | 149.22   | 149.42 | 145.84 | 146.88 | 146.47 |

# **SCHEDULE 201 (Continued)**

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

|      |       |       |       |          | T          | ABLE 4b   |          |         |       |       |       |       |
|------|-------|-------|-------|----------|------------|-----------|----------|---------|-------|-------|-------|-------|
|      |       |       |       | R        | enewabl    | e Avoide  | d Costs  |         |       |       |       |       |
|      |       |       | Ren   | ewable F | ixed Price | e Option  | for Base | Load QI | =     |       |       |       |
|      |       |       |       | 0        | ff-Peak F  | orecast ( | \$/MWH)  |         |       |       |       |       |
|      |       |       |       |          |            |           |          |         |       | _     |       | _     |
| Year | Jan   | Feb   | Mar   | Apr      | May        | Jun       | Jul      | Aug     | Sep   | Oct   | Nov   | Dec   |
| 2014 | 38.13 | 51.38 | 42.88 | 15.23    | 9.88       | 9.38      | 21.78    | 37.03   | 40.53 | 39.63 | 41.38 | 47.38 |
| 2015 | 43.19 | 41.41 | 36.99 | 23.85    | 16.69      | 12.34     | 24.12    | 36.59   | 34.18 | 37.49 | 38.44 | 41.46 |
| 2016 | 43.43 | 41.65 | 37.23 | 24.08    | 16.92      | 12.57     | 24.35    | 36.83   | 34.42 | 37.73 | 38.68 | 41.70 |
| 2017 | 45.56 | 43.69 | 39.04 | 25.21    | 17.67      | 13.09     | 25.49    | 38.61   | 36.08 | 39.56 | 40.56 | 43.74 |
| 2018 | 48.40 | 46.40 | 41.45 | 26.74    | 18.73      | 13.86     | 27.05    | 41.01   | 38.31 | 42.01 | 43.08 | 46.46 |
| 2019 | 51.44 | 49.32 | 44.06 | 28.40    | 19.87      | 14.69     | 28.72    | 43.58   | 40.71 | 44.65 | 45.79 | 49.38 |
| 2020 | 74.05 | 74.35 | 76.18 | 74.70    | 70.70      | 70.98     | 71.32    | 72.70   | 73.76 | 75.21 | 74.98 | 75.50 |
| 2021 | 76.61 | 75.69 | 77.70 | 76.08    | 72.65      | 72.71     | 73.48    | 73.88   | 75.25 | 77.66 | 74.78 | 76.80 |
| 2022 | 77.70 | 77.31 | 79.96 | 77.27    | 73.68      | 74.12     | 75.90    | 74.74   | 76.69 | 79.10 | 76.00 | 78.21 |
| 2023 | 78.70 | 78.76 | 81.53 | 79.38    | 74.14      | 75.53     | 77.17    | 76.51   | 78.04 | 80.71 | 77.14 | 79.80 |
| 2024 | 79.35 | 79.42 | 83.14 | 79.16    | 74.55      | 77.78     | 76.40    | 76.83   | 78.61 | 81.03 | 79.55 | 80.29 |
| 2025 | 80.96 | 80.94 | 84.88 | 80.33    | 74.54      | 78.20     | 78.02    | 79.19   | 79.32 | 82.81 | 82.21 | 81.48 |
| 2026 | 81.35 | 82.42 | 85.28 | 80.89    | 75.34      | 79.31     | 79.11    | 79.94   | 79.12 | 83.91 | 82.41 | 82.47 |
| 2027 | 84.14 | 84.11 | 86.28 | 82.99    | 75.15      | 80.77     | 81.16    | 80.43   | 80.90 | 86.39 | 83.38 | 83.99 |
| 2028 | 85.29 | 86.01 | 88.97 | 85.07    | 74.43      | 82.57     | 82.76    | 81.19   | 82.83 | 87.06 | 84.33 | 86.62 |
| 2029 | 85.87 | 86.84 | 90.61 | 86.72    | 68.73      | 82.93     | 84.21    | 82.59   | 84.39 | 88.00 | 86.85 | 88.12 |
| 2030 | 87.21 | 88.28 | 92.46 | 86.89    | 68.43      | 83.64     | 84.98    | 85.17   | 84.95 | 89.66 | 88.91 | 89.94 |
| 2031 | 89.10 | 90.50 | 93.69 | 87.32    | 69.81      | 83.38     | 86.78    | 86.97   | 85.14 | 91.14 | 90.93 | 90.04 |
| 2032 | 90.57 | 92.00 | 95.23 | 88.76    | 70.97      | 84.75     | 88.21    | 88.41   | 86.54 | 92.64 | 92.44 | 91.53 |
| 2033 | 92.57 | 94.03 | 97.34 | 90.72    | 72.53      | 86.63     | 90.16    | 90.36   | 88.46 | 94.69 | 94.48 | 93.55 |
| 2034 | 94.36 | 95.84 | 99.22 | 92.47    | 73.93      | 88.30     | 91.90    | 92.10   | 90.16 | 96.52 | 96.30 | 95.36 |

|      |       |       |       |           | T/         | ABLE 4b   |          |         |       |       |       |       |
|------|-------|-------|-------|-----------|------------|-----------|----------|---------|-------|-------|-------|-------|
|      |       |       |       | R         | enewabl    | e Avoided | d Costs  |         |       |       |       |       |
|      |       |       | Ren   | newable F | ixed Price | e Option  | for Base | Load QI | =     |       |       |       |
|      |       |       |       | 0         | ff-Peak F  | orecast ( | \$/MWH)  |         |       |       |       |       |
|      |       |       |       |           |            |           |          |         |       |       |       |       |
| Year | Jan   | Feb   | Mar   | Apr       | May        | Jun       | Jul      | Aug     | Sep   | Oct   | Nov   | Dec   |
| 2014 | 38.13 | 51.38 | 42.88 | 15.23     | 9.88       | 9.38      | 21.78    | 37.03   | 40.53 | 39.63 | 41.38 | 47.38 |
| 2015 | 43.19 | 41.41 | 36.99 | 23.85     | 16.69      | 12.34     | 24.12    | 36.59   | 34.18 | 37.49 | 38.44 | 41.46 |
| 2016 | 43.43 | 41.65 | 37.23 | 24.08     | 16.92      | 12.57     | 24.35    | 36.83   | 34.42 | 37.73 | 38.68 | 41.70 |
| 2017 | 45.56 | 43.69 | 39.04 | 25.21     | 17.67      | 13.09     | 25.49    | 38.61   | 36.08 | 39.56 | 40.56 | 43.74 |
| 2018 | 48.40 | 46.40 | 41.45 | 26.74     | 18.73      | 13.86     | 27.05    | 41.01   | 38.31 | 42.01 | 43.08 | 46.46 |
| 2019 | 51.44 | 49.32 | 44.06 | 28.40     | 19.87      | 14.69     | 28.72    | 43.58   | 40.71 | 44.65 | 45.79 | 49.38 |
| 2020 | 59.57 | 59.79 | 61.16 | 60.06     | 57.06      | 57.27     | 57.53    | 58.56   | 59.35 | 60.44 | 60.26 | 60.65 |
| 2021 | 61.57 | 60.88 | 62.38 | 61.17     | 58.60      | 58.64     | 59.22    | 59.52   | 60.55 | 62.35 | 60.20 | 61.71 |
| 2022 | 62.46 | 62.17 | 64.15 | 62.14     | 59.45      | 59.78     | 61.11    | 60.25   | 61.70 | 63.51 | 61.19 | 62.84 |
| 2023 | 63.29 | 63.33 | 65.41 | 63.80     | 59.88      | 60.91     | 62.14    | 61.65   | 62.79 | 64.80 | 62.12 | 64.11 |
| 2024 | 63.85 | 63.91 | 66.70 | 63.71     | 60.26      | 62.68     | 61.65    | 61.97   | 63.30 | 65.11 | 64.00 | 64.56 |
| 2025 | 65.15 | 65.14 | 68.08 | 64.68     | 60.34      | 63.09     | 62.95    | 63.83   | 63.92 | 66.54 | 66.09 | 65.54 |
| 2026 | 65.53 | 66.33 | 68.47 | 65.19     | 61.03      | 64.01     | 63.86    | 64.48   | 63.86 | 67.45 | 66.33 | 66.37 |
| 2027 | 67.71 | 67.69 | 69.31 | 66.85     | 60.98      | 65.19     | 65.48    | 64.93   | 65.29 | 69.40 | 67.14 | 67.59 |
| 2028 | 68.66 | 69.20 | 71.42 | 68.49     | 60.54      | 66.63     | 66.77    | 65.60   | 66.82 | 69.99 | 67.94 | 69.66 |
| 2029 | 69.19 | 69.91 | 72.73 | 69.82     | 56.36      | 66.99     | 67.94    | 66.73   | 68.08 | 70.78 | 69.92 | 70.87 |
| 2030 | 70.29 | 71.09 | 74.22 | 70.05     | 56.23      | 67.61     | 68.62    | 68.76   | 68.60 | 72.12 | 71.56 | 72.33 |
| 2031 | 71.80 | 72.85 | 75.23 | 70.47     | 57.37      | 67.52     | 70.07    | 70.21   | 68.84 | 73.33 | 73.18 | 72.51 |
| 2032 | 72.99 | 74.06 | 76.48 | 71.64     | 58.32      | 68.64     | 71.23    | 71.37   | 69.98 | 74.54 | 74.39 | 73.71 |
| 2033 | 74.59 | 75.68 | 78.16 | 73.20     | 59.59      | 70.14     | 72.79    | 72.94   | 71.51 | 76.17 | 76.02 | 75.32 |
| 2034 | 76.04 | 77.15 | 79.67 | 74.62     | 60.75      | 71.50     | 74.20    | 74.35   | 72.90 | 77.65 | 77.49 | 76.79 |

# **SCHEDULE 201 (Continued)**

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

|      |        |        |        |         | T          | ABLE 5a   |           |        |        |        |        |        |
|------|--------|--------|--------|---------|------------|-----------|-----------|--------|--------|--------|--------|--------|
|      |        |        |        | F       | Renewabl   | e Avoide  | d Costs   |        |        |        |        |        |
|      |        |        | , i    | Renewab | le Fixed F | Price Opt | ion for W | ind QF |        |        |        |        |
|      |        |        |        | 0       | n-Peak F   | orecast ( | \$/MWH)   |        |        |        |        |        |
|      |        |        |        |         |            |           |           |        | _      |        |        |        |
| Year | Jan    | Feb    | Mar    | Apr     | May        | Jun       | Jul       | Aug    | Sep    | Oct    | Nov    | Dec    |
| 2014 | 44.43  | 53.18  | 44.93  | 26.68   | 27.18      | 27.33     | 41.83     | 51.08  | 46.68  | 43.18  | 44.93  | 50.68  |
| 2015 | 46.36  | 44.02  | 38.95  | 32.30   | 27.00      | 25.03     | 40.87     | 47.13  | 41.33  | 39.48  | 40.91  | 44.44  |
| 2016 | 45.93  | 43.62  | 38.61  | 32.04   | 26.81      | 24.86     | 40.50     | 46.69  | 40.96  | 39.13  | 40.54  | 44.03  |
| 2017 | 48.52  | 46.08  | 40.79  | 33.85   | 28.32      | 26.26     | 42.79     | 49.32  | 43.27  | 41.34  | 42.83  | 46.51  |
| 2018 | 52.38  | 49.75  | 44.05  | 36.58   | 30.62      | 28.41     | 46.21     | 53.25  | 46.73  | 44.65  | 46.26  | 50.22  |
| 2019 | 55.26  | 52.49  | 46.49  | 38.62   | 32.35      | 30.02     | 48.76     | 56.17  | 49.31  | 47.12  | 48.81  | 52.99  |
| 2020 | 89.69  | 89.67  | 88.77  | 89.31   | 93.09      | 92.03     | 91.66     | 91.52  | 90.00  | 88.85  | 89.84  | 88.64  |
| 2021 | 91.73  | 92.00  | 90.23  | 91.50   | 94.85      | 93.96     | 93.28     | 93.88  | 92.10  | 90.91  | 92.44  | 90.88  |
| 2022 | 93.81  | 93.66  | 91.42  | 93.47   | 96.98      | 95.77     | 95.23     | 95.19  | 93.89  | 92.71  | 94.39  | 92.68  |
| 2023 | 96.01  | 95.50  | 93.17  | 95.61   | 98.50      | 97.64     | 97.23     | 96.79  | 95.80  | 94.43  | 96.45  | 95.15  |
| 2024 | 97.25  | 97.43  | 95.12  | 97.50   | 100.71     | 99.51     | 99.38     | 99.07  | 98.85  | 96.03  | 97.21  | 97.37  |
| 2025 | 99.51  | 99.89  | 97.31  | 100.08  | 104.15     | 102.76    | 101.63    | 101.79 | 100.82 | 98.17  | 99.55  | 99.13  |
| 2026 | 102.27 | 101.88 | 100.16 | 102.74  | 108.00     | 103.89    | 103.89    | 104.37 | 104.03 | 100.42 | 102.58 | 101.47 |
| 2027 | 104.29 | 103.77 | 101.82 | 104.32  | 111.38     | 105.95    | 105.51    | 107.22 | 105.85 | 102.51 | 104.04 | 103.48 |
| 2028 | 106.19 | 104.96 | 102.57 | 106.53  | 113.07     | 107.34    | 108.18    | 108.19 | 107.16 | 104.79 | 106.06 | 105.14 |
| 2029 | 108.51 | 108.23 | 105.09 | 109.08  | 120.90     | 110.80    | 110.89    | 110.89 | 110.94 | 106.98 | 107.94 | 107.81 |
| 2030 | 110.84 | 110.49 | 107.80 | 111.21  | 124.40     | 114.99    | 112.45    | 112.31 | 113.94 | 109.07 | 109.73 | 109.79 |
| 2031 | 112.82 | 112.24 | 110.32 | 114.27  | 126.75     | 118.70    | 114.50    | 115.61 | 115.86 | 111.35 | 112.66 | 112.14 |
| 2032 | 114.68 | 114.08 | 112.13 | 116.15  | 128.84     | 120.66    | 116.38    | 117.51 | 117.77 | 113.18 | 114.51 | 113.99 |
| 2033 | 117.23 | 116.62 | 114.62 | 118.73  | 131.70     | 123.34    | 118.97    | 120.13 | 120.39 | 115.70 | 117.06 | 116.52 |
| 2034 | 119.48 | 118.86 | 116.83 | 121.02  | 134.24     | 125.71    | 121.26    | 122.44 | 122.70 | 117.93 | 119.31 | 118.76 |

|      |       |       |       |                  | T.               | ABLE 5a   |         |        |       |       |       |       |
|------|-------|-------|-------|------------------|------------------|-----------|---------|--------|-------|-------|-------|-------|
|      |       |       |       | F                | Renewabl         | e Avoide  | d Costs |        |       |       |       |       |
|      |       |       | F     |                  | le Fixed F       |           |         | ind QF |       |       |       |       |
|      |       |       |       | 0                | n-Peak F         | orecast ( | \$/MWH) |        |       |       |       |       |
|      |       |       |       |                  |                  |           |         | _      | _     |       |       |       |
| Year | Jan   | Feb   | Mar   | Apr              | May              | Jun       | Jul     | Aug    | Sep   | Oct   | Nov   | Dec   |
| 2014 | 44.43 | 53.18 | 44.93 | 26.68            | 27.18            | 27.33     | 41.83   | 51.08  | 46.68 | 43.18 | 44.93 | 50.68 |
| 2015 | 46.36 | 44.02 | 38.95 | 32.30            | 27.00            | 25.03     | 40.87   | 47.13  | 41.33 | 39.48 | 40.91 | 44.44 |
| 2016 | 45.93 | 43.62 | 38.61 | 32.04            | 26.81            | 24.86     | 40.50   | 46.69  | 40.96 | 39.13 | 40.54 | 44.03 |
| 2017 | 48.52 | 46.08 | 40.79 | 33.85            | 28.32            | 26.26     | 42.79   | 49.32  | 43.27 | 41.34 | 42.83 | 46.51 |
| 2018 | 52.38 | 49.75 | 44.05 | 36.58            | 30.62            | 28.41     | 46.21   | 53.25  | 46.73 | 44.65 | 46.26 | 50.22 |
| 2019 | 55.26 | 52.49 | 46.49 | 38.62            | 32.35            | 30.02     | 48.76   | 56.17  | 49.31 | 47.12 | 48.81 | 52.99 |
| 2020 | 70.23 | 70.21 | 69.54 | 69.95            | 72.77            | 71.98     | 71.70   | 71.60  | 70.46 | 69.60 | 70.34 | 69.44 |
| 2021 | 71.82 | 72.02 | 70.69 | <del>71.64</del> | <del>74.15</del> | 73.48     | 72.97   | 73.43  | 72.09 | 71.20 | 72.35 | 71.18 |
| 2022 | 73.43 | 73.32 | 71.64 | 73.18            | 75.80            | 74.90     | 74.50   | 74.47  | 73.49 | 72.61 | 73.87 | 72.59 |
| 2023 | 75.14 | 74.76 | 73.01 | 74.84            | 77.01            | 76.36     | 76.05   | 75.73  | 74.98 | 73.96 | 75.47 | 74.50 |
| 2024 | 76.13 | 76.26 | 74.53 | 76.31            | 78.72            | 77.82     | 77.72   | 77.49  | 77.33 | 75.22 | 76.10 | 76.21 |
| 2025 | 77.89 | 78.17 | 76.24 | 78.31            | 81.36            | 80.32     | 79.47   | 79.59  | 78.87 | 76.88 | 77.91 | 77.60 |
| 2026 | 80.02 | 79.73 | 78.44 | 80.37            | 84.30            | 81.23     | 81.23   | 81.59  | 81.34 | 78.64 | 80.25 | 79.42 |
| 2027 | 81.60 | 81.21 | 79.75 | 81.62            | 86.90            | 82.84     | 82.51   | 83.79  | 82.77 | 80.27 | 81.41 | 80.99 |
| 2028 | 83.09 | 82.17 | 80.38 | 83.34            | 88.24            | 83.95     | 84.57   | 84.59  | 83.81 | 82.04 | 82.99 | 82.30 |
| 2029 | 84.89 | 84.68 | 82.34 | 85.32            | 94.16            | 86.60     | 86.67   | 86.67  | 86.71 | 83.74 | 84.46 | 84.36 |
| 2030 | 86.71 | 86.45 | 84.43 | 86.99            | 96.86            | 89.81     | 87.91   | 87.81  | 89.03 | 85.38 | 85.88 | 85.92 |
| 2031 | 88.27 | 87.83 | 86.39 | 89.35            | 98.69            | 92.67     | 89.52   | 90.35  | 90.54 | 87.17 | 88.14 | 87.76 |
| 2032 | 89.73 | 89.28 | 87.82 | 90.83            | 100.32           | 94.20     | 91.00   | 91.85  | 92.04 | 88.61 | 89.60 | 89.21 |
| 2033 | 91.71 | 91.25 | 89.76 | 92.83            | 102.54           | 96.28     | 93.01   | 93.88  | 94.07 | 90.56 | 91.58 | 91.18 |
| 2034 | 93.48 | 93.01 | 91.49 | 94.62            | 104.52           | 98.14     | 94.81   | 95.69  | 95.89 | 92.31 | 93.35 | 92.94 |

# **SCHEDULE 201 (Continued)**

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

|      |       |       |       |          | T         | ABLE 5b   |           |        |       |       |       |       |
|------|-------|-------|-------|----------|-----------|-----------|-----------|--------|-------|-------|-------|-------|
|      |       |       |       | R        | enewabl   | e Avoide  | d Costs   |        |       |       |       |       |
|      |       |       | F     | Renewabl | e Fixed F | rice Opt  | ion for W | ind QF |       |       |       |       |
|      |       |       |       | 0        | ff-Peak F | orecast ( | \$/MWH)   |        |       |       |       |       |
|      |       |       |       |          |           |           |           |        |       | _     |       |       |
| Year | Jan   | Feb   | Mar   | Apr      | May       | Jun       | Jul       | Aug    | Sep   | Oct   | Nov   | Dec   |
| 2014 | 34.43 | 47.68 | 39.18 | 11.53    | 6.18      | 5.68      | 18.08     | 33.33  | 36.83 | 35.93 | 37.68 | 43.68 |
| 2015 | 39.42 | 37.64 | 33.22 | 20.08    | 12.92     | 8.57      | 20.35     | 32.82  | 30.41 | 33.72 | 34.67 | 37.69 |
| 2016 | 39.59 | 37.81 | 33.39 | 20.24    | 13.08     | 8.73      | 20.51     | 32.99  | 30.58 | 33.89 | 34.84 | 37.86 |
| 2017 | 41.65 | 39.78 | 35.13 | 21.30    | 13.76     | 9.18      | 21.58     | 34.70  | 32.17 | 35.65 | 36.65 | 39.83 |
| 2018 | 44.41 | 42.41 | 37.46 | 22.75    | 14.74     | 9.87      | 23.06     | 37.02  | 34.32 | 38.02 | 39.09 | 42.47 |
| 2019 | 47.37 | 45.25 | 39.99 | 24.33    | 15.80     | 10.62     | 24.65     | 39.51  | 36.64 | 40.58 | 41.72 | 45.31 |
| 2020 | 69.90 | 70.20 | 72.03 | 70.55    | 66.55     | 66.83     | 67.17     | 68.55  | 69.61 | 71.06 | 70.83 | 71.35 |
| 2021 | 72.38 | 71.46 | 73.47 | 71.85    | 68.42     | 68.48     | 69.25     | 69.65  | 71.02 | 73.43 | 70.55 | 72.57 |
| 2022 | 73.39 | 73.00 | 75.65 | 72.96    | 69.37     | 69.81     | 71.59     | 70.43  | 72.38 | 74.79 | 71.69 | 73.90 |
| 2023 | 74.31 | 74.37 | 77.14 | 74.99    | 69.75     | 71.14     | 72.78     | 72.12  | 73.65 | 76.32 | 72.75 | 75.41 |
| 2024 | 74.88 | 74.95 | 78.67 | 74.69    | 70.08     | 73.31     | 71.93     | 72.36  | 74.14 | 76.56 | 75.08 | 75.82 |
| 2025 | 76.40 | 76.38 | 80.32 | 75.77    | 69.98     | 73.64     | 73.46     | 74.63  | 74.76 | 78.25 | 77.65 | 76.92 |
| 2026 | 76.70 | 77.77 | 80.63 | 76.24    | 70.69     | 74.66     | 74.46     | 75.29  | 74.47 | 79.26 | 77.76 | 77.82 |
| 2027 | 79.40 | 79.37 | 81.54 | 78.25    | 70.41     | 76.03     | 76.42     | 75.69  | 76.16 | 81.65 | 78.64 | 79.25 |
| 2028 | 80.46 | 81.18 | 84.14 | 80.24    | 69.60     | 77.74     | 77.93     | 76.36  | 78.00 | 82.23 | 79.50 | 81.79 |
| 2029 | 80.95 | 81.92 | 85.69 | 81.80    | 63.81     | 78.01     | 79.29     | 77.67  | 79.47 | 83.08 | 81.93 | 83.20 |
| 2030 | 82.19 | 83.26 | 87.44 | 81.87    | 63.41     | 78.62     | 79.96     | 80.15  | 79.93 | 84.64 | 83.89 | 84.92 |
| 2031 | 83.98 | 85.38 | 88.57 | 82.20    | 64.69     | 78.26     | 81.66     | 81.85  | 80.02 | 86.02 | 85.81 | 84.92 |
| 2032 | 85.36 | 86.79 | 90.02 | 83.55    | 65.76     | 79.54     | 83.00     | 83.20  | 81.33 | 87.43 | 87.23 | 86.32 |
| 2033 | 87.26 | 88.72 | 92.03 | 85.41    | 67.22     | 81.32     | 84.85     | 85.05  | 83.15 | 89.38 | 89.17 | 88.24 |
| 2034 | 88.94 | 90.42 | 93.80 | 87.05    | 68.51     | 82.88     | 86.48     | 86.68  | 84.74 | 91.10 | 90.88 | 89.94 |

|      |       |       |       |       | T/        | ABLE 5b    |         |        |       |       |       |                  |
|------|-------|-------|-------|-------|-----------|------------|---------|--------|-------|-------|-------|------------------|
|      |       |       |       | R     | enewabl   | e Avoided  | d Costs |        |       |       |       |                  |
|      |       |       | F     |       |           | Price Opti |         | ind QF |       |       |       |                  |
|      |       |       |       | 0     | ff-Peak F | orecast (  | \$/MWH) |        |       |       |       |                  |
|      |       |       |       |       |           |            |         |        | _     |       |       |                  |
| Year | Jan   | Feb   | Mar   | Apr   | May       | Jun        | Jul     | Aug    | Sep   | Oct   | Nov   | Dec              |
| 2014 | 34.43 | 47.68 | 39.18 | 11.53 | 6.18      | 5.68       | 18.08   | 33.33  | 36.83 | 35.93 | 37.68 | 43.68            |
| 2015 | 39.42 | 37.64 | 33.22 | 20.08 | 12.92     | 8.57       | 20.35   | 32.82  | 30.41 | 33.72 | 34.67 | 37.69            |
| 2016 | 39.59 | 37.81 | 33.39 | 20.24 | 13.08     | 8.73       | 20.51   | 32.99  | 30.58 | 33.89 | 34.84 | 37.86            |
| 2017 | 41.65 | 39.78 | 35.13 | 21.30 | 13.76     | 9.18       | 21.58   | 34.70  | 32.17 | 35.65 | 36.65 | 39.83            |
| 2018 | 44.41 | 42.41 | 37.46 | 22.75 | 14.74     | 9.87       | 23.06   | 37.02  | 34.32 | 38.02 | 39.09 | 42.47            |
| 2019 | 47.37 | 45.25 | 39.99 | 24.33 | 15.80     | 10.62      | 24.65   | 39.51  | 36.64 | 40.58 | 41.72 | 45.31            |
| 2020 | 55.42 | 55.64 | 57.01 | 55.91 | 52.91     | 53.12      | 53.38   | 54.41  | 55.20 | 56.29 | 56.11 | 56.50            |
| 2021 | 57.34 | 56.65 | 58.15 | 56.94 | 54.37     | 54.41      | 54.99   | 55.29  | 56.32 | 58.12 | 55.97 | <del>57.48</del> |
| 2022 | 58.15 | 57.86 | 59.84 | 57.83 | 55.14     | 55.47      | 56.80   | 55.94  | 57.39 | 59.20 | 56.88 | 58.53            |
| 2023 | 58.90 | 58.94 | 61.02 | 59.41 | 55.49     | 56.52      | 57.75   | 57.26  | 58.40 | 60.41 | 57.73 | 59.72            |
| 2024 | 59.38 | 59.44 | 62.23 | 59.24 | 55.79     | 58.21      | 57.18   | 57.50  | 58.83 | 60.64 | 59.53 | 60.09            |
| 2025 | 60.59 | 60.58 | 63.52 | 60.12 | 55.78     | 58.53      | 58.39   | 59.27  | 59.36 | 61.98 | 61.53 | 60.98            |
| 2026 | 60.88 | 61.68 | 63.82 | 60.54 | 56.38     | 59.36      | 59.21   | 59.83  | 59.21 | 62.80 | 61.68 | 61.72            |
| 2027 | 62.97 | 62.95 | 64.57 | 62.11 | 56.24     | 60.45      | 60.74   | 60.19  | 60.55 | 64.66 | 62.40 | 62.85            |
| 2028 | 63.83 | 64.37 | 66.59 | 63.66 | 55.71     | 61.80      | 61.94   | 60.77  | 61.99 | 65.16 | 63.11 | 64.83            |
| 2029 | 64.27 | 64.99 | 67.81 | 64.90 | 51.44     | 62.07      | 63.02   | 61.81  | 63.16 | 65.86 | 65.00 | 65.95            |
| 2030 | 65.27 | 66.07 | 69.20 | 65.03 | 51.21     | 62.59      | 63.60   | 63.74  | 63.58 | 67.10 | 66.54 | 67.31            |
| 2031 | 66.68 | 67.73 | 70.11 | 65.35 | 52.25     | 62.40      | 64.95   | 65.09  | 63.72 | 68.21 | 68.06 | 67.39            |
| 2032 | 67.78 | 68.85 | 71.27 | 66.43 | 53.11     | 63.43      | 66.02   | 66.16  | 64.77 | 69.33 | 69.18 | 68.50            |
| 2033 | 69.28 | 70.37 | 72.85 | 67.89 | 54.28     | 64.83      | 67.48   | 67.63  | 66.20 | 70.86 | 70.71 | 70.01            |
| 2034 | 70.62 | 71.73 | 74.25 | 69.20 | 55.33     | 66.08      | 68.78   | 68.93  | 67.48 | 72.23 | 72.07 | 71.37            |

# **SCHEDULE 201 (Continued)**

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

|      | TABLE 6a                                  |        |        |        |        |        |        |        |        |        |        |        |
|------|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|      | Renewable Avoided Costs                   |        |        |        |        |        |        |        |        |        |        |        |
|      | Renewable Fixed Price Option for Solar QF |        |        |        |        |        |        |        |        |        |        |        |
|      | On-Peak Forecast (\$/MWH)                 |        |        |        |        |        |        |        |        |        |        |        |
|      |   |        |        |        |        |        |        |        | _      |        |        |        |
| Year | Jan                                       | Feb    | Mar    | Apr    | May    | Jun    | Jul    | Aug    | Sep    | Oct    | Nov    | Dec    |
| 2014 | 48.13                                     | 56.88  | 48.63  | 30.38  | 30.88  | 31.03  | 45.53  | 54.78  | 50.38  | 46.88  | 48.63  | 54.38  |
| 2015 | 50.13                                     | 47.79  | 42.72  | 36.07  | 30.77  | 28.80  | 44.64  | 50.90  | 45.10  | 43.25  | 44.68  | 48.21  |
| 2016 | 49.77                                     | 47.46  | 42.45  | 35.88  | 30.65  | 28.70  | 44.34  | 50.53  | 44.80  | 42.97  | 44.38  | 47.87  |
| 2017 | 52.43                                     | 49.99  | 44.70  | 37.76  | 32.23  | 30.17  | 46.70  | 53.23  | 47.18  | 45.25  | 46.74  | 50.42  |
| 2018 | 56.37                                     | 53.74  | 48.04  | 40.57  | 34.61  | 32.40  | 50.20  | 57.24  | 50.72  | 48.64  | 50.25  | 54.21  |
| 2019 | 59.33                                     | 56.56  | 50.56  | 42.69  | 36.42  | 34.09  | 52.83  | 60.24  | 53.38  | 51.19  | 52.88  | 57.06  |
| 2020 | 97.99                                     | 97.97  | 97.07  | 97.61  | 101.39 | 100.33 | 99.96  | 99.82  | 98.30  | 97.15  | 98.14  | 96.94  |
| 2021 | 100.19                                    | 100.46 | 98.69  | 99.96  | 103.31 | 102.42 | 101.74 | 102.34 | 100.56 | 99.37  | 100.90 | 99.34  |
| 2022 | 102.43                                    | 102.28 | 100.04 | 102.09 | 105.60 | 104.39 | 103.85 | 103.81 | 102.51 | 101.33 | 103.01 | 101.30 |
| 2023 | 104.79                                    | 104.28 | 101.95 | 104.39 | 107.28 | 106.42 | 106.01 | 105.57 | 104.58 | 103.21 | 105.23 | 103.93 |
| 2024 | 106.19                                    | 106.37 | 104.06 | 106.44 | 109.65 | 108.45 | 108.32 | 108.01 | 107.79 | 104.97 | 106.15 | 106.31 |
| 2025 | 108.63                                    | 109.01 | 106.43 | 109.20 | 113.27 | 111.88 | 110.75 | 110.91 | 109.94 | 107.29 | 108.67 | 108.25 |
| 2026 | 111.57                                    | 111.18 | 109.46 | 112.04 | 117.30 | 113.19 | 113.19 | 113.67 | 113.33 | 109.72 | 111.88 | 110.77 |
| 2027 | 113.77                                    | 113.25 | 111.30 | 113.80 | 120.86 | 115.43 | 114.99 | 116.70 | 115.33 | 111.99 | 113.52 | 112.96 |
| 2028 | 115.85                                    | 114.62 | 112.23 | 116.19 | 122.73 | 117.00 | 117.84 | 117.85 | 116.82 | 114.45 | 115.72 | 114.80 |
| 2029 | 118.35                                    | 118.07 | 114.93 | 118.92 | 130.74 | 120.64 | 120.73 | 120.73 | 120.78 | 116.82 | 117.78 | 117.65 |
| 2030 | 120.88                                    | 120.53 | 117.84 | 121.25 | 134.44 | 125.03 | 122.49 | 122.35 | 123.98 | 119.11 | 119.77 | 119.83 |
| 2031 | 123.06                                    | 122.48 | 120.56 | 124.51 | 136.99 | 128.94 | 124.74 | 125.85 | 126.10 | 121.59 | 122.90 | 122.38 |
| 2032 | 125.10                                    | 124.50 | 122.55 | 126.57 | 139.26 | 131.08 | 126.80 | 127.93 | 128.19 | 123.60 | 124.93 | 124.41 |
| 2033 | 127.85                                    | 127.24 | 125.24 | 129.35 | 142.32 | 133.96 | 129.59 | 130.75 | 131.01 | 126.32 | 127.68 | 127.14 |
| 2034 | 130.32                                    | 129.70 | 127.67 | 131.86 | 145.08 | 136.55 | 132.10 | 133.28 | 133.54 | 128.77 | 130.15 | 129.60 |

|      | TABLE 6a                                  |       |       |        |        |        |        |        |        |       |       |                  |
|------|---|-------|-------|--------|--------|--------|--------|--------|--------|-------|-------|------------------|
|      | Renewable Avoided Costs                   |       |       |        |        |        |        |        |        |       |       |                  |
|      | Renewable Fixed Price Option for Solar QF |       |       |        |        |        |        |        |        |       |       |                  |
|      | On-Peak Forecast (\$/MWH)                 |       |       |        |        |        |        |        |        |       |       |                  |
| .,   |   |       |       |        |        |        |        |        | _      |       |       |                  |
| Year | Jan                                       | Feb   | Mar   | Apr    | May    | Jun    | Jul    | Aug    | Sep    | Oct   | Nov   | Dec              |
| 2014 | 48.13                                     | 56.88 | 48.63 | 30.38  | 30.88  | 31.03  | 45.53  | 54.78  | 50.38  | 46.88 | 48.63 | 54.38            |
| 2015 | 50.13                                     | 47.79 | 42.72 | 36.07  | 30.77  | 28.80  | 44.64  | 50.90  | 45.10  | 43.25 | 44.68 | 48.21            |
| 2016 | 49.77                                     | 47.46 | 42.45 | 35.88  | 30.65  | 28.70  | 44.34  | 50.53  | 44.80  | 42.97 | 44.38 | 47.87            |
| 2017 | 52.43                                     | 49.99 | 44.70 | 37.76  | 32.23  | 30.17  | 46.70  | 53.23  | 47.18  | 45.25 | 46.74 | 50.42            |
| 2018 | 56.37                                     | 53.74 | 48.04 | 40.57  | 34.61  | 32.40  | 50.20  | 57.24  | 50.72  | 48.64 | 50.25 | 54.21            |
| 2019 | 59.33                                     | 56.56 | 50.56 | 42.69  | 36.42  | 34.09  | 52.83  | 60.24  | 53.38  | 51.19 | 52.88 | 57.06            |
| 2020 | 74.38                                     | 74.36 | 73.69 | 74.10  | 76.92  | 76.13  | 75.85  | 75.75  | 74.61  | 73.75 | 74.49 | 73.59            |
| 2021 | 76.05                                     | 76.25 | 74.92 | 75.87  | 78.38  | 77.71  | 77.20  | 77.66  | 76.32  | 75.43 | 76.58 | <del>75.41</del> |
| 2022 | 77.74                                     | 77.63 | 75.95 | 77.49  | 80.11  | 79.21  | 78.81  | 78.78  | 77.80  | 76.92 | 78.18 | 76.90            |
| 2023 | 79.53                                     | 79.15 | 77.40 | 79.23  | 81.40  | 80.75  | 80.44  | 80.12  | 79.37  | 78.35 | 79.86 | 78.89            |
| 2024 | 80.60                                     | 80.73 | 79.00 | 80.78  | 83.19  | 82.29  | 82.19  | 81.96  | 81.80  | 79.69 | 80.57 | 80.68            |
| 2025 | 82.45                                     | 82.73 | 80.80 | 82.87  | 85.92  | 84.88  | 84.03  | 84.15  | 83.43  | 81.44 | 82.47 | 82.16            |
| 2026 | 84.67                                     | 84.38 | 83.09 | 85.02  | 88.95  | 85.88  | 85.88  | 86.24  | 85.99  | 83.29 | 84.90 | 84.07            |
| 2027 | 86.34                                     | 85.95 | 84.49 | 86.36  | 91.64  | 87.58  | 87.25  | 88.53  | 87.51  | 85.01 | 86.15 | 85.73            |
| 2028 | 87.92                                     | 87.00 | 85.21 | 88.17  | 93.07  | 88.78  | 89.40  | 89.42  | 88.64  | 86.87 | 87.82 | 87.13            |
| 2029 | 89.81                                     | 89.60 | 87.26 | 90.24  | 99.08  | 91.52  | 91.59  | 91.59  | 91.63  | 88.66 | 89.38 | 89.28            |
| 2030 | 91.73                                     | 91.47 | 89.45 | 92.01  | 101.88 | 94.83  | 92.93  | 92.83  | 94.05  | 90.40 | 90.90 | 90.94            |
| 2031 | 93.39                                     | 92.95 | 91.51 | 94.47  | 103.81 | 97.79  | 94.64  | 95.47  | 95.66  | 92.29 | 93.26 | 92.88            |
| 2032 | 94.94                                     | 94.49 | 93.03 | 96.04  | 105.53 | 99.41  | 96.21  | 97.06  | 97.25  | 93.82 | 94.81 | 94.42            |
| 2033 | 97.02                                     | 96.56 | 95.07 | 98.14  | 107.85 | 101.59 | 98.32  | 99.19  | 99.38  | 95.87 | 96.89 | 96.49            |
| 2034 | 98.90                                     | 98.43 | 96.91 | 100.04 | 109.94 | 103.56 | 100.23 | 101.11 | 101.31 | 97.73 | 98.77 | 98.36            |

# **SCHEDULE 201 (Continued)**

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

|      | TABLE 6b                                  |        |        |       |           |           |         |       |       |        |        |        |
|------|---|--------|--------|-------|-----------|-----------|---------|-------|-------|--------|--------|--------|
|      | Renewable Avoided Costs                   |        |        |       |           |           |         |       |       |        |        |        |
|      | Renewable Fixed Price Option for Solar QF |        |        |       |           |           |         |       |       |        |        |        |
|      |   |        |        | 0     | ff-Peak F | orecast ( | \$/MWH) |       |       |        |        |        |
|      |   |        |        |       |           | _         |         | _     |       | _      |        |        |
| Year | Jan                                       | Feb    | Mar    | Apr   | May       | Jun       | Jul     | Aug   | Sep   | Oct    | Nov    | Dec    |
| 2014 | 38.13                                     | 51.38  | 42.88  | 15.23 | 9.88      | 9.38      | 21.78   | 37.03 | 40.53 | 39.63  | 41.38  | 47.38  |
| 2015 | 43.19                                     | 41.41  | 36.99  | 23.85 | 16.69     | 12.34     | 24.12   | 36.59 | 34.18 | 37.49  | 38.44  | 41.46  |
| 2016 | 43.43                                     | 41.65  | 37.23  | 24.08 | 16.92     | 12.57     | 24.35   | 36.83 | 34.42 | 37.73  | 38.68  | 41.70  |
| 2017 | 45.56                                     | 43.69  | 39.04  | 25.21 | 17.67     | 13.09     | 25.49   | 38.61 | 36.08 | 39.56  | 40.56  | 43.74  |
| 2018 | 48.40                                     | 46.40  | 41.45  | 26.74 | 18.73     | 13.86     | 27.05   | 41.01 | 38.31 | 42.01  | 43.08  | 46.46  |
| 2019 | 51.44                                     | 49.32  | 44.06  | 28.40 | 19.87     | 14.69     | 28.72   | 43.58 | 40.71 | 44.65  | 45.79  | 49.38  |
| 2020 | 78.20                                     | 78.50  | 80.33  | 78.85 | 74.85     | 75.13     | 75.47   | 76.85 | 77.91 | 79.36  | 79.13  | 79.65  |
| 2021 | 80.84                                     | 79.92  | 81.93  | 80.31 | 76.88     | 76.94     | 77.71   | 78.11 | 79.48 | 81.89  | 79.01  | 81.03  |
| 2022 | 82.01                                     | 81.62  | 84.27  | 81.58 | 77.99     | 78.43     | 80.21   | 79.05 | 81.00 | 83.41  | 80.31  | 82.52  |
| 2023 | 83.09                                     | 83.15  | 85.92  | 83.77 | 78.53     | 79.92     | 81.56   | 80.90 | 82.43 | 85.10  | 81.53  | 84.19  |
| 2024 | 83.82                                     | 83.89  | 87.61  | 83.63 | 79.02     | 82.25     | 80.87   | 81.30 | 83.08 | 85.50  | 84.02  | 84.76  |
| 2025 | 85.52                                     | 85.50  | 89.44  | 84.89 | 79.10     | 82.76     | 82.58   | 83.75 | 83.88 | 87.37  | 86.77  | 86.04  |
| 2026 | 86.00                                     | 87.07  | 89.93  | 85.54 | 79.99     | 83.96     | 83.76   | 84.59 | 83.77 | 88.56  | 87.06  | 87.12  |
| 2027 | 88.88                                     | 88.85  | 91.02  | 87.73 | 79.89     | 85.51     | 85.90   | 85.17 | 85.64 | 91.13  | 88.12  | 88.73  |
| 2028 | 90.12                                     | 90.84  | 93.80  | 89.90 | 79.26     | 87.40     | 87.59   | 86.02 | 87.66 | 91.89  | 89.16  | 91.45  |
| 2029 | 90.79                                     | 91.76  | 95.53  | 91.64 | 73.65     | 87.85     | 89.13   | 87.51 | 89.31 | 92.92  | 91.77  | 93.04  |
| 2030 | 92.23                                     | 93.30  | 97.48  | 91.91 | 73.45     | 88.66     | 90.00   | 90.19 | 89.97 | 94.68  | 93.93  | 94.96  |
| 2031 | 94.22                                     | 95.62  | 98.81  | 92.44 | 74.93     | 88.50     | 91.90   | 92.09 | 90.26 | 96.26  | 96.05  | 95.16  |
| 2032 | 95.78                                     | 97.21  | 100.44 | 93.97 | 76.18     | 89.96     | 93.42   | 93.62 | 91.75 | 97.85  | 97.65  | 96.74  |
| 2033 | 97.88                                     | 99.34  | 102.65 | 96.03 | 77.84     | 91.94     | 95.47   | 95.67 | 93.77 | 100.00 | 99.79  | 98.86  |
| 2034 | 99.78                                     | 101.26 | 104.64 | 97.89 | 79.35     | 93.72     | 97.32   | 97.52 | 95.58 | 101.94 | 101.72 | 100.78 |

|      | TABLE 6b                                  |       |       |       |           |           |         |       |       |       |       |       |
|------|---|-------|-------|-------|-----------|-----------|---------|-------|-------|-------|-------|-------|
|      | Renewable Avoided Costs                   |       |       |       |           |           |         |       |       |       |       |       |
|      | Renewable Fixed Price Option for Solar QF |       |       |       |           |           |         |       |       |       |       |       |
|      |   |       |       | 0     | ff-Peak F | orecast ( | \$/MWH) |       |       |       |       |       |
|      |   |       |       |       |           |           |         |       | _     |       |       |       |
| Year | Jan                                       | Feb   | Mar   | Apr   | May       | Jun       | Jul     | Aug   | Sep   | Oct   | Nov   | Dec   |
| 2014 | 38.13                                     | 51.38 | 42.88 | 15.23 | 9.88      | 9.38      | 21.78   | 37.03 | 40.53 | 39.63 | 41.38 | 47.38 |
| 2015 | 43.19                                     | 41.41 | 36.99 | 23.85 | 16.69     | 12.34     | 24.12   | 36.59 | 34.18 | 37.49 | 38.44 | 41.46 |
| 2016 | 43.43                                     | 41.65 | 37.23 | 24.08 | 16.92     | 12.57     | 24.35   | 36.83 | 34.42 | 37.73 | 38.68 | 41.70 |
| 2017 | 45.56                                     | 43.69 | 39.04 | 25.21 | 17.67     | 13.09     | 25.49   | 38.61 | 36.08 | 39.56 | 40.56 | 43.74 |
| 2018 | 48.40                                     | 46.40 | 41.45 | 26.74 | 18.73     | 13.86     | 27.05   | 41.01 | 38.31 | 42.01 | 43.08 | 46.46 |
| 2019 | 51.44                                     | 49.32 | 44.06 | 28.40 | 19.87     | 14.69     | 28.72   | 43.58 | 40.71 | 44.65 | 45.79 | 49.38 |
| 2020 | 59.57                                     | 59.79 | 61.16 | 60.06 | 57.06     | 57.27     | 57.53   | 58.56 | 59.35 | 60.44 | 60.26 | 60.65 |
| 2021 | 61.57                                     | 60.88 | 62.38 | 61.17 | 58.60     | 58.64     | 59.22   | 59.52 | 60.55 | 62.35 | 60.20 | 61.71 |
| 2022 | 62.46                                     | 62.17 | 64.15 | 62.14 | 59.45     | 59.78     | 61.11   | 60.25 | 61.70 | 63.51 | 61.19 | 62.84 |
| 2023 | 63.29                                     | 63.33 | 65.41 | 63.80 | 59.88     | 60.91     | 62.14   | 61.65 | 62.79 | 64.80 | 62.12 | 64.11 |
| 2024 | 63.85                                     | 63.91 | 66.70 | 63.71 | 60.26     | 62.68     | 61.65   | 61.97 | 63.30 | 65.11 | 64.00 | 64.56 |
| 2025 | 65.15                                     | 65.14 | 68.08 | 64.68 | 60.34     | 63.09     | 62.95   | 63.83 | 63.92 | 66.54 | 66.09 | 65.54 |
| 2026 | 65.53                                     | 66.33 | 68.47 | 65.19 | 61.03     | 64.01     | 63.86   | 64.48 | 63.86 | 67.45 | 66.33 | 66.37 |
| 2027 | 67.71                                     | 67.69 | 69.31 | 66.85 | 60.98     | 65.19     | 65.48   | 64.93 | 65.29 | 69.40 | 67.14 | 67.59 |
| 2028 | 68.66                                     | 69.20 | 71.42 | 68.49 | 60.54     | 66.63     | 66.77   | 65.60 | 66.82 | 69.99 | 67.94 | 69.66 |
| 2029 | 69.19                                     | 69.91 | 72.73 | 69.82 | 56.36     | 66.99     | 67.94   | 66.73 | 68.08 | 70.78 | 69.92 | 70.87 |
| 2030 | 70.29                                     | 71.09 | 74.22 | 70.05 | 56.23     | 67.61     | 68.62   | 68.76 | 68.60 | 72.12 | 71.56 | 72.33 |
| 2031 | 71.80                                     | 72.85 | 75.23 | 70.47 | 57.37     | 67.52     | 70.07   | 70.21 | 68.84 | 73.33 | 73.18 | 72.51 |
| 2032 | 72.99                                     | 74.06 | 76.48 | 71.64 | 58.32     | 68.64     | 71.23   | 71.37 | 69.98 | 74.54 | 74.39 | 73.71 |
| 2033 | 74.59                                     | 75.68 | 78.16 | 73.20 | 59.59     | 70.14     | 72.79   | 72.94 | 71.51 | 76.17 | 76.02 | 75.32 |
| 2034 | 76.04                                     | 77.15 | 79.67 | 74.62 | 60.75     | 71.50     | 74.20   | 74.35 | 72.90 | 77.65 | 77.49 | 76.79 |

# Portland General Electric Company

Sheet No. 201-17

# **SCHEDULE 201 (Continued)**

## WIND INTEGRATION

| TAB              | LE 7 |  |  |  |  |  |
|------------------|------|--|--|--|--|--|
| Wind Integration |      |  |  |  |  |  |
| Year             | Cost |  |  |  |  |  |
| 2014             | 3.70 |  |  |  |  |  |
| 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 |  |  |  |  |  |

## **SCHEDULE 201 (Continued)**

#### 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:

- 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.
- 2) 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.

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.

## **SCHEDULE 201 (Continued)**

# 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

## 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 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.

## Portland General Electric Company

Sheet No. 201-20

## **SCHEDULE 201 (Concluded)**

OTHER DEFINITIONS (Continued)

#### **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 (C02), 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. As used in this schedule, Environmental Attributes shall mean any and all current or future credits, benefits, emissions reductions, environmental air quality credits, emissions reduction credits, offsets and allowances, howsoever entitled, resulting from the avoidance of the emission of any gas, chemical or other substance attributable to the Facility during the Term, or otherwise attributable to the generation, purchase, sale or use of energy from or by the Facility during the Term, including without limitation any of the same arising out of legislation or regulation concerned with oxides of nitrogen, sulfur or carbon, with particulate matter, soot or mercury, or implementing the United Nations Framework Convention on Climate Change (the "UNFCCC") or the Kyoto Protocol to the UNFCCC or crediting "early action" emissions reduction, or laws or regulations involving or administered by the Clean Air Markets Division of the Environmental Protection Agency or successor administrator, or any State or federal entity given jurisdiction over a program involving transferability of Environmental Attributes, including the Oregon Renewable Portfolio Standards, and any Green Tag Reporting Rights to such Environmental Attributes.

#### **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.

Comment [MD4]: CREA suggested language

Comment [MD5]: We were asked to utilize Pacificorp's definition, which this change reflects.

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

This is the period from 2020 through 2034.

#### **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. Disputes may be presented to the Commission for resolution.

## **SPECIAL CONDITIONS**

- Delivery of energy by Seller will be at a voltage, phase, frequency, and power factor as specified by the Company.
- 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.

|                                 | Schedule 201 Standard Renewable In-System Non Variable Power Purchase Agreement Effective, 2014  |   |
|---------------------------------|--|---|
| STA                             | NDARD RENEWABLE IN-SYSTEM NON-VARIABLE POWER PURCHASE  |   |
|                                 | AGREEMENT  |   |
| between                         | HIS AGREEMENT, entered into this day, 20, is ("Seller") and Portland General Electric ("PGE") (hereinafter each a "Party" or collectively, "Parties").   |   |
|                                 | <u>RECITALS</u>  |   |
| for<br>in                       | eller intends to construct, own, operate and maintain a facility the generation of electric power located County, with a Nameplate Capacity Rating of "kW"), as further described in Exhibit B ("Facility"); and   |   |
|                                 | eller intends to operate the Facility as a "Qualifying Facility," as such term is a Section 3.1.3, below.  |   |
|                                 | eller shall sell and PGE shall purchase the entire Net Output, as such term is   |   |
|                                 | n Section 1.1922, below, from the Facility in accordance with the terms and s of this Agreement.   | Formatted: Not Highlight  |
|                                 | AGREEMENT  |   |
| NO                              | DW, THEREFORE, the Parties mutually agree as follows:  |   |
|                                 | SECTION 1: DEFINITIONS   |   |
| W<br>meanings                   | hen used in this Agreement, the following terms shall have the following s:  |   |
|                                 | 1. <sup></sup> "Annual Minimum Net Output" means the sum of <u>each</u> the Monthly <mark>∢ nimum Net Output multiplied by twelve (12) <u>in a Contract Year.</u></mark>   | Formatted: Indent: Left: 0.5", No bullets or numbering  |
| by Seller                       | 2-1.1. "As-built Supplement" means the supplement to Exhibit B provided in accordance with Section 4.4 following completion of construction of the lescribing the Facility as actually built.  | Comment [A1]: For purposes of settlement, PGE is reverting to an annual measure of Minimum Net Output. PGE requests that the change to a monthly measure be considered in Phase II.                                 |
| power pu<br>Such per<br>PGE sha | "Billing Period" means a period between PGE's readings of its urchase billing meter at the Facility in the normal course of PGE's business. riods typically may vary and may not coincide with calendar months, however, all use best efforts to read the power purchase billing meter in 12 equally |   |
| 4.4<br>money in                 | eriods per year  4.1.3. "Cash Escrow" means an agreement by two parties to place to the custody of a third party for delivery to a grantee only after the fulfillment additions specified.   | Comment [A2]: CREA objected to former language as too broad. I believe we agreed that language such as this would be acceptable. If not, PGE requests revisions to allow more flexibility be addressed in Phase II. |
| deemed                          | 5.1.4. "Commercial Operation Date" means the date that the Facility is by PGE to be fully operational and reliable. PGE may, at its discretion, require, ther things, that all of the following events have occurred:  |   |

|  | Schedule 201    |
|--|-----------------|
| Standard Renewable In-System Non Variable Power Pure | chase Agreement |
| Effective  | , 2014          |

- 4.5.1.1.4.1. (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);
- 4.5.2.1.4.2. (facilities with nameplate under 500 kW exempt from following requirement) Start-Up Testing of the Facility has been completed in accordance with Section 1.3228;
- 1.5.3.1.4.3. (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;
- 4.5.4.1.4.4. (facilities with nameplate under 500 kW exempt from following requirement) PGE has received a certificate addressed to PGE from an LPE stating that in accordance with the Generation Interconnection Agreement, all required interconnection facilities have been constructed, all required interconnection tests have been completed; and the Facility is physically interconnected with PGE's electric system.
- 4.5.5.1.4.5. (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;
- 4.6.1.5. "Contract Price" means the applicable price, including on-peak and off-peak prices, as specified in the Schedule.
  - 1.7. "Contract Month" means each calendar month of each Contract Year.
- 4.8.1.6. "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.

1.9.

4.10.1.8. "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,

**Comment [A3]:** Non-variable contract, so changes not needed for seasonal hydro/solar.

Formatted: Indent: Left: 0", Tab stops:

0.95", List tab + Not at 1"

Formatted: Font: 12 pt, Not Highlight

| Sch  | nedule 201 |
|--|------------|
| Standard Renewable In-System Non Variable Power Purchase | Agreement  |
| Effective  | , 2014     |

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 (C02), 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. means any and all current or future credits, benefits, emissions reductions, environmental air quality credits, emissions reduction credits, offsets and allowances, howsoever entitled, resulting from the avoidance of the emission of any gas, chemical or other substance attributable to the Facility during the Term, or otherwise attributable to the generation, purchase, sale or use of energy from or by the Facility during the Term, including without limitation any of the same arising out of legislation or regulation concerned with oxides of nitrogen, sulfur or carbon, with particulate matter, soot or mercury, or implementing the United Nations Framework Convention on Climate Change (the "UNFCCC") or the Kyoto Protocol to the UNFCCC or crediting "early action" emissions reduction, or laws or regulations involving or administered by the Clean Air Markets Division of the Environmental Protection Agency or successor administrator, or any State or federal entity given jurisdiction over a program involving transferability of Environmental Attributes, including the Oregon Renewable Portfolio Standards, and any Green Tag Reporting Rights to such Environmental Attributes.

4.11.1.9. "Facility" has the meaning set forth in the Recitals.

1.12.1.10. "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 at the 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).

4.13.1.11. "Generation Interconnection Agreement" means the generation interconnection agreement to be entered into separately between Seller and PGE, providing for the construction, operation, and maintenance of interconnection facilities required to accommodate deliveries of Seller's Net Output.

1.14.1.12. "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.

1.15.1.13. "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

**Comment [A4]:** We were asked to utilize Pacificorp's definition, which this change reflects.

| Sche  | edule 201 |
|---|-----------|
| Standard Renewable In-System Non Variable Power Purchase Ag | greement  |
| Effective   | , 2014    |

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.

1.16.1.14. L'Lost Energy Value" means for a Contract YearMonth: zero, unless the Contract Year's Month's Net Output is less than the Monthly Minimum Net Output and the Contract YearMonth's mean time weighted average of the Mid-C Index Price for On-Peak Hours and Off-Peak Hours is greater than the time weighted average of the Contract Price for On-Peak Hours and Off-Peak Hours for that Contract Year, in which case Lost Energy Value equals: (Monthly Minimum Net Output - Net Output for the Contract Month Year) X (the lower of: the mean time weighted average of the Contract Price for On-Peak Hours; or the mean time weighted average of the Mid-C Index Price for On-Peak Hours and Off-Peak Hours - mean the time-weighted average of the Contract Price for On-Peak Hours and Off-Peak Hours).

4.17.1.15. "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: <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.

1.18. "Mid Columbia" means an area which includes points at any of the switchyards associated with the following four hydro projects: Rocky Reach, Rock Island, Wanapum and Priest Rapids. These switchyards include: Rocky Reach, Rock Island, Wanapum, McKenzie, Valhalla, Columbia, Midway and Vantage. Mid-Columbia shall also include points in the "Northwest Hub," as defined by Bonneville Power Administration. For scheduling purposes, the footprint described above shall dictate the delivery point name for the then current Western Electricity Coordinating Council ("WECC") scheduling protocols. If the footprint changes during the Term, a mutually agreed upon footprint that describes an area containing the most liquidity for trading purposes shall apply.

4.19.1.16. "Monthly-Minimum Net Output" shall have the meaning provided in Section 4.2 of this Agreement.

1.20.1.17. "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.

4.21.1.18. "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.

1.22.1.19. "Net Output" means all energy expressed in kWhs produced by the Facility, less station and other onsite use and less transformation and transmission losses.

**Comment [A5]:** Reflects CREA's suggested changes, and reversion to annual from monthly damages calculations.

Comment [A6]: CREA suggestion change

Comment [A7]: Obsolete definition

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

Effective \_\_\_\_\_\_\_, 2014

4.23.1.20. "Off-Peak Hours" has the meaning provided in the Schedule.

1.24.1.21. "On-Peak Hours" has the meaning provided in the Schedule.

4.25.1.22. "Point of Delivery" means the high side of the generation step up transformer(s) located at the point of interconnection between the Facility and PGE's distribution or transmission system, as specified in the Generation Interconnection Agreement.

4.26.1.23. "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.

4.27.1.24. "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.

4.28.1.25. "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.

1.29.1.27. "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. In the event of a conflict between this Agreement and the Schedule, this Agreement shall apply.

Comment [A8]: CREA suggested language

**Comment [A9]:** We think including a supremacy clause makes sense and would like to add it as a Phase II issue if not included now. It is not always possible to anticipate conflicts.

| Schedule 201 Standard Renewable In-System Non Variable Power Purchase Agreement Effective, 2014  |  |
|--|--|
| 4.30.1.28. "Senior Lien" means a prior lien which has precedence as to the property under the lien over another lien or encumbrance.   |  |
| 1.31.1.29. "Start-Up Testing" means the completion of applicable required factory and start-up tests as set forth in Exhibit D.  |  |
| 4.32.1.30. "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.   |  |
| 1.33.1.31. "Term" shall mean the period beginning on the Effective Date and ending on the Termination Date.  |  |
| 1.34.1.32. "Test Period" shall mean a period of sixty (60) days or a commercially reasonable period determined by the Seller.  |  |
| 1.35.1.33. References to Recitals, Sections, and Exhibits are to be the recitals, sections and exhibits of this Agreement.   |  |
| SECTION 2: TERM; COMMERCIAL OPERATION DATE   |  |
| 2.1 This Agreement shall become effective upon execution by both Parties ("Effective Date").   |  |
| 2.2 Time is of the essence of this Agreement, and Seller's ability to meet certain requirements prior to the Commercial Operation Date and to complete all requirements to establish the Commercial Operation Date is critically important. Therefore,   |  |
| 2.2.1 By [date to be determined by the Seller] Seller shall begin initial deliveries of Net Output; and  |  |
| 2.2.2 By [date to be determined by the Seller] Seller shall have completed all requirements under Section 1.4 and shall have established the Commercial Operation Date.  |  |
| 2.2.3 In the event Seller is unable to meet the requirements of Sections 2.2.1 and 2.2.2, and if PGE is resource deficient (as defined by the Commission) PGE may terminate this agreement in accordance with Section 9. Otherwise, PGE may not terminate, but Seller shall pay damages equal to the Lost Energy Value for delay beyond the date specified in Section 2.2.2. In calculating the Lost Energy Value for use in this section, the Monthly-Minimum Net Output shall be prorated if necessary when applied to the period of time between the Commercial Operation Date and the date specified in 2.2.1. |  |
| 2.3 This Agreement shall terminate on, [date to be chosen by Seller], or the date the Agreement is terminated in accordance with Section 9 or 11.2, whichever is earlier ("Termination Date").   |  |

SECTION 3: REPRESENTATIONS AND WARRANTIES

3.1 Seller and PGE represent, covenant, and warrant as follows:

Comment [A10]: CREA suggested changes

| Schedule 201 Standard Renewable In-System Non Variable Power Purchase Agreement Effective, 2014   |
|---|
| 3.1.1 Seller warrants it is a duly organized under the laws of  |
| 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 kW.   |
| 3.1.9 Seller estimates that the average annual Net Output to be delivered by the Facility to PGE is kilowatt-hours ("kWh"), which amount PGE will include in its resource planning.   |
| 3.1.10 Seller will deliver from the Facility to PGE at the Point of Delivery Net Output not to exceed a maximum of kWh of Net Output during each Contract Year ("Maximum Net Output").  |
| 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.  |

7

|   | Schedule 201             |
|---|--------------------------|
| Standard Renewable In-System Non Variable | Power Purchase Agreement |
| Effective                                 | , 2014                   |

- 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 renewable energy credits 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 RPS ATTRIBUTES

- 4.1 Commencing on the Effective Date and continuing through the Term of this Agreement, Seller shall sell to PGE the entire Net Output delivered from the Facility at the Point of Delivery. PGE shall pay Seller the Contract Price for all delivered Net Output.
- 4.2 Seller shall deliver to PGE from the Facility for each Contract Year Net Output equal to or greater than the Monthly-Minimum Net Output (either (a) if -Seller does not select the Alternative Minimum Amount as defined in Exhibit A of this Agreement, seventy-five percent (75%) of its average annual Net Output divided by twelve (12)-or (b) if selected by Seller, the Alternative Minimum Amount designated for each Contract Yearmonth), provided that such Monthly-Minimum Net Output shall be reduced on a pro-rata basis for any periods during a Contract Month(s)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 Monthly-Minimum Net Output each Contract MonthYear, PGE will suffer losses equal to the Lost Energy Value. As damages for Seller's failure to deliver the Monthly-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

Comment [A11]: ODOE suggested change

Comment [A12]: CREA suggested change

| Schedule 2  | 201 |
|---|-----|
| Standard Renewable In-System Non Variable Power Purchase Agreem | ıen |
| Effective, 20   | 014 |

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 (not more than 24 months), 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 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 To the extent not otherwise provided in the Generation Interconnection Agreement, all costs associated with the modifications to PGE's interconnection facilities or electric system occasioned by or related to the interconnection of the Facility with PGE's system, or any increase in generating capability of the Facility, or any increase of delivery of Net Dependable Capacity from the Facility, shall be borne by Seller.
- During the Renewable Resource Deficiency Period Commencing on the Effective Date and continuing through the Term of this Agreement, Seller shall provide and PGE shall acquire the Environmental RPS Attributes for the Contract Years as specified in the Schedule and Seller shall retain ownership of all other Environmental Attributes (if any). During the Renewable Resource Sufficiency Period, and any period within the Term of this Agreement after completion of the first fifteen (15) years after the Commercial Operation Date, Seller shall retain all Environmental Attributes in accordance with the Schedule. The Contract Price includes full payment for the Net Output and any Environmental RPS Attributes transferred to PGE under this Agreement. With respect to Environmental Attributes not transferred to PGE under this Agreement ("Seller-Retained RECsEnvironmental 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 RECsEnvironmental Attributes, and PGE shall not report under such program that such Seller-Retained RECs-Environmental Attributes belong to it. With respect to Environmental 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.

Comment [A13]: Incorporates CREA's

| Sc   | hedule 201 |
|--|------------|
| Standard Renewable In-System Non Variable Power Purchase Agreement |            |
| Effective  | , 2014     |

## **SECTION 5: OPERATION AND CONTROL**

- 5.1 Seller shall operate and maintain the Facility in a safe manner in accordance with the Generation Interconnection Agreement, and Prudent Electrical Practices. PGE shall have no obligation to purchase Net Output from the Facility to the extent the interconnection of the Facility to PGE's electric system is disconnected, suspended or interrupted, in whole or in part, pursuant to the Generation Interconnection Agreement, or to the extent generation curtailment is required as a result of Seller's noncompliance with the Generation Interconnection Agreement. Seller is solely responsible for the operation and maintenance of the Facility. PGE shall not, by reason of its decision to inspect or not to inspect the Facility, or by any action or inaction taken with respect to any such inspection, assume or be held responsible for any liability or occurrence arising from the operation and maintenance by Seller of the Facility.
- 5.2 Seller agrees to provide sixty (60) days advance written notice of any scheduled maintenance that would require shut down of the Facility for any period of time
- 5.3 If the Facility ceases operation for unscheduled maintenance, Seller immediately shall notify PGE of the necessity of such unscheduled maintenance, the time when such maintenance has occurred or will occur, and the anticipated duration of such maintenance. Seller shall take all reasonable measures and exercise its best efforts to avoid unscheduled maintenance, to limit the duration of such unscheduled maintenance, and to perform unscheduled maintenance during Off-Peak hours.

## **SECTION 6: CREDITWORTHINESS**

In the event Seller: a) is unable to represent or warrant as required by Section 3 that it has not been a debtor in any bankruptcy proceeding within the past two (2) years; b) becomes such a debtor during the Term; or c) is not or will not be current on all its financial obligations, Seller shall immediately notify PGE and shall promptly (and in no less than 10 days after notifying PGE) provide default security in an amount reasonably acceptable to PGE in one of the following forms: Senior Lien, Step-in Rights, a Cash Escrow or Letter of Credit. The amount of such default security that shall be acceptable to PGE shall be equal to: (annual On Peak Hours) X (On Peak Price – Off Peak Price) X (Annual-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: METERING**

7.1 PGE shall design, furnish, install, own, inspect, test, maintain and replace all metering equipment at Seller's cost and as required pursuant to the Generation Interconnection Agreement.

|  | Schedule 201         |
|--|----------------------|
| Standard Renewable In-System Non Variable Powe | r Purchase Agreement |
| Effective                                      | , 2014               |

- 7.2 Metering shall be performed at the location and in a manner consistent with this Agreement and as specified in the Generation Interconnection Agreement. All Net Output purchased hereunder shall be adjusted to account for electrical losses, if any, between the point of metering and the Point of Delivery, so that he purchased amount reflects the net amount of power flowing into PGE's system at the Point of Delivery.
- 7.3 PGE shall periodically inspect, test, repair and replace the metering equipment as provided in the Generation Interconnection Agreement. If any of the inspections or tests discloses an error exceeding two (2%) percent of the actual energy delivery, either fast or slow, proper correction, based upon the inaccuracy found, shall be made of previous readings for the actual period during which the metering equipment rendered inaccurate measurements if that period can be ascertained. If the actual period cannot be ascertained, the proper correction shall be made to the measurements taken during the time the metering equipment was in service since last tested, but not exceeding three (3) months, in the amount the metering equipment shall have been shown to be in error by such test. Any correction in billings or payments resulting from a correction in the meter records shall be made in the next monthly billing or payment rendered. Such correction, when made, shall constitute full adjustment of any claim between Seller and PGE arising out of such inaccuracy of metering equipment.
- 7.4 To the extent not otherwise provided in the Generation Interconnection Agreement, all of PGE's costs relating to all metering equipment installed to accommodate Seller's Facility shall be borne by Seller.

#### SECTION 8: BILLINGS, COMPUTATIONS AND PAYMENTS

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

#### SECTION 9: DEFAULT, REMEDIES AND TERMINATION

- 9.1 In addition to any other event that may constitute a default under this Agreement, the following events shall constitute defaults under this Agreement:
- 9.1.1 Breach by Seller or PGE of a representation or warranty, except for Section 3.1.4, set forth in this Agreement.
- 9.1.2 Seller's failure to provide default security, if required by Section 6, prior to delivery of any Net Output to PGE or within 10 days of notice.
- 9.1.3 Seller's failure to deliver the Annual Minimum Net Output for two consecutive Contract Years.

**Comment [A14]:** To make consistent with Billing Period definition, above.

| Schedule 20  |
|--|
| Standard Renewable In-System Non Variable Power Purchase Agreement |
| Effective, 201   |

- 9.1.4 If Seller is no longer a Qualifying Facility.
- 9.1.5 Failure of PGE to make any required payment pursuant to Section 8.1.
- 9.2 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 9.1.3 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 9 are cumulative such that the exercise of one or more rights shall not constitute a waiver of any other rights.
- 9.3 If this Agreement is terminated as provided in this Section 9 PGE shall make all payments, within thirty (30) days, that, pursuant to the terms of this Agreement, are owed to Seller as of the time of receipt of notice of default. PGE shall not be required to pay Seller for any Net Output delivered by Seller after such notice of default.
- 9.4 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 Monthly-Minimum Net Output that Seller was otherwise obligated to provide for a period of twenty-four (24) months from the date of termination. Accounts owed by Seller pursuant to this paragraph shall be due within five (5) business days after any invoice from PGE for the same.
- 9.5 In the event PGE terminates this Agreement pursuant to this Section 9, and Seller wishes to again sell Net Output to PGE following such termination, PGE in its sole discretion may require that Seller shall do so subject to the terms of this Agreement, including but not limited to the Contract Price until the Term of this Agreement (as set forth in Section 2.3) would have run in due course had the Agreement remained in effect. At such time Seller and PGE agree to execute a written document ratifying the terms of this Agreement.
- 9.6 Sections 9.1 9.3 9.4 9.5, 10, and 19.2 shall survive termination of this Agreement.

#### SECTION 10: INDEMNIFICATION AND LIABILITY

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

|   | Schedule 201             |
|---|--------------------------|
| Standard Renewable In-System Non Variable | Power Purchase Agreement |
| Effective _                               | , 2014                   |

- 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+A-" 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
- 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 "A-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

Comment [A15]: PGE's policies regarding insurance company ratings have changed since Order 06-538. PGE is willing to make this change, but requests this issue be addressed in Phase II.

| Schedule 2  | 201 |
|---|-----|
| Standard Renewable In-System Non Variable Power Purchase Agreem | en  |
| Effective, 20   | 014 |

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

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

#### SECTION 12: FORCE MAJEURE

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

|   | Schedule 201       |
|---|--------------------|
| Standard Renewable In-System Non Variable Power | Purchase Agreement |
| Effective                                       | , 2014             |

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

#### **SECTION 13: SEVERAL OBLIGATIONS**

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

#### **SECTION 14: CHOICE OF LAW**

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

#### SECTION 15: PARTIAL INVALIDITY AND PURPA REPEAL

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

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

#### **SECTION 16: WAIVER**

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

#### SECTION 17: GOVERNMENTAL JURISDICTION AND AUTHORIZATIONS

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

#### SECTION 18: SUCCESSORS AND ASSIGNS

| Schedule 2   | 01  |
|--|-----|
| Standard Renewable In-System Non Variable Power Purchase Agreeme | ent |
| Effective, 20  | 14  |

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

#### SECTION 19: ENTIRE AGREEMENT

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

#### SECTION 20: NOTICES

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

| To Seller:      |                         |  |
|-----------------|-------------------------|--|
|                 |                         |  |
|                 |                         |  |
|                 |                         |  |
|                 |                         |  |
| with a copy to: |                         |  |
| . ,             |                         |  |
|                 |                         |  |
|                 |                         |  |
|                 |                         |  |
| To PGE:         | Contracts Manager       |  |
|                 | QF Contracts, 3WTC0306  |  |
|                 | PGE - 121 SW Salmon St. |  |

Portland, Oregon 97204

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

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

|               | Sc<br>Standard Renewable In-System Non Variable Power Purchase<br>Effective | • |
|---------------|---|---|
| PGE           |   |   |
| By:           |   |   |
| Name:         |   |   |
| Title:        |   |   |
| Date:         |   |   |
|               |   |   |
| (Name Seller) | <u>_</u> .  |   |
| By:           |   |   |
| Name:         |   |   |
| Title:        |   |   |
| Date:         |   |   |

|   | Schedule 201             |
|---|--------------------------|
| Standard Renewable In-System Non Variable I | Power Purchase Agreement |
| Effective _                                 | , 2014                   |

## EXHIBIT A MONTHLY MINIMUM NET OUTPUT

In this Exhibit, Seller may designate an alternative Monthly Minimum Net Output to the default of 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. An Alternative Minimum Amount may be separately set for each month during a Contract Year.

Comment [A16]: Not needed, because of change

Schedule 201
Standard Renewable In-System Non Variable Power Purchase Agreement
Effective \_\_\_\_\_\_\_, 2014

## EXHIBIT B DESCRIPTION OF SELLER'S FACILITY

[Seller to Complete]

|   | Schedule 201             |
|---|--------------------------|
| Standard Renewable In-System Non Variable | Power Purchase Agreement |
| Effective                                 | , 2014                   |

## EXHIBIT C REQUIRED FACILITY DOCUMENTS

[Seller list all permits and authorizations required for this project]

Sellers Generation Interconnection Agreement

|   | Schedule 201             |
|---|--------------------------|
| Standard Renewable In-System Non Variable | Power Purchase Agreement |
| Effective                                 | , 2014                   |

#### EXHIBIT D START-UP TESTING

#### [Seller identify appropriate tests]

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

- 1. Pressure tests of all steam system equipment;
- 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.

|   | Schedule 201       |
|---|--------------------|
| Standard Renewable In-System Non Variable Power | Purchase Agreement |
| Effective                                       | , 2014             |

#### EXHIBIT E SCHEDULE

[Attach currently in-effect Schedule 201]

# BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

#### **UM 1931**

| PORTLAND GENERAL ELECTRIC COMPANY, | ) |
|------------------------------------|---|
| Complainant,                       | ) |
| v.                                 | ) |
| ALFALFA SOLAR I LLC, et al.        | ) |
| Defendants.                        | ) |
|                                    | ) |

## RESPONSE TESTIMONY OF JOHN R. LOWE

#### ON BEHALF OF THE

# COMMUNITY RENEWABLE ENERGY ASSOCIATION NORTHWEST AND INTERMOUNTAIN POWER PRODUCES COALITION RENEWABLE ENERGY COALITION

**December 28, 2018** 

| 1 | Q. | Mr. Lowe, please state your name and business address. |
|---|----|--|
|---|----|--|

- 2 A. My name is John R. Lowe. I am the director of the Renewable Energy Coalition
- 3 (the "Coalition"). My business address is P.O. Box 25576, Portland, Oregon
- 4 97298.

8

9

10

11

12

13

14

15

16

17

18

19

20

21

- 5 Q. Please describe your background and experience.
- A. In 1975, I graduated from Oregon State University with a Bachelor of Science
   degree.

From 1975 to 2006, I was employed by PacifiCorp. Over most of that 30-year period, my responsibilities were primarily related to PacifiCorp's contracting and policies under the Public Utility Regulatory Policies Act of 1978 ("PURPA") throughout the utility's multi-state service territory, which includes Washington, Oregon, California, Idaho, Wyoming, and Utah. My responsibilities included all contractual matters arising under PURPA and supervision of other matters related to both power purchases and interconnections. In that capacity, I was involved in scores of contract negotiations, helped develop new contract concepts, terms and language, and became familiar with terminology commonly used in the electric utility industry in utility tariffs and written power purchase agreements ("PPA") for purchases from qualifying facilities ("QF").

Since 2009, I have been directing and managing the activities of the Coalition as well as providing consulting services to individual members of the Coalition related to both power purchases and interconnections.

#### 22 Q. On whose behalf are you appearing in this proceeding?

- 23 **A.** I am testifying on behalf of the Coalition, the Community Renewable Energy
- Association and the Northwest and Intermountain Power Producers Coalition.

- 1 Q. Please describe the Coalition and its members.
- 2 A. The Coalition was established in 2009, and is comprised of over 35 members who
- 3 own and operate over 50 mostly small renewable energy QFs in Oregon, Idaho,
- 4 Montana, Washington, Utah, and Wyoming. Several types of entities are
- 5 members of the Coalition, including irrigation districts, waste management
- 6 districts, water districts, electric cooperatives, corporations, and individuals.
- 7 Most are small hydroelectric projects, but the membership includes biomass,
- 8 geothermal, solid waste, and many solar projects.
- 9 Q. Please describe CREA.
- 10 A. CREA was established in 2007 and is an intergovernmental association. See ORS
- 11 190.003-190.118. CREA consists of local governments seeking to promote
- locally-owned renewable energy projects for all forms of renewable generation
- recognized in Oregon's Renewable Portfolio Standard (biomass, geothermal,
- hydropower, ocean thermal, solar, tidal, wave, wind and hydrogen). CREA is
- 15 comprised of several Oregon counties which provide active participation through
- their county commissioners, including Crook, Lincoln, Sherman, Wasco, Gilliam,
- Harney, Hood River, Morrow, Union, and Wallowa. In addition to these counties,
- 18 CREA's current membership includes the City of Prineville, Columbia Gorge
- 19 Community College, Oregon Water Resources Congress, and numerous irrigation
- districts, businesses, individuals and non-profit organizations who have interest in
- 21 a viable community renewable energy sector for Oregon.
  - Q. Please describe NIPPC.

22

- 23 A. NIPPC is a trade association whose members and associate members include
- independent power producers active in the Pacific Northwest and Western energy

markets. The purpose of NIPPC is to represent the interests of its members in developing rules and policies that help achieve a competitive electric power supply market in the Pacific Northwest.

#### Q. Please summarize your testimony.

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

A.

My testimony will discuss the context of a QF PPA negotiation for a developing facility and how it is common in the industry to use the word "term" and similar phrases to describe the period during which the facility is operating and expected to be delivering and selling power under the PPA even though the PPA itself would be effective before that time. Next, I will discuss the terminology used in Portland General Electric Company's ("PGE") Schedule 201 contained in the PPAs at issue in this proceeding. Specifically, I will testify that the phrases that PGE used in its Schedule 201 to describe the 15-year fixed-price period and the 20-year contract term are typical language used in the industry to describe the period during which the facility is operating and expected to be delivering and selling power to the purchasing utility. I will further provide examples of other Oregon utilities that have used the same or similar language to that in PGE's Schedule 201 to describe a 15-year period of fixed prices and a 20-year overall period of pricing after the operation date or expected operation date of the facility. I conclude from my experience in the industry and the other utilities' use of the same words in their tariffs that the ordinary industry understanding of the words used in PGE's Schedule 201 is that PGE's fixed prices apply for a period of 15 years after operation with an additional five years of market-based pricing, for an overall term of 20 years after operation and power sales begin. I will further

discuss, from a policy perspective, why the precedents PGE seeks to establish in
this case are not reasonable and should be rejected.

Q. Could you please provide background on the context of a typical renewable energy facility that is under development and seeking to obtain a power purchase agreement with a utility?

A.

Yes. Normally, the proposed facility's developer will seek to enter into a PPA with the utility well prior to completion of development, two to four years being quite common. In the case of a proposed facility that requires third-party financing such as a loan or mortgage to build the facility, it is important to be able to accurately predict the revenue that the facility will likely produce from power sales. Thus, a PPA having fixed prices for its energy sales is important for the project to obtain such financing to complete development and bring the facility into operation. Without a PPA with fixed prices, there is little assurance as to the revenue the facility will be able to receive. The sponsor of the development project will want to see a predictable revenue stream with fixed prices for sufficient period of time of expected operations in order to demonstrate the development efforts will be profitable.

It is typical in my experience for proposed facilities that there will be reasonable period of time between execution of the PPA and the commencement of power delivery and sales. That is because the developer cannot instantaneously complete financing and construction on the day that it signs the PPA, and will normally need many months to years to do so. This period of time between execution of the PPA and the first power deliveries under the PPA can easily consume two or three years and sometimes five years or more. In Oregon, the

| 1  |           | stakeholders to Commission processes have agreed to allow for there to be up to   |
|--|-----------|---|
| 2  |           | three years between execution of the PPA and scheduled commercial operation,  |
| 3  |           | with the possibility for a longer period of time if demonstrated to be necessary by   |
| 4  |           | the developer. These timeframes recognize that in most cases a short period of  |
| 5  |           | time is needed between initial power deliveries during testing and the  |
| 6  |           | accomplishment of commercial operation.   |
| 7<br>8<br>9  | Q.        | Have you reviewed PGE's Schedule 201 contained in the PPA between PGE and Alfalfa Solar I LLC contained in PGE Exhibit Macfarlane/101, including Schedule 201's descriptions of the contract term and the fixed-price term?   |
| 10   | A.        | Yes. With respect to the renewable fixed-price period, Schedule 201 provides at   |
| 11   |           | page 12:  |
| 12<br>13<br>14<br>15<br>16<br>17<br>18<br>19<br>20<br>21 |           | 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 Sellers with PPAs exceeding 15 years will receive pricing equal to the Mid-C Index Price and will retain all Environmental Attributes generated by the facility for all years up to five in excess of the initial 15.1 |
| 22   |           | With respect to the overall contract length, it states: "The agreement will have a  |
| 23   |           | term of up to 20 years as selected by the QF." Additionally, the contract states:   |
| 24   |           | "TERM OF AGREEMENT: Not less than one year and not to exceed 20 years." <sup>3</sup>  |
| 25<br>26<br>27   | Q.        | Based on your experience in the industry what would a prospective QF understand this language to mean?  |
| 28   | <b>A.</b> | It means that the term is directly related to the period of fixed prices commencing   |
| 29   |           | with power delivery and sales (commercial operation) which result in the  |
|  | 1 2       | PGE/101, Macfarlane/30 (emphasis added).  Id. at 25 (emphasis added).   |

*Id.* at 36 (emphasis added).

commencement of fixed prices being paid. This is the typical language for a utility to include in a QF tariff to convey that the utility will offer to pay fixed avoided cost prices for a 15-year period after the facility achieves operation and begins selling its output, and that an overall contract term ending 20 years after operation will be allowed. Given the typical short period to establish commercial operation, the contract term may commence no sooner than initial deliveries.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

It is standard in the industry to use the shorthand word "term" to describe the delivery term of the PPA. That is because, as I explained earlier, it is commonly understood that there will be some period of time up to several years in length between when the PPA is executed and when the pricing begins to apply. The period of years of the agreement that are most relevant to the parties to a power purchase agreement is the period of years during which utility is purchasing the power, this is commonly referred to as the "contract term". While the agreement is executed before that time as a matter of course and practicality, the period after power deliveries and purchases begin is the focus of the parties' analysis underlying the transaction. For example, industry participants commonly refer to a "20-year contract" or a contract with a "20-year term," to describe a power purchase agreement that will remain in effect for a period of 20 years of power purchases after the facility becomes operational and is selling power, even though it is well-understood that the overall length of time from execution to termination will exceed 20 years. The period of time between the date of execution of the PPA and the actual operation of the facility will vary from one facility to another. But for new facilities it is rarely less than a year, commonly

between two and three years and sometimes even longer. The parties to a transaction for a new project never expect power purchases to begin immediately. Even with existing projects replacing an expiring PPA, is it not practical for contract term to coincide with both PPA execution and commencement or continuance of power deliveries. Existing projects need to know who will be buying their power at the end of their contract, and sometimes need to enter into PPAs years before expiration of their current contract to obtain financing for upgrades or planning purposes.

0.

The most important aspect of the PPA is the years of the agreement where the power purchases occur, and therefore industry participants refer to the length of agreement with reference to the "term" or "length of contract" after the point of operations or expected schedule of power deliveries or operations.

In the case of a 15-year term of fixed prices described in PGE's Schedule 201, the only way to achieve a "maximum term" of fifteen years of fixed pricing is if the 15-year period begins when a QF is operational and thus able to deliver and sell energy to PGE. That is how the "term" phrase would ordinarily and reasonably be understood.

- PGE contends in this case that Schedule 201's use of the word "term" must be understood to limit the period of payment at the renewable fixed prices to 15 years following execution of a PPA and to limit the overall period of payments for energy under the PPA to 20 years following execution of the PPA. Do you agree that PGE's interpretation of these terms in its Schedule 201 is consistent with common usage of these terms in the industry?
- A. Absolutely not. For the reasons stated above, PGE's position is inconsistent with what an industry participant would normally expect from the words that PGE used

1 in its Schedule 201, and standard industry applications and interpretations of 2 contract term. 3 Q. Can you provide examples of other Oregon utilities that use words similar to 4 those in PGE's Schedule 201 to describe the period of years after operation 5 of the facility in its PURPA tariff? 6 Α. Yes. Only two other utilities are subject to the Commission's PURPA contract 7 length requirements – Idaho Power Company ("Idaho Power") and PacifiCorp. 8 Both Idaho Power and PacifiCorp use words in their PURPA tariffs similar to the 9 words used in PGE's Schedule 201, and both use those words to describe the 10 period of years after the operation date or the expected operation date, not the date the PPA is executed. 11 12 Q. Please describe PacifiCorp's description of the pricing periods in its PURPA 13 tariff. 14 A. I drafted PacifiCorp's original Schedule 37 during my employment with 15 PacifiCorp, and I had significant input into the initial version filed by PacifiCorp.<sup>4</sup> 16 PacifiCorp's initial Schedule 37 filing is contained in the record as Exhibit D to 17 the Declaration of Gregory M. Adams in Support of Motion for Summary Disposition, filed on July 2, 2018 ("Adams Declaration"), as well as PGE Exhibit 18 19 Macfarlane/103. PacifiCorp filed this tariff in compliance with Order No. 05-584 20 on July 12, 2005. It provided, in pertinent part: "Fixed Avoided Cost Prices are 21 available for a contract term of up to 15 years and prices under a longer term 22 contract (up to 20 years) will thereafter be under either Banded Gas Market

PacifiCorp no longer uses the term Schedule 37, but calls its Oregon tariff: "Standard Avoided Cost Rates", and uses the term Schedule 37 in its other states. For sake of convenience, I refer to PacifiCorp's tariff as Schedule 37.

Indexed Avoided Cost Prices or Gas Market Indexed Avoided Cost Prices."5

PacifiCorp's tariff did not state that either the "contract term of up to 15 years" for Fixed Avoided Cost Prices or the "longer term contract (up to 20 years)" commences when a QF becomes operational or is expected to become operational. There was no need to do so because industry participants would understand the words PacifiCorp used to reflect that PacifiCorp was offering a 15-year period of fixed prices after operations and that contract term did not commence with execution of the PPA. This interpretation and application of "contract term" was used without question prior to the development of Schedule 37 and has its origin in practice beginning prior to 1980. PacifiCorp's standard contracts offered under this version of Schedule 37 stated in Section 5.2: "(Fixed Price Sellers Only). In the event Seller elects the Fixed Price payment method, PacifiCorp shall pay Seller the applicable On-Peak and Off-Peak rates specified in Schedule 37 during the first fifteen (15) years after the Scheduled Initial Delivery Date. Thereafter, PacifiCorp shall pay Seller market-based rates . . . . ."

I am not an attorney and do not offer a legal interpretation of this language other than to state my general understanding of this provision as a result of contract language development, negotiation and price applications for numerous projects, is that the precise period of time of the 15 years of fixed prices in PacifiCorp's standard contract is the 15 years after the facility is expected to be operational, as opposed to the period of time after execution of the PPA. While

<sup>&</sup>lt;sup>5</sup> PGE/103, Macfarlane/38 (emphasis added) (containing Exhibit F, Schedule No. 37 at 2).

*Id.* at 16 (emphasis omitted).

there may be a reduction in the term of fixed pricing if the QF fails to perform on the contracted schedule of initial or commercial operations, the general concept remains that the important period of the contract is the period when power purchases are expected to occur. This is consistent with my general understanding of the common industry use of the word "term" in Schedule 37, and the intent of the language as applied to actual contracts negotiated for specific projects or used for standard form agreements.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16 17

18

19

20

21 22

23

24

25

26

27

28

29

The version of PacifiCorp's Schedule 37 approved at the end of Phase I of UM 1610 also used the words "term" in the same manner, and not as the period of time starting when the PPA is executed. That version of PacifiCorp's PURPA tariff and a representative PPA is in the record as Exhibit E to the Adams Declaration. As to the renewable fixed pricing, PacifiCorp's Schedule 37 provided:

Prices are fixed at the time that the contract is signed by both the Renewable Qualifying Facility and the Company and will not change during the term of the contract. Renewable Fixed Avoided Cost Prices are available for a contract term of up to 15 years and prices under a longer term contract (up to 20 years) will thereafter be under the Firm Market Indexed Avoided Cost Price.... A Renewable Qualifying Facility choosing the Renewable Fixed Avoided Cost pricing option must cede all Green Tags generated by the facility, as defined in the standard contract, to the Company during the Renewable Resource Deficiency Period identified on page 6, except that a Renewable Qualifying Facility retains ownership of all Environmental Attributes generated by the facility, as defined in the standard contract, during the Renewable Resource Sufficiency Period identified on page 6 and during any period after the first 15 years of a longer term contract (up to 20 years).<sup>7</sup>

Adams Declaration, Docket No. UM 1931 at Exhibit E, 19 (July 2, 2018) (containing an excerpt of *PacifiCorp's Stipulation and Compliance Filing*, Docket No. UM 1610, Advice No. 14-007 (Aug. 11, 2014) (emphasis added)).

1 The corresponding standard contract in effect in 2016 states 2 in Section 5.3 states: 3 5.3 (Fixed Price Renewable Seller Only). In the event 4 Seller elects the Fixed Price Renewable pricing method, 5 PacifiCorp shall pay Seller the applicable On-Peak and Off-Peak 6 rates specified in Schedule 37 during the first fifteen (15) years 7 after the Scheduled Initial Delivery Date. Thereafter, PacifiCorp 8 shall pay Seller Firm Electric Market.<sup>8</sup> 9 10 Q. Does PacifiCorp still employ this same use of the word "term" in its current 11 **PURPA** tariff? 12 A. Yes. PacifiCorp's currently effective Schedule 37 and a representative version of 13 its standard contract is attached as Exhibit CREA-NIPPC-REC/101. The current tariff uses very similar language to that quoted above for the Schedule 37 in effect 14 after Phase I of UM 1610.9 15 16 Q. Please summarize your understanding of the PacifiCorp tariffs. 17 A. In sum, PacifiCorp's use of terminology in referring to the pricing periods – 18 including the words "term" and "contract term" and "years of a longer contract 19 term (up to 20 years)" – is consistent with general industry understandings and is 20 not further clarified in the Schedule 37 to inform prospective QFs that PacifiCorp 21 does not mean the period of time immediately following execution of the 22 agreement. This historic interpretation and meaning of contract term is extremely 23 well established in both pre and post Schedule 37 PPAs.

<sup>8</sup> *Id.* at 44.

<sup>9</sup> CREA-NIPPC-REC/101, Lowe/4.

1 You stated Idaho Power has also used similar words in its PURPA tariff to Q. 2 describe the period of pricing after the operation of the facility as opposed to 3 the period after the date the PPA is executed. Please discuss Idaho Power's 4 use of this terminology. 5 Idaho Power's Oregon PURPA tariff approved by the Commission at the end of A. 6 Phase I in UM 1610 also contains similar language with respect to the length of 7 the contract. This document is contained in the record in the Adams Declaration 8 at Exhibit F. The Idaho Power Schedule 85 stated with respect to the non-standard 9 contract: "QFs have the unilateral right to select a contract length of up to 20 years for a PURPA contract." The tariff does not explain this is a period that 10 begins on operation, likely years after execution of the contract. Article 5.1 of 11 12 Idaho Power's standard contract provides "[s]ubject to the provisions of paragraph 5.2 below, this Agreement shall become effective on the date first 13 14 written and shall continue in full force and effect for a period of to exceed 20 years) Contract Years from the Operation Date."11 15 16 I have also attached Idaho Power's currently effective Schedule 85 as 17 Exhibit CREA-NIPPC-REC/102. Idaho Power's currently effective Schedule 85 uses the same language to describe a "contract length of up to 20 years." 12 18

Adams Declaration at Exhibit F, 21 (containing Idaho Power Company's Application for Approval of its Replacement Compliance Filing with Order No. 14-058, Docket No. UM 1610, at Schedule 85, 11 (July 3, 2014)).

<sup>11</sup> *Id.* at 39.

<sup>12</sup> CREA-NIPPC-REC/102, Lowe/11.

| 1 2                  | Q. | What do you conclude from the use of the words in reference to the period of pricing in Oregon utility's PURPA tariffs?   |
|----------------------|----|---|
| 3                    | A. | I conclude that the Idaho Power and PacifiCorp tariffs use the words "term" and   |
| 4                    |    | "contract length" and "years" in manner that is consistent with industry norms and  |
| 5                    |    | that refers to a period of time after the facility is either operational or expected to   |
| 6                    |    | be operational. The Idaho Power and PacifiCorp tariffs' use of these words  |
| 7                    |    | supports my understanding, based on decades of experience, that it is ordinary and  |
| 8                    |    | expected in the industry that those words are used to describe the period the   |
| 9                    |    | pricing will be paid during the period of power purchases under the PPA.  |
| 10<br>11<br>12       | Q. | Do you have any policy concerns with PGE's arguments regarding the unique use of the words "term" and "maximum term of 15 years" that it asks the Commission to impute to PGE's PURPA tariff alone?                                 |
| 13                   | A. | Yes. As I noted earlier, PGE's position that the fixed price period must end  |
| 14                   |    | exactly 15 years after execution of the contract is outside the expectations of   |
| 15                   |    | industry norms where the tariff provides that the QF will receive a "maximum  |
| 16                   |    | term of 15 years" of such fixed pricing. Such a departure from industry norms   |
| 17                   |    | and expectations should not be allowed. A QF presented with substantively   |
| 18                   |    | identical language in the three Oregon utilities' tariffs should reasonably be able   |
| 19                   |    | to conclude that PGE's tariff had the same basic meaning as the other two Oregon  |
| 20                   |    | utilities' tariffs, not that the period of fixed pricing ends 15 years after execution.   |
| 21<br>22<br>23<br>24 | Q. | Mr. Macfarlane provides extensive testimony that he characterizes as "regulatory background" starting with his legal interpretation of Order No. 05-584. Do you have any response to Mr. Macfarlane's reliance on Order No. 05-584? |
| 25                   | A. | Yes. Again, I am not an attorney, so I will not engage Mr. Macfarlane in legal  |
| 26                   |    | debates as to the proper interpretation of Order No. 05-584. I note, however, that  |
| 27                   |    | Mr. Macfarlane omits from his legal analysis any discussion of the Commission's   |

1 more recent orders discussing the Commission's intended meaning of Order No. 2 05-584. Specifically, in Order No. 18-079, in response to a complaint filed 3 against PGE by the Coalition and other groups related to this very issue, the 4 Commission stated: 5 We answered complainants' request in Order No. 17-256, 6 where we affirmed and made explicit our policy adopted in Order 7 No. 05-584: 'Prices paid to a QF are only meaningful when a QF is 8 operational and delivering power to a utility. Therefore, we believe 9 that, to provide a QF the full benefit of the fixed price requirement, 10 the 15-year term must commence on the date of power delivery'... 11 . We also reject PGE's characterization that our decision constituted the adoption of a 'new policy.' Rather, as requested by 12 complainants, our decision was simply to affirm the policy with 13 14 respect to the commencement date for the 15-year period of fixed 15 prices. This policy, which had been reflected explicitly in standard 16 contract forms for PacifiCorp and Idaho Power Company, had 17 been, up until the filing of PGE's most recent standard contracts, 18 neither a source of controversy nor litigation by either a QF or a utility. 13 19 20 Mr. Macfarlane and his employer may wish to ignore this order since it is 21 contrary to their position, but I encourage the Commission to discount the value 22 of Mr. Macfarlane's testimony for his failure to actually address the 23 Commission's own recent statements regarding its understanding of its own 24 policy and the meaning of Order No. 05-584.

NIPPC, CREA, and REC v. PGE, Docket No. UM 1805, Order No. 18-079 at 3 (Mar. 5, 2018) (quoting Order No. 17-256 at 4 (July 13, 2017)).

| 1<br>2<br>3<br>4<br>5<br>6 | Q. | Mr. Macfarlane also includes extensive discussion of PGE's initial contract forms that it used from 2005 to 2014 contained in the record as PGE Exhibits Macfarlane/102 and Macfarlane/105, prior to the development of the renewable rate contract form that was eventually executed by the QF defendants in this proceeding. Do have any response to Mr. Macfarlane's reliance on the prior contract forms from a policy perspective? |
|----------------------------|----|---|
| 7                          | A. | Yes. The Commission should not rely on these prior forms contained in PGE   |
| 8                          |    | Exhibits Macfarlane/102 and Macfarlane/105 to interpret the meaning of a  |
| 9                          |    | subsequently available form or the executed versions of that subsequent form at   |
| 10                         |    | issue in this case. If the Commission relies on PGE's previously effective  |
| 11                         |    | contract forms to interpret the meaning of the subsequent version of the contract   |
| 12                         |    | form that contains entirely different provisions, the Commission will be  |
| 13                         |    | establishing a policy where QFs need to investigate not only the underlying   |
| 14                         |    | Commission orders giving rise to the currently effective contract form but also all   |
| 15                         |    | of the utility's previously effective versions of the form since 2005.  |
| 16                         |    | I urge the Commission not to adopt such a policy because the burden of  |
| 17                         |    | doing so would be unreasonable. It is unreasonable to require the QF to locate  |
| 18                         |    | and investigate the evolution of PGE's forms since 2005, and such a policy will   |
| 19                         |    | undermine confidence in the standard contract forms.  |
| 20<br>21<br>22<br>23<br>24 | Q. | Do you believe that PGE's reliance on its previously effective contract forms from 2005 and 2007 establishes that all stakeholders and the Commission were aware of PGE's outlier position that the 20-year term of the contract and the 15-year term of fixed pricing ends 20 years and 15 years, respectively, after execution of the contract?   |
| 25                         | A. | No. By PGE witness Bruce True's own admission, PGE agreed on at least one   |
| 26                         |    | occasion to complete and execute the prior version of the contract form in a  |
| 27                         |    | manner that established the pricing periods ran from the commercial operation   |
| 28                         |    | date. Although Mr. True argues it was a "mistake," he acknowledges that PGE   |

executed a standard contract with OneEnergy Solar based on the older version of the contract form where PGE agreed to pay fixed prices for 15 years. <sup>14</sup> I have included the OneEnergy Solar PPA at Exhibit CREA-NIPPC-REC/103. Mr. True also notes that during discussions leading up to execution of the PPAs in dispute here, the attorney for the QF developer pointed out to PGE's attorney that PGE had executed another PPA based on the prior contract form that provided a 21-year total term, the PaTu Wind Farm PPA. <sup>15</sup> That PPA is included in the record as PGE Exhibit 213. <sup>16</sup>

While I will not attempt to offer an interpretation of those executed agreements, the fact that PGE did sign versions of the previously effective form with revisions is significant. PGE apparently had at least a one-time willingness to work with individual QFs and make minor completions and modifications as necessary to further clarify the intent of Commission orders upon such request by QF parties. In other words, there is no basis to assume from the record or the existing Commission orders that the Commission or the parties to UM 1129 would expect PGE would refuse to agree to execute the form in a manner that made it consistent with how Idaho Power and PacifiCorp treated the same issue.

- Q. Do you have any other policy concerns with the arguments PGE has made thus far through its testimony?
- Yes. PGE appears to suggest that the interpretation of a QF's PPA should be informed by statements made by PGE representatives during the QF's attempt to secure PGE's signature on the standard contract form. Specifically, the general

<sup>&</sup>lt;sup>14</sup> PGE/200, True/7.

*Id.* at 9.

<sup>&</sup>lt;sup>16</sup> PGE/213, True/1.

argument in Mr. True's testimony appears to be that because PGE expressed its view to the QFs that the 15-year fixed-price period ends 15 years after execution, the QFs should be bound by that assertion by PGE's representations because the QFs signed the PPAs after PGE made such statement. Under this proposed rule by PGE, PGE can change the meaning of the Commission-approved standard contract form and the Commission orders underlying the form by simply expressing PGE's contrary beliefs to the QF prior to execution. I strongly urge the Commission to reject this proposed precedent PGE is trying to establish in this case.

In my experience consulting with QF PPAs, it is possible and probable that a utility representative will incorrectly state the meaning or impact of various policies, mechanisms, calculations, and terms in the contract during the PPA discussions or actual negotiations. When that occurs, the QF should not be required to engage in litigation before the Commission – which can take months to years – prior to executing the standard contract form, just to ascertain what the QF believes to be fairly obvious from the wording of the agreement and the underlying Commission orders, as Mr. Jacob Stephens asserts in his testimony was the case.

PGE is not a willing counterparty to QF PPAs, as the Commission is likely aware by this point from the numerous QF complaints pending against PGE.

Allowing PGE, or any other utility, to use its own statements to the prospective QF to influence the meaning of an executed standard contract or the meaning of Commission policy and orders that gave rise to the contract is not reasonable.

1 The Commission has provided at numerous times and means significant certainty 2 as to the intent of 15-year fixed prices being available to new QF PPAs. PGE has 3 taken every opportunity, and even created some, to undo such regulatory certainty 4 in PURPA's implementation and created an environment of un-certainty and 5 controversy. 6 Q. Does this conclude your testimony? 7 A Yes

#### BEFORE THE PUBLIC UTILITY COMMISSION

#### **OF OREGON**

#### **UM 1931**

| PORTLAND GENERAL ELECTRIC COMPANY, | ) |
|------------------------------------|---|
| Complainant,                       | ) |
| v.                                 | ) |
| ALFALFA SOLAR I LLC, et al.        | ) |
| Defendants.                        | ) |

#### **EXHIBIT CREA-NIPPC-REC/101**

PACIFIC POWER OREGON STANDARD AVOIDED COST RATES AND PACIFIC POWER OREGON NEW FIRM QF POWER PURCHASE AGREEMENT

**December 28, 2018** 

## OREGON STANDARD AVOIDED COST RATES

## AVOIDED COST PURCHASES FROM ELIGIBLE QUALIFYING FACILITIES

Page 1

#### **Available**

To owners of Qualifying Facilities making sales of electricity to the Company in the State of Oregon.

#### **Applicable**

- For power purchased from Base Load and Wind Qualifying Facilities with a nameplate capacity of 10,000 kW or less or that, 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, has a nameplate capacity of 10,000 kW or less.
- For power purchased Fixed and Tracking Solar Qualifying Facilities with a nameplate capacity of 3,000 kW or less or that, 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, has a nameplate capacity of 3,000 kW or less.

Owners of these Qualifying Facilities will be required to enter into a written power sales contract with the Company.

#### **Definitions**

#### **Cogeneration Facility**

A facility which produces electric energy together with steam or other form of useful energy (such as heat) which are used for industrial, commercial, heating or cooling purposes through the sequential use of energy.

#### **Qualifying Facilities**

Qualifying cogeneration facilities or qualifying small power production facilities within the meaning of section 201 and 210 of the Public Utility Regulatory Policies Act of 1978 (PURPA), 16 U.S.C. 796 and 824a-3.

#### **Qualifying Electricity**

Electricity that meets the requirements of "qualifying electricity" set forth in the Oregon Renewable Portfolio Standards: ORS 469A.010, 469A.020, and 469A.025.

#### **Renewable Qualifying Facility**

A Qualifying Facility that generates Qualifying Electricity.

#### Wind Qualifying Facility

A Renewable Qualifying Facility that generates Qualifying Electricity using wind as its motive force.

#### **Baseload Renewable Qualifying Facility**

A Renewable Qualifying Facility that generates Qualifying Electricity using any qualifying resource other than wind or solar.

#### **Small Power Production Facility**

A facility which produces electric energy using as a primary energy source biomass, waste, renewable resources or any combination thereof and has a power production capacity which, together with other facilities located at the same site, is not greater than 80 megawatts.





## OREGON STANDARD AVOIDED COST RATES

## AVOIDED COST PURCHASES FROM ELIGIBLE QUALIFYING FACILITIES

Page 2

#### **Definitions (continued)**

#### **On-Peak Hours or Peak Hours**

On-Peak hours are defined as 6:00 a.m. to 10:00 p.m. Pacific Prevailing Time Monday through Saturday, excluding NERC holidays.

Due to the expansions of Daylight Saving Time (DST) as adopted under Section 110 of the U.S. Energy Policy Act of 2005, the time periods shown above will begin and end one hour later for the period between the second Sunday in March and the first Sunday in April and for the period between the last Sunday in October and the first Sunday in November.

#### **Off-Peak Hours**

All hours other than On-Peak.

#### **Excess Output**

Excess Output shall mean any increment of Net Output delivered at a rate, on an hourly basis, exceeding the Facility Nameplate Capacity. PacifiCorp shall pay Seller the Off-Peak Price as described and calculated under pricing option 4 (Non-Firm Market Index Avoided Cost Price) for all Excess Output.

#### Same Site

Generating facilities are considered to be located at the same site as the QF for which qualification for the standard rates and standard contract 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 the standard rates and standard contract is sought.

#### Person(s) or Affiliated Person(s)

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. 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. 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.

#### **Shared Interconnection and Infrastructure**

QFs otherwise meeting the separate ownership test and thereby qualified for entitlement to the standard rates and standard contract 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 the standard rates and standard contract so long as the use of the shared interconnection complies with the interconnecting utility's safety and reliability standards, interconnection contract requirements and Prudent Electrical Practices as that term is defined in the interconnecting utility's approved standard contract.



## OREGON STANDARD AVOIDED COST RATES

## AVOIDED COST PURCHASES FROM ELIGIBLE QUALIFYING FACILITIES

Page 3

#### **Definitions (continued)**

#### **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.

#### Community-Based

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 a significant continuing role with or interest in the project after it is completed and placed in service. Many varied and different organizations may qualify under this exception. For example, the community organization could be a church, a school, a water district, an agricultural cooperative, a unit of local government, & local utility, a homeowners' association, a charity, a civic organization, and etc.

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 (v) 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.

#### **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 the standard rates and standard contract.

Any dispute concerning a QF's entitlement to the standard rates and standard contract shall be presented to the Commission for resolution. 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 act as an administrative law judge, not as an arbitrator.



## OREGON STANDARD AVOIDED COST RATE

## AVOIDED COST PURCHASES FROM ELIGIBLE QUALIFYING FACILITIES

Page 4

#### **Self Supply Option**

Owner shall elect to sell all Net Output to PacifiCorp and purchase its full electric requirements from PacifiCorp or sell Net Output surplus to its needs at the Facility site to PacifiCorp and purchase partial electric requirements service from PacifiCorp, in accordance with the terms and conditions of the power purchase agreement and the appropriate retail service.

#### **Pricing Options**

#### 1. Standard Fixed Avoided Cost Prices

Prices are fixed at the time that the contract is signed by both the Qualifying Facility and the Company and will not change during the term of the contract. Standard Fixed Avoided Cost Prices are available for a contract term of up to 15 years and prices under a longer term contract (up to 20 years) will thereafter be under the Firm Market Indexed Avoided Cost Price.

The Standard Fixed Avoided Cost pricing option is available to all Qualifying Facilities. The Standard Fixed Avoided Cost Price for Wind Qualifying Facilities will reflect integration costs as set forth on page 5.

#### 2. Renewable Fixed Avoided Cost Prices

Prices are fixed at the time that the contract is signed by both the Renewable Qualifying Facility and the Company and will not change during the term of the contract. Renewable Fixed Avoided Cost Prices are available for a contract term of up to 15 years and prices under a longer term contract (up to 20 years) will thereafter be under the Firm Market Indexed Avoided Cost Price. The Renewable Fixed Avoided Cost pricing option is available only to Renewable Qualifying Facilities. A Renewable Qualifying Facility choosing the Renewable Fixed Avoided Cost pricing option: (a) must cede all Green Tags generated by the facility, as defined in the standard contract, to the Company during the Renewable Resource Deficiency Period identified on page 8 including during any period after the first 15 years of a longer term contract (up to 20 years); and (b) will retain ownership of all Environmental Attributes generated by the facility, as defined in the standard contract, during the Renewable Resource Sufficiency Period identified on page 8.

#### 3. Firm Market Indexed Avoided Cost Prices

Firm Market Index Avoided Cost Prices are available to Qualifying Facilities that contract to deliver firm power. Monthly On-Peak / Off-Peak prices paid are a blending of Intercontinental Exchange (ICE) Day Ahead Power Price Report at market hubs for On-Peak and Off-Peak prices. The monthly blending matrix is available upon request.

#### 4. Non-Firm Market Index Avoided Cost Prices

Non-Firm Market Index Avoided Cost Prices are available to Qualifying Facilities that do not elect to provide firm power. Qualifying Facilities taking this option will have contracts that do not include minimum delivery requirements, default damages for construction delay or, for under delivery or early termination, or default security for these purposes. Monthly On-Peak / Off-Peak prices paid are 93 percent of a blending of ICE Day Ahead Power Price Report at market hubs for on-peak and off-peak firm index prices. The monthly blending matrix is available upon request. The Non-Firm Market Index Avoided Cost pricing option is available to all Qualifying Facilities. The Non-Firm Market Index Avoided Cost Price for Wind Qualifying Facilities will reflect integration costs.



### AVOIDED COST PURCHASES FROM ELIGIBLE QUALIFYING FACILITIES

Page 5

#### **Monthly Payments**

A Qualifying Facility shall select the option of payment at the time of signing the contract under one of the Pricing Options specified above. Once an option is selected the option will remain in effect for the duration of the Facility's contract.

#### **Renewable or Standard Fixed Avoided Cost Prices**

In accordance with the terms of a contract with a Qualifying Facility, the Company shall pay for all separately metered kilowatt-hours of On-Peak and Off-Peak generation at the renewable or standard fixed prices as provided in this schedule. On-Peak and Off-Peak are defined in the definitions section of this schedule.

#### Firm Market Indexed and Non-Firm Market Index Avoided Cost Prices

In accordance with the terms of a contract with a Qualifying Facility, the Company shall pay for all separately metered kilowatt-hours of On-Peak and Off-Peak generation at the market prices calculated at the time of delivery. On-Peak and Off-Peak are defined in the definitions section of this schedule.

#### **Avoided Cost Prices**

#### Standard Fixed Avoided Cost Prices for Base Load and Wind QF (¢/kWh)

| Deliveries | Base Load QF (1,3) |          | Wind    | QF (2,3) |
|------------|--------------------|----------|---------|----------|
| During     | On-Peak            | Off-Peak | On-Peak | Off-Peak |
| Calendar   | Energy             | Energy   | Energy  | Energy   |
| Year       | Price              | Price    | Price   | Price    |
|            | (a)                | (b)      | (c)     | (d)      |
|            |                    |          |         |          |
| 2018       | 2.37               | 1.65     | 2.31    | 1.59     |
| 2019       | 2.46               | 1.80     | 2.40    | 1.74     |
| 2020       | 2.69               | 2.08     | 2.63    | 2.02     |
| 2021       | 3.03               | 2.39     | 2.97    | 2.33     |
| 2022       | 3.21               | 2.55     | 3.15    | 2.48     |
| 2023       | 3.37               | 2.73     | 3.30    | 2.66     |
| 2024       | 3.60               | 2.97     | 3.53    | 2.90     |
| 2025       | 3.89               | 3.25     | 3.82    | 3.18     |
| 2026       | 4.01               | 3.38     | 3.93    | 3.30     |
| 2027       | 4.13               | 3.49     | 4.05    | 3.41     |
| 2028       | 4.31               | 3.70     | 4.23    | 3.62     |
| 2029       | 4.69               | 4.06     | 4.61    | 3.98     |
| 2030       | 7.32               | 4.41     | 5.20    | 4.32     |
| 2031       | 7.40               | 4.42     | 5.23    | 4.34     |
| 2032       | 7.73               | 4.70     | 5.52    | 4.61     |
| 2033       | 8.01               | 4.91     | 5.76    | 4.83     |
| 2034       | 8.03               | 4.87     | 5.73    | 4.78     |
| 2035       | 8.22               | 4.99     | 5.87    | 4.90     |
| 2036       | 8.28               | 4.98     | 5.88    | 4.89     |



### AVOIDED COST PURCHASES FROM ELIGIBLE QUALIFYING FACILITIES

Page 6

#### **Avoided Cost Prices (Continued)**

#### Standard Fixed Avoided Cost Prices for Fixed and Tracking Solar QF (¢/kWh)

| Deliveries | Fixed Solar QF (2,3) |          |   | Tracking So | lar QF (2,3) |
|------------|----------------------|----------|---|-------------|--------------|
| During     | On-Peak              | Off-Peak |   | On-Peak     | Off-Peak     |
| Calendar   | Energy               | Energy   |   | Energy      | Energy       |
| Year       | Price                | Price    |   | Price       | Price        |
|            | (e)                  | (f)      | - | (g)         | (h)          |
|            |                      |          | _ |             |              |
| 2018       | 2.31                 | 1.59     |   | 2.31        | 1.59         |
| 2019       | 2.40                 | 1.74     |   | 2.40        | 1.74         |
| 2020       | 2.63                 | 2.01     |   | 2.63        | 2.01         |
| 2021       | 2.97                 | 2.32     |   | 2.97        | 2.32         |
| 2022       | 3.14                 | 2.48     |   | 3.14        | 2.48         |
| 2023       | 3.30                 | 2.66     |   | 3.30        | 2.66         |
| 2024       | 3.53                 | 2.89     |   | 3.53        | 2.89         |
| 2025       | 3.81                 | 3.17     |   | 3.81        | 3.17         |
| 2026       | 3.93                 | 3.30     |   | 3.93        | 3.30         |
| 2027       | 4.05                 | 3.41     |   | 4.05        | 3.41         |
| 2028       | 4.23                 | 3.62     |   | 4.23        | 3.62         |
| 2029       | 4.61                 | 3.97     |   | 4.61        | 3.97         |
| 2030       | 8.52                 | 4.32     |   | 8.73        | 4.32         |
| 2031       | 8.63                 | 4.34     |   | 8.84        | 4.34         |
| 2032       | 8.99                 | 4.61     |   | 9.20        | 4.61         |
| 2033       | 9.29                 | 4.82     |   | 9.51        | 4.82         |
| 2034       | 9.34                 | 4.78     |   | 9.56        | 4.78         |
| 2035       | 9.55                 | 4.90     |   | 9.78        | 4.90         |
| 2036       | 9.64                 | 4.89     |   | 9.87        | 4.89         |

- (1) Capacity Contribution to Peak for Avoided Proxy Resource and Base Load QF resource are assumed 100%.
- (2) The standard avoided cost price for wind and solar QFs located in PacifiCorp's balancing authority area (BAA) are reduced by an integration charge of \$0.57/MWh (\$2016) and solar integration charge of \$0.60/MWh (\$2016), respectively.
  - For Solar and Wind QFs not located in PacifiCorp's BAA, the renewable avoided cost price will be increased by wind integration charge of \$0.57/MWh (\$2016) and solar integration charge of \$0.60/MWh (\$2016), respectively.
- (3) Standard Resource Sufficiency Period ends December 31, 2029 and Standard Resource Deficiency Period begins January 1, 2030.



## AVOIDED COST PURCHASES FROM ELIGIBLEQUALIFYING FACILITIES

Page 7

#### **Avoided Cost Prices (Continued)**

#### Renewable Fixed Avoided Cost Prices for Base Load and Wind QF (¢/kWh)

| Deliveries | Renewable Base Load QF<br>(1,4) |        |   | Wind (  | QF (1,2,3) |
|------------|---------------------------------|--------|---|---------|------------|
| During     | On-Peak Off-Peak                |        | 1 | On-Peak | Off-Peak   |
| Calendar   | Energy                          | Energy |   | Energy  | Energy     |
| Year       | Price                           | Price  |   | Price   | Price      |
| 1 001      | (a)                             | (b)    | J | (c)     | (d)        |
|            | (4)                             | (0)    |   | (0)     | (0)        |
| 2018       | 2.37                            | 1.65   |   | 2.31    | 1.59       |
| 2019       | 2.46                            | 1.80   |   | 2.40    | 1.74       |
| 2020       | 2.69                            | 2.08   |   | 2.63    | 2.02       |
| 2021       | 5.20                            | 2.53   |   | 2.89    | 2.46       |
| 2022       | 5.32                            | 2.61   |   | 2.95    | 2.54       |
| 2023       | 5.43                            | 2.69   |   | 3.01    | 2.62       |
| 2024       | 5.53                            | 2.79   |   | 3.05    | 2.72       |
| 2025       | 5.63                            | 2.89   |   | 3.09    | 2.81       |
| 2026       | 5.75                            | 2.96   |   | 3.15    | 2.89       |
| 2027       | 5.88                            | 3.03   |   | 3.22    | 2.96       |
| 2028       | 5.99                            | 3.12   |   | 3.28    | 3.04       |
| 2029       | 6.11                            | 3.20   |   | 3.34    | 3.12       |
| 2030       | 6.24                            | 3.28   |   | 3.41    | 3.20       |
| 2031       | 6.36                            | 3.36   |   | 3.47    | 3.27       |
| 2032       | 6.49                            | 3.43   |   | 3.54    | 3.35       |
| 2033       | 6.62                            | 3.52   |   | 3.60    | 3.43       |
| 2034       | 6.76                            | 3.59   |   | 3.68    | 3.50       |
| 2035       | 6.89                            | 3.67   |   | 3.75    | 3.58       |
| 2036       | 7.02                            | 3.75   |   | 3.82    | 3.66       |

### AVOIDED COST PURCHASES FROM ELIGIBLEQUALIFYING FACILITIES

Page 8

#### **Avoided Cost Prices (continued)**

#### Renewable Fixed Avoided Cost Prices for Fixed and Tracking Solar QF (¢/kWh)

| Deliveries | Fixed Solar QF (1,2,3) |          | Tracking Sol | ar QF (1,2,3) |
|------------|------------------------|----------|--------------|---------------|
| During     | On-Peak                | Off-Peak | On-Peak      | Off-Peak      |
| Calendar   | Energy                 | Energy   | Energy       | Energy        |
| Year       | Price                  | Price    | Price        | Price         |
|            | (e)                    | (f)      | <br>(g)      | (h)           |
|            |                        |          |              |               |
| 2018       | 2.31                   | 1.59     | 2.31         | 1.59          |
| 2019       | 2.40                   | 1.74     | 2.40         | 1.74          |
| 2020       | 2.63                   | 2.01     | 2.63         | 2.01          |
| 2021       | 5.55                   | 2.46     | 5.85         | 2.46          |
| 2022       | 5.68                   | 2.54     | 5.99         | 2.54          |
| 2023       | 5.80                   | 2.62     | 6.11         | 2.62          |
| 2024       | 5.91                   | 2.72     | 6.23         | 2.72          |
| 2025       | 6.02                   | 2.81     | 6.35         | 2.81          |
| 2026       | 6.15                   | 2.89     | 6.48         | 2.89          |
| 2027       | 6.28                   | 2.95     | 6.62         | 2.95          |
| 2028       | 6.41                   | 3.03     | 6.76         | 3.03          |
| 2029       | 6.53                   | 3.12     | 6.89         | 3.12          |
| 2030       | 6.67                   | 3.19     | 7.03         | 3.19          |
| 2031       | 6.80                   | 3.27     | 7.17         | 3.27          |
| 2032       | 6.94                   | 3.34     | 7.32         | 3.34          |
| 2033       | 7.08                   | 3.42     | 7.47         | 3.42          |
| 2034       | 7.22                   | 3.50     | 7.62         | 3.50          |
| 2035       | 7.37                   | 3.58     | 7.77         | 3.58          |
| 2036       | 7.51                   | 3.65     | 7.92         | 3.65          |

- (1) For the purpose of determining: (i) when the Renewable Qualifying Facility is entitled to renewable avoided cost prices; and (ii) the ownership of environmental attributes and the transfer of Green Tags to PacifiCorp, Renewable Sufficiency Period ends December 31, 2020 and Renewable Deficiency Period begins January 1, 2021.
- (2) During the Renewable Resource Sufficiency Period, the renewable avoided cost price for a wind and solar Qualifying Facility located in PacifiCorp's BAA is reduced by wind integration charge of \$0.57/MWh (\$2016) and solar integration charge of \$0.60/MWh (\$2016), respectively.
  - For Solar and Wind QFs not located in PacifiCorp's BAA, the renewable avoided cost price will be increased by the avoided wind integration charge of \$0.57/MWh (\$2016) and solar integration charge of \$0.60/MWh (\$2016), respectively.
- (3) During the Renewable Resource Deficiency Period, the renewable avoided cost price for a solar Qualifying Facility located in PacifiCorp's BAA (in-system) is reduced by the difference between the solar integration charge\$0.60/MWh (\$2016) and wind integration charge of\$0.57/MWh (\$2016). For a wind Qualifying Facility located in PacifiCorp's (BAA), the adjustment is zero. For a solar Qualifying Facility not located in PacifiCorp's BAA, the renewable avoided cost price for solar QF will be increased by the difference between the solar integration and wind integration charges.
- (4) During the Renewable Resource Deficiency Period, the renewable avoided cost price for Base Load is increased by the avoided wind integration charge of \$0.57/MWh (\$2016).



### AVOIDED COST PURCHASES FROM ELIGIBLE QUALIFYING FACILITIES

Page 9

#### **Qualifying Facilities Contracting Procedure**

Interconnection and power purchase agreements are handled by different functions within the Company. Interconnection agreements (both transmission and distribution level voltages) are handled by the Company's transmission function (PacifiCorp Transmission Services) while power purchase agreements are handled by the Company's merchant function (PacifiCorp Commercial and Trading).

It is recommended that the owner initiate its request for interconnection 18 months ahead of the anticipated in-service date to allow time for studies, negotiation of agreements, engineering, procurement, and construction of the required interconnection facilities. Early application for interconnection will help ensure that necessary interconnection arrangements proceed in a timely manner on a parallel track with negotiation of the power purchase agreement.

#### 1. Eligible Qualifying Facilities

**APPLICATION:** To owners of eligible existing or proposed QFs with a design capacity less than or equal to 10,000 kW for Base Load and Wind QF resources and less than or equal to 3,000 kW for Solar QF resources who desire to make sales to the Company in the state of Oregon. Such owners will be required to enter into a written power purchase agreement with the Company pursuant to the procedures set forth below.

#### I. Process for Completing a Power Purchase Agreement

#### A. Communications

Unless otherwise directed by the Company, all communications to the Company regarding QF power purchase agreements should be directed in writing as follows:

PacifiCorp Manager-QF Contracts 825 NE Multnomah St, Suite 600 Portland, Oregon 97232

The Company will respond to all such communications in a timely manner. If the Company is unable to respond on the basis of incomplete or missing information from the QF owner, the Company shall indicate what additional information is required. Thereafter, the Company will respond in a timely manner following receipt of all required information.





### AVOIDED COST PURCHASES FROM ELIGIBLE QUALIFYING FACILITIES

Page 10

#### B. Procedures

- The Company's approved generic or standard form power purchase agreements may be obtained from the Company's website at <u>www.pacificorp.com</u>, or if the owner is unable to obtain it from the website, the Company will send a copy within seven days of a written request.
- 2. In order to obtain a project specific draft power purchase agreement the owner must provide in writing to the Company, general project information required for the completion of a power purchase agreement, including, but not limited to:
  - (a) demonstration of ability to obtain QF status;
  - (b) design capacity (MW), station service requirements, and net amount of power to be delivered to the Company's electric system;
  - (c) generation technology and other related technology applicable to the site;
  - (d) proposed site location;
  - (e) schedule of monthly power deliveries;
  - (f) calculation or determination of minimum and maximum annual deliveries;
  - (g) motive force or fuel plan;
  - (h) proposed on-line date and other significant dates required to complete the milestones:
  - (i) proposed contract term and pricing provisions as defined in this Schedule (i.e., standard fixed price, renewable fixed price);
  - (j) status of interconnection or transmission arrangements;
  - (k) point of delivery or interconnection;
- 3. The Company shall provide a draft power purchase agreement when all information described in Paragraph 2 above has been received in writing from the QF owner. Within 15 business days following receipt of all information required in Paragraph 2, the Company will provide the owner with a draft power purchase agreement including current standard avoided cost prices and/or other optional pricing mechanisms as approved by the Public Utility Commission of Oregon in this Standard Avoided Cost Rate Schedule.
- 4. If the owner desires to proceed with the power purchase agreement after reviewing the Company's draft power purchase agreement, it may request in writing that the Company prepare a final draft power purchase agreement. In connection with such request, the owner 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 power purchase agreement. Within 15 business days following receipt of all information requested by the Company in this paragraph 4, the Company will provide the owner with a final draft power purchase agreement.



### AVOIDED COST PURCHASES FROM ELIGIBLE QUALIFYING FACILITIES

Page 11

#### B. Procedures (continued)

- 5. After reviewing the final draft power purchase agreement, the owner may either prepare another set of written comments and proposals or approve the final draft power purchase agreement. If the owner prepares written comments and proposals the Company will respond in 15 business days to those comments and proposals.
- 6. When both parties are in full agreement as to all terms and conditions of the draft power purchase agreement, the Company will prepare and forward to the owner within 15 business days, a final executable version of the agreement. Following the Company's execution a completely executed copy will be returned to the owner. Prices and other terms and conditions in the power purchase agreement will not be final and binding until the power purchase agreement has been executed by both parties.

#### II. Process for Negotiating Interconnection Agreements

[NOTE: Section II applies only to QFs connecting directly to PacifiCorp's electrical system. An off-system QF should contact its local utility or transmission provider to determine the interconnection requirements and wheeling arrangement necessary to move the power to PacifiCorp's system.]

In addition to negotiating a power purchase agreement, QFs intending to make sales to the Company are also required to enter into an interconnection agreement that governs the physical interconnection of the project to the Company's transmission or distribution system. The Company's obligation to make purchases from a QF is conditioned upon the QF completing all necessary interconnection arrangements. It is recommended that the owner initiate its request for interconnection 18 months ahead of the anticipated inservice date to help ensure that necessary interconnection arrangements proceed in a timely manner on a parallel track with negotiation of the power purchase agreement.

Because of functional separation requirements mandated by the Federal Energy Regulatory Commission, interconnection and power purchase agreements are handled by different functions within the Company. Interconnection agreements (both transmission and distribution level voltages) are handled by the Company's transmission function (including but not limited to PacifiCorp Transmission Services) while power purchase agreements are handled by the Company's merchant function (including but not limited to PacifiCorp's Commercial and Trading Group).



### AVOIDED COST PURCHASES FROM ELIGIBLE QUALIFYING FACILITIES

Page 12

#### II. Process for Negotiating Interconnection Agreements (continued)

#### A. Communications

Initial communications regarding interconnection agreements should be directed to the Company in writing as follows:

PacifiCorp Director – Transmission Services 825 NE Multnomah St, Suite 1600 Portland, Oregon 97232

Based on the project size and other characteristics, the Company will direct the QF owner to the appropriate individual within the Company's transmission function who will be responsible for negotiating the interconnection agreement with the QF owner. Thereafter, the QF owner should direct all communications regarding interconnection agreements to the designated individual, with a copy of any written communications to the address set forth above.

#### B. Procedures

Generally, the interconnection process involves (1) initiating a request for interconnection, (2) undertaking studies to determine the system impacts associated with the interconnection and the design, cost, and schedules for constructing any necessary interconnection facilities, and (3) executing an interconnection agreement to address facility construction, testing, acceptance, ownership, operation and maintenance issues. Consistent with PURPA and Oregon Public Utility Commission regulations, the owner is responsible for all interconnection costs assessed by the Company on a nondiscriminatory basis. For interconnections impacting the Company's Transmission and Distribution System, the Company will process the interconnection application through PacifiCorp Transmission Services.

## BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

#### **UM 1931**

| PORTLAND GENERAL ELECTRIC COMPANY, | ) |
|------------------------------------|---|
| Complainant,                       | ) |
| v.                                 | ) |
| ALFALFA SOLAR I LLC, et al.        | ) |
| Defendants.                        | ) |
|                                    | ) |

#### **EXHIBIT CREA-NIPPC-REC/102**

#### IDAHO POWER COMPANY SCHEDULE 85 COGENERATION AND SMALL POWER PRODUCTION STANDARD CONTRACT RATES

**December 28, 2018** 

#### **AVAILABILITY**

Service under this schedule is available for power delivered to the Company's control area within the State of Oregon.

#### APPLICABILITY

Service under this schedule is applicable to any Seller that:

- Owns or operates a Qualifying Facility meeting the Eligibility Threshold defined below and desires to sell
   Energy generated by the Qualifying Facility to the Company in compliance with all the terms and conditions
   of the Standard Contract;
- Meets all applicable requirements of the Company's Generation Interconnection Process.

For Qualifying Facilities with a Nameplate Capacity rating greater than 10 MW, a negotiated Non-Standard Contract between the Seller and the Company is required.

#### **DEFINITIONS**

<u>Eligibility Threshold</u> is the Nameplate Capacity requirement of a Qualifying Facility in order to be eligible for the terms and conditions of the Standard Contract. The separate Eligibility Threshold delineations are:

- 1. For all solar QF projects:
  - a. With a Nameplate Capacity no greater than 3 MW the project is eligible for a Standard Contract with fixed terms and standard avoided cost prices:
  - With a Nameplate Capacity above 3 MW and less than or equal to 10 MW the project is eligible for a Standard Contract with fixed terms and negotiated avoided cost prices;
- 2. For all non-solar QF projects with a Nameplate Capacity of 10 MW or less the project is eligible for a Standard Contract with fixed terms and standard avoided cost prices.

<u>Energy</u> means the electric energy, expressed in kWh, generated by the Qualifying Facility and delivered by the Seller to the Company in accordance with the conditions of this schedule and the Standard Contract. Energy is measured net of Losses and Station Use.

Generation Interconnection Process is the Company's generation interconnection application and engineering review process developed to ensure a safe and reliable generation interconnection in compliance with all applicable regulatory requirements, Prudent Electrical Practices and national safety standards. The Generation Interconnection Process is managed by the Company's Delivery Business Unit.

Heat Rate Conversion Factor is 7,100 MMBTU divided by 1,000.

<u>Heavy Load (HL) Hours</u> are the daily hours from hour ending 0700-2200 Mountain Time, (16 hours) <u>excluding</u> all hours on all Sundays, New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

<u>Intermittent</u> describes a Qualifying Facility that produces electrical energy from the use of wind, solar or run of river hydro as the prime mover.

<u>Light Load (LL) Hours</u> are the daily hours from hour ending 2300-0600 Mountain Time (8 hours), plus all other hours on all Sundays, New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

1

(N)

Issued by IDAHO POWER COMPANY
By Timothy E. Tatum, Vice President, Regulatory Affairs
1221 West Idaho Street, Boise, Idaho

#### FOURTH REVISED SHEET NO. 85-2 CANCELS THIRD REVISED SHEET NO. 85-2

# SCHEDULE 85 COGENERATION AND SMALL POWER PRODUCTION STANDARD CONTRACT RATES (Continued)

#### **DEFINITIONS** (Continued)

<u>Losses</u> are the loss of electric energy occurring as a result of the transformation and transmission of electric energy from the Qualifying Facility to the Point of Delivery.

(M)

<u>Nameplate Capacity</u> means the full-load electrical quantities assigned by the designer to a generator and its prime mover or other piece of electrical equipment, such as transformers and circuit breakers, under standardized conditions, expressed in amperes, kilovolt amperes, kilowatts, volts, or other appropriate units. Usually indicated on a nameplate attached to the individual machine or device.

(M)

Non-Standard Contract is a negotiated contract between any Seller that owns or operates a Qualifying Facility with a nameplate capacity rating which does not meet the Eligibility Threshold and desires to sell Energy generated by the Qualifying Facility to the Company. The starting point for negotiation of price is the Avoided Cost Components established in this schedule and may be modified to address specific factors mandated by federal and state law, including

(C)

- The utility's system cost data;
- 2. The availability of capacity or energy from a Qualifying Facility during the system daily and seasonal peak periods, including:
  - The ability of the utility to dispatch the qualifying facility;
  - b. The expected or demonstrated reliability of the qualifying facility;
  - c. The terms of any contract or other legally enforceable obligation, including the duration of the obligation, termination notice requirement and sanctions for non-compliance;
  - d. The extent to which scheduled outages of the qualifying facility can be usefully coordinated with scheduled outages of the utility's facilities;
  - e. The usefulness of energy and capacity supplied from a qualifying facility during system emergencies, including its ability to separate its load from its generation;
  - f. The individual and aggregate value of energy and capacity from qualifying facilities on the electric utility's system; and
  - g. The smaller capacity increments and the shorter lead times available with additions of capacity from qualifying facilities; and
- The relationship of the availability of energy or capacity from the Qualifying Facility to the ability of the electric utility to avoid costs, including the deferral of capacity additions and the reduction of fossil fuel use; and
- 4. The costs or savings resulting from variations in line losses from those that would have existed in the absence of purchases from a Qualifying Facility, if the purchasing electric utility generated an equivalent amount of energy itself or purchased an equivalent amount of electric energy or capacity.

The guidelines for negotiating a Non-Standard Contract are more specifically described later in this schedule in GUIDELINES FOR NEGOTIATION OF POWER PURCHASE AGREEMENTS FOR QFS NOT MEETING THE ELIGIBILITY THRESHOLD.

#### FIRST REVISED SHEET NO. 85-3 CANCELS ORIGINAL SHEET NO. 85-3

#### SCHEDULE 85 COGENERATION AND SMALL POWER PRODUCTION STANDARD CONTRACT RATES (Continued)

#### DEFINITIONS (Continued)

Point of Delivery is the location where the Company's and the Seller's electrical facilities are inter-connected or where the Company's and the Seller's host transmission provider's electrical facilities are interconnected.

Prudent Electrical Practices are those practices, methods and equipment that are commonly used in prudent electrical engineering and operations to operate electric equipment lawfully and with safety, dependability, efficiency and economy.

PURPA means the Public Utility Regulatory Policies Act of 1978.

(M)

Qualifying Facility or QF is a cogeneration facility or a small power production facility which meets the PURPA criteria for qualification set forth in Subpart B of Part 292, Subchapter K, Chapter I, Title 18, of the Code of Federal Regulations.

Seasonality Factor is the factor used in determining the seasonal purchase price of energy. The applicable factors

73.50% for Season 1 (March, April, May); 120.00% for Season 2 (July, August, November, December); 100.00% for Season 3 (June, September, October, January, February).

Seller is any entity that owns or operates a Qualifying Facility and desires to sell Energy to the Company.

Standard Contracts are the pro forma Energy Sales Agreements the Company maintains on file with the Public Utility Commission of Oregon for Intermittent and non-intermittent on-system Qualifying Facilities and Intermittent and non-intermittent off-system Qualifying Facilities, with a Nameplate Capacity which meets the Eligibility Threshold.

(C)

Station Use is electric energy used to operate the Qualifying Facility which is auxiliary to or directly related to the generation of electricity and which, but for the generation of electricity, would not be consumed by the Seller.

#### QUALIFYING FACILITY INFORMATION INQUIRY PROCESS

There are two separate processes required for a Seller to deliver and sell energy from a Qualifying Facility to the Company. These processes may be completed separately or simultaneously.

#### 1. Generation Interconnection Process

All generation projects physically interconnecting to the Company's electrical system, regardless of size, location or ownership, must successfully complete the Generation Interconnection Process prior to the project delivering energy to the Company. A complete description of the Small Generator Interconnection Procedures, the Interconnection Application and Company contact information is maintained on the Idaho Power website at www.idahopower.com, or Seller may contact the Company's Delivery Business Unit at 1-208-388-2658 for further information.

All generation projects delivering power under the off-system Energy Sales Agreement must successfully complete a comparable Generation Interconnection Process with the Seller's host interconnection provider and transmission provider.

#### QUALIFYING FACILITY INFORMATION INQUIRY PROCESS (Continued0

#### Energy Sales Agreement

(M) | | |

To begin the process of completing a Standard Contract or negotiating a Non-Standard Contract, for a proposed project, the Seller must submit to the Company a request for an Energy Sales Agreement. All requests will be processed in the order of receipt by the Company.

#### a. Communications

Unless otherwise directed by the Company, all communications to the Company regarding an Energy Sales Agreement should be directed in writing as follows:

Idaho Power Company Cogeneration and Small Power Production P O Box 70 Boise, Idaho 83707

#### b. Procedures

- i. The Company's approved Energy Sales Agreement may be obtained from the Company's website at http://www.idahopower.com or if the Seller is unable to obtain it from the website, the Company will send a copy within 10 business days of a written request.
- ii. In order to obtain a project specific draft Energy Sales Agreement the Seller must provide in writing to the Company, general project information required for the completion of an Energy Sales Agreement, including, but not limited to:
  - a) Date of request
  - b) Company / Organization that will be the contracting party
  - c) Contract notification information including name, address and telephone number
  - d) Verification that the Qualifying Facility meets the "Eligibility for Standard Rates and Contract" criteria
  - e) Copy of the Qualifying Facility's QF certificate
  - f) Copy of the FERC license (applicable to hydro projects only)
  - Location of the proposed project including general area and specific legal property description
  - h) Description of the proposed project including specific equipment models, types, sizes and configurations
  - i) Type of project (wind, hydro, geothermal etc)
  - j) Nameplate capacity of the proposed project
  - k) Schedule 85 pricing option selected
  - Desired term of the Energy Sales Agreement
  - m) Annual net energy amount
  - n) Maximum capacity of the Qualifying Facility
  - o) Estimated first energy date
  - p) Estimated operation date
  - q) Point of Delivery
  - r) Status of the Generation Interconnection Process

#### QUALIFYING FACILITY INFORMATION INQUIRY PROCESS (Continued)

#### b. <u>Procedures</u> (Continued)

- iii. The Company shall provide a draft Energy Sales Agreement when all information described in Paragraph 2 above has been received in writing from the Seller. Within 15 business days following receipt of all information required in Paragraph 2 the Company will provide the Seller with a draft Energy Sales Agreement including current standard avoided cost prices and/or other optional pricing mechanisms as approved by the Oregon Public Utility Commission in this Schedule.
- iv. The Company will respond within 15 business days to any written comments and proposals that the Seller provides in response to the draft Energy Sales Agreement.
- v. If the Seller desires to proceed with the Energy Sales Agreement after reviewing the Company's draft Energy Sales Agreement, it may request in writing that the Company prepare a final draft Energy Sales Agreement. In connection with such request, the Seller must provide the Company with an updated status of the Generation Interconnection Process which indicates that the Seller's provided information (i.e. first energy date, operation date, etc.) are realistically attainable and any additional or clarified project information that the Company reasonably determines to be necessary for the preparation of a final draft Energy Sales Agreement. Once the Company has received the written request for a final draft Energy Sales Agreement and all additional or clarified project information that the Company reasonably determines to be necessary for the preparation of a final draft Energy Sales Agreement, the Company will provide Seller with a final draft Energy Sales Agreement within 15 business days.
- vi. After reviewing the final draft Energy Sales Agreement, the Seller may either prepare another set of written comments and proposals or approve the final draft Energy Sales Agreement. If the Seller prepares written comments and proposals, the Company will respond within 15 business days to those comments and proposals.
- vii. When both parties are in full agreement as to all terms and conditions of the final draft Energy Sales Agreement, the Company will prepare and forward to the Seller within 15 business days a final executable version of the Energy Sales Agreement. Once the Seller executes the Energy Sales Agreement and returns all copies to the Company, the Company will execute the Energy Sales Agreement. Following the Company's execution a completely executed copy will be returned to the Seller. Prices and other terms and conditions in the Energy Sales Agreement will not be final and binding until the Energy Sales Agreement has been executed by both parties.

### AVOIDED COST PRICE Standard Avoided Cost Prices for Baseload QF

| Year | On-Peak | Off-Peak |
|------|---------|----------|
| real | \$/MWh  | \$/MWh   |
|      | (a)     | (b)      |
| 2018 | \$21.65 | \$14.62  |
| 2019 | \$23.12 | \$16.90  |
| 2020 | \$25.50 | \$19.12  |
| 2021 | \$28.93 | \$22.45  |
| 2022 | \$30.93 | \$24.22  |
| 2023 | \$32.49 | \$25.67  |
| 2024 | \$33.83 | \$26.79  |
| 2025 | \$34.95 | \$27.88  |
| 2026 | \$52.19 | \$33.12  |
| 2027 | \$54.05 | \$34.58  |
| 2028 | \$55.63 | \$35.75  |
| 2029 | \$56.93 | \$36.63  |
| 2030 | \$57.98 | \$37.26  |
| 2031 | \$59.20 | \$38.04  |
| 2032 | \$60.28 | \$38.68  |
| 2033 | \$61.16 | \$39.10  |
| 2034 | \$62.12 | \$39.60  |
| 2035 | \$63.31 | \$40.32  |
| 2036 | \$64.79 | \$41.31  |
| 2037 | \$65.99 | \$42.02  |
| 2038 | \$67.66 | \$43.19  |
| 2039 | \$69.60 | \$44.61  |
| 2040 | \$71.20 | \$45.69  |
| 2041 | \$72.69 | \$46,65  |
| 2042 | \$74.26 | \$47.67  |

Notes:

(a) Value of on-peak capacity allocated to on-peak hours of a Baseload resource. 2018-2025 On-peak Market Prices. Fuel and Capitalized Energy Cost of the Proxy CCCT. 2018-2025

(b) Off-Peak Market Prices.

(C)

#### Standard Avoided Cost Prices with Integration Charges for a Wind QF

| Year | On-Peak  | Off-Peak | Wind<br>Integration<br>Charge | On-Peak<br>with<br>Integration Charge | Off-Peak<br>with<br>Integration Charge |
|------|----------|----------|-------------------------------|---------------------------------------|--|
|      | (\$/MWh) | \$/MWh   | \$/MWh                        | \$/MWh                                | \$/MWh                                 |
|      | (a)      | (b)      | (c)                           | (d)                                   | (e)                                    |
|      | 7.4      |          |                               | (a)-(c)                               | (b)-(c)                                |
| 2018 | \$21.65  | \$14.62  | \$17.51                       | \$4.14                                | (\$2.89)                               |
| 2019 | \$23.12  | \$16.90  | \$18.03                       | \$5.09                                | (\$1.13)                               |
| 2020 | \$25.50  | \$19.12  | \$18.57                       | \$6.93                                | \$0.55                                 |
| 2021 | \$28.93  | \$22.45  | \$19.13                       | \$9.80                                | \$3.32                                 |
| 2022 | \$30.93  | \$24.22  | \$19.70                       | \$11.23                               | \$4.52                                 |
| 2023 | \$32.49  | \$25.67  | \$20.29                       | \$12.20                               | \$5.38                                 |
| 2024 | \$33.83  | \$26.79  | \$20.90                       | \$12.93                               | \$5.89                                 |
| 2025 | \$34.95  | \$27.88  | \$21.53                       | \$13.42                               | \$6.35                                 |
| 2026 | \$36.63  | \$33.12  | \$22.18                       | \$14.45                               | \$10.94                                |
| 2027 | \$38.16  | \$34.58  | \$22.84                       | \$15.32                               | \$11.74                                |
| 2028 | \$39.41  | \$35.75  | \$23.53                       | \$15.88                               | \$12.22                                |
| 2029 | \$40.36  | \$36.63  | \$24.23                       | \$16.13                               | \$12.40                                |
| 2030 | \$41.07  | \$37.26  | \$24.96                       | \$16.11                               | \$12.30                                |
| 2031 | \$41.93  | \$38.04  | \$25.71                       | \$16.22                               | \$12.33                                |
| 2032 | \$42.65  | \$38.68  | \$26.48                       | \$16.17                               | \$12.20                                |
| 2033 | \$43.16  | \$39.10  | \$27.27                       | \$15.89                               | \$11.83                                |
| 2034 | \$43.74  | \$39.60  | \$28.09                       | \$15.65                               | \$11.51                                |
| 2035 | \$44.55  | \$40.32  | \$28.93                       | \$15.62                               | \$11.39                                |
| 2036 | \$45.63  | \$41.31  | \$29.80                       | \$15.83                               | \$11.51                                |
| 2037 | \$46.43  | \$42.02  | \$30.70                       | \$15.73                               | \$11.32                                |
| 2038 | \$47.69  | \$43.19  | \$31.62                       | \$16.07                               | \$11,57                                |
| 2039 | \$49.21  | \$44.61  | \$32.57                       | \$16.64                               | \$12.04                                |
| 2040 | \$50.38  | \$45.69  | \$33.25                       | \$17.13                               | \$12.44                                |
| 2041 | \$51.44  | \$46.65  | \$33.95                       | \$17.49                               | \$12.70                                |
| 2042 | \$52.56  | \$47.67  | \$34.66                       | \$17.90                               | \$13.01                                |

#### Notes:

- (a) Value of on-peak capacity allocated to on-peak hours of a Wind resource
- (b) Fuel and Capitalized Energy Cost of the Proxy CCCT
- (c) Wind Integration Charges based on current penetration level of 701-800 MW. The Integration Charge will be updated when the next penetration level is reached.
- (d) 2018 2025 On-Peak Market Prices

(e) 2018 - 2025 Off-Peak Market Prices

(C)

#### Standard Avoided Cost Prices with Integration Charges for a PV Solar QF

|       |          |              | PV Solar    | On-Peak            | Off-Peak           |     |
|-------|----------|--------------|-------------|--------------------|--------------------|-----|
|       | On-Peak  | Off-<br>Peak | Integration | with               | with               |     |
| Year  | On-Feak  | reak         | Charge      | Integration Charge | Integration Charge |     |
| i cai | (\$/MWh) | \$/MWh       | \$/MWh      | \$/MWh             | \$/MWh             |     |
|       | (a)      | (b)          | (c)         | (d)                | φ//v/v/11 (e)      | ł   |
|       | (a)      | (D)          | (C)         |                    | 2 4                |     |
|       |          |              |             | (a)-(c)            | (b)-(c)            |     |
|       |          |              |             |                    |                    |     |
| 2018  | \$21.65  | \$14.62      | \$0.56      | \$21.09            | \$14.06            | (Ç) |
| 2019  | \$23.12  | \$16.90      | \$0.57      | \$22.55            | \$16.33            |     |
| 2020  | \$25.50  | \$19.12      | \$0.59      | \$24.91            | \$18.53            |     |
| 2021  | \$28.93  | \$22.45      | \$0.60      | \$28.33            | \$21.85            |     |
| 2022  | \$30.93  | \$24.22      | \$0.61      | \$30.32            | \$23.61            |     |
| 2023  | \$32.49  | \$25.67      | \$0.63      | \$31.86            | \$25.04            |     |
| 2024  | \$33.83  | \$26.79      | \$0.64      | \$33.19            | \$26.15            |     |
| 2025  | \$34.95  | \$27.88      | \$0.66      | \$34.29            | \$27.22            |     |
| 2026  | \$56.76  | \$33.12      | \$0.67      | \$56.09            | \$32.45            |     |
| 2027  | \$58.72  | \$34.58      | \$0.68      | \$58.04            | \$33.90            |     |
| 2028  | \$60.39  | \$35.75      | \$0.70      | \$59.69            | \$35.05            |     |
| 2029  | \$61.79  | \$36.63      | \$0.71      | \$61.08            | \$35.92            |     |
| 2030  | \$62.95  | \$37.26      | \$0.73      | \$62.22            | \$36.53            |     |
| 2031  | \$64.27  | \$38.04      | \$0.75      | \$63.52            | \$37.29            |     |
| 2032  | \$65.46  | \$38.68      | \$0.76      | \$64.70            | \$37.92            |     |
| 2033  | \$66.45  | \$39.10      | \$0.78      | \$65.67            | \$38.32            |     |
| 2034  | \$67.52  | \$39.60      | \$0.80      | \$66.72            | \$38.80            |     |
| 2035  | \$68.83  | \$40.32      | \$0.81      | \$68.02            | \$39.51            |     |
| 2036  | \$70.42  | \$41.31      | \$0.83      | \$69.59            | \$40.48            |     |
| 2037  | \$71.74  | \$42.02      | \$0.85      | \$70.89            | \$41.17            |     |
| 2038  | \$73.53  | \$43.19      | \$0.87      | \$72.66            | \$42.32            |     |
| 2039  | \$75.59  | \$44.61      | \$0.89      | \$74.70            | \$43.72            |     |
| 2040  | \$77.32  | \$45.69      | \$0.91      | \$76.41            | \$44.78            |     |
| 2041  | \$78.94  | \$46.65      | \$0.93      | \$78.01            | \$45.72            |     |
| 2042  | \$80.63  | \$47.67      | \$0.95      | \$79.68            | \$46.72            | (c) |

#### Notes:

- (a) Value of on-peak capacity allocated to on-peak hours of a Fixed PV Utility Solar resource
- (b) Fuel and Capitalized Energy Cost of the Proxy CCCT
- (c) Solar Integration Charges based on current penetration level of 301-400 MW. The Integration Charge will be updated when the next penetration level is reached.
- (d) 2018 2025 On-Peak Market Prices

(e) 2018 - 2025 Off-Peak Market Prices

(C) (C)

#### SECOND REVISED SHEET NO. 85-9 CANCELS FIRST REVISED SHEET NO. 85-9

# SCHEDULE 85 COGENERATION AND SMALL POWER PRODUCTION STANDARD CONTRACT RATES (Continued)

#### NET ENERGY PURCHASE PRICE

For contract years one (1) through (15) fifteen, the monthly Net Energy Purchase Price will be calculated as follows:

For all Energy delivered to the Company on a monthly basis during HL hours the Net Energy Purchase Price will be:

The On-Peak price from the preceding applicable Standard Avoided Cost Price tables multiplied by the appropriate Seasonality Factor.

For all Energy delivered to the Company on a monthly basis during LL hours the Net Energy Purchase Price will be:

The Off-Peak price from the preceding applicable Standard Avoided Cost Price tables multiplied by the appropriate Seasonality Factor.

For all periods after the end of the fifteenth (15th) contract year, the Company will pay the Seller monthly, for Energy delivered and accepted at the Point of Delivery in accordance with the Seller's election of the following options:

#### Option 1 - Dead Band Method

Net Energy Purchase Price =

On-Peak = (AGPU + Capacity Payment On-Peak Hours) X Seasonality Factor Off-Peak = AGPU X Seasonality Factor

Actual Gas Price Used (AGPU) =
90% of Fuel Cost if
Indexed Fuel Cost is less than 90% Fuel Cost; else
110% of Fuel Cost if
Indexed Fuel Cost is greater than 110% Fuel Cost; else
Indexed Fuel Cost

where

On-Peak and Off-Peak are established in this schedule by QF resource type for the applicable calendar year of the actual Net Energy deliveries to the Company, and

Indexed Fuel Cost is the applicable weighted monthly average index price of natural gas at Sumas multiplied by the Heat Rate Conversion Factor.

#### SECOND REVISED SHEET NO. 85-10 CANCELS FIRST REVISED SHEET NO. 85-10

# SCHEDULE 85 COGENERATION AND SMALL POWER PRODUCTION STANDARD CONTRACT RATES (Continued)

#### NET ENERGY PURCHASE PRICE (Continued)

#### Option 2 - Gas Market Method

Net Energy Purchase Price =

On-Peak = (AGPU + Capacity Payment On-Peak Hours) X Seasonality Factor Off-Peak = AGPU X Seasonality Factor

Actual Gas Price Used (AGPU) = Indexed Fuel Cost

where

On-Peak and Off-Peak are established in this schedule by QF resource type for the applicable calendar year of the actual Net Energy deliveries to the Company, and

Indexed Fuel Cost is the applicable weighted monthly average index price of natural gas at Sumas multiplied by the Heat Rate Conversion Factor.

#### MISCELLANEOUS PROVISIONS

#### Insurance

Qualifying Facilities with a Nameplate Capacity of 200 kilowatts or smaller are not required to provide evidence of liability insurance.

#### GUIDELINES FOR NEGOTIATION OF POWER PURCHASE AGREEMENTS FOR QFS NOT MEETING THE ELIGIBILITY THRESHOLD

- The Company will not impose terms and conditions beyond what is standard practice. The Edison Electric Institute master agreement and the Company's Standard Contracts are useful starting points in negotiating QF agreements.
- 2. The Company will provide an indicative pricing proposal for a QF that plans to provide firm energy or capacity and chooses avoided cost rates calculated at the time of the obligation. The Company will provide an indicative pricing proposal within 30 days of receipt of the information the Company requires from the QF. The proposal may include other terms and conditions, tailored to the individual characteristics of the proposed project. The avoided cost rates in the indicative pricing proposal will be based on the following:
  - a. The starting point for negotiations is the avoided cost calculated under the modeling methodology approved by the Idaho Public Utilities Commission for negotiated contracts, as refined by the Oregon Public Utility Commission to incorporate stochastic analyses of electric and natural gas prices, loads, hydro and unplanned outages.
  - b. The prospective QF may request in writing that the Company prepare a draft power purchase agreement to serve as the basis for negotiations. The Company may require additional information from the QF necessary to prepare a draft agreement.

#### SECOND REVISED SHEET NO. 85-11 CANCELS FIRST REVISED SHEET NO. 85-11

# SCHEDULE 85 COGENERATION AND SMALL POWER PRODUCTION STANDARD CONTRACT RATES (Continued)

### GUIDELINES FOR NEGOTIATION OF POWER PURCHASE AGREEMENTS FOR QFS NOT MEETING THE ELIGIBILITY THRESHOLD(Continued)

- c. Within 30 days of receiving the required information, the Company will provide a draft power purchase agreement containing a comprehensive set of proposed terms and conditions.
- d. The QF must submit in writing a statement of its intention to begin negotiations with the Company and may include written comments and proposals. The Company is not obligated to begin negotiations until it receives written notification from the QF. The Company will not unreasonably delay negotiations and will respond in good faith to all proposals by the QF.
- e. When the parties have agreed, the Company will prepare a final version of the contract within 15 business days. A contract is not final and binding until signed by both parties.
- f. At any time after 60 days from the date the QF has provided its written notification pursuant to paragraph d., the QF may file a complaint with the Oregon Public Utility Commission asking the Commission to adjudicate any unresolved contract terms and conditions.
- QFs have the unilateral right to select a contract length of up to 20 years for a PURPA contract. The contract
  length selected by the QF may impact other contractual issues including, but not limited to, the avoided
  cost determination with respect to that QF.
- 4. The Company should consider the QF to be providing firm energy or capacity if the contract requires delivery of a specified amount of energy or capacity over a specified term and includes sanctions for noncompliance under a legally enforceable obligation. The Company shall not determine that a QF provides no capacity value simply because the Company did not select it through a competitive bidding process. For a QF providing firm energy or capacity:
  - a. The Company and the QF should negotiate the time periods when the QF may schedule outages and the advance notification requirement for such outages, using provisions in the Company's partial requirements tariffs as guidance.
  - The QF should be required to make best efforts to meet its capacity obligations during Company system emergencies.
  - c. The Company and the QF should negotiate security, default, damage and termination provisions that keep the Company and its ratepayers whole in the event the QF fails to meet obligations under the contract.
  - d. Delay of commercial operation should not be a cause of termination if the Company determines at the time of contract execution that it will be resource-sufficient as of the QF on-line date specified in the contract; however, damages may be appropriate.
  - e. Lack of natural motive force for testing to prove commercial operation should not be a cause of termination.
  - f. The Company should include a provision in the contract that states the Company may require a QF terminated due to its default and wishing to resume selling to the Company be subject to the terms of the original contract until its end date.

#### FIRST REVISED SHEET NO. 85-12 CANCELS ORIGINAL SHEET NO. 85-12

## SCHEDULE 85 COGENERATION AND SMALL POWER PRODUCTION STANDARD CONTRACT RATES (Continued)

### GUIDELINES FOR NEGOTIATION OF POWER PURCHASE AGREEMENTS FOR QFS NOT MEETING THE ELIGIBILITY THRESHOLD (Continued)

- An "as available" obligation for delivery of energy, including deliveries in excess of Nameplate Capacity or the amount committed in the QF contract, should be treated as a non-firm commitment. Non-firm commitments should not be subject to minimum delivery requirements, default damages for construction delay or under-delivery, default damages for the QF choosing to terminate the contract early, or default security for these purposes.
- 6. For QFs unable to establish creditworthiness, the Company must at a minimum allow the QF to choose either a letter of credit or cash escrow for providing default security. When determining security requirements, the Company should take into account the risk associated with the QF based on such factors as its size and type of supply commitments.
- 7. When QF rates are based on avoided costs calculated at the time of delivery, the Company should use day-ahead on- and off-peak market index prices at the appropriate market hub(s).
  - a. For QFs providing firm energy or capacity that choose this option, avoided cost rates should be based on day-ahead market index prices for firm purchases.
  - b. For QFs providing energy on an "as available" basis, avoided cost rates should be based on dayahead market index prices for non-firm purchases.
- 8. The Company should not make adjustments to standard avoided cost rates other than those approved by the Oregon Public Utility Commission and consistent with these guidelines.
- 9. The Company should make adjustments to avoided costs for reliability on an expected forward-looking basis. The Company should design QF rates to provide an incentive for the QF to achieve the contracted level and timing of energy deliveries.
- 10. The Company should make adjustments to avoided costs for dispatchability on a probabilistic, forward-looking basis.
- 11. If avoided cost rates for a QF are calculated at the time of the obligation and the Company's avoided resource is a fossil fuel plant, the Company should adjust avoided cost rates for the resource deficiency period to take into account avoided fossil fuel price risk.
- 12. Avoided cost rates for wind QFs should be adjusted for integration cost estimates based on studies conducted for the Company's system, unless the QF contracts for integration services with a third party.
  - a. The Company should use the most recent integration cost data available, consistent with its evaluation of competitively bid and self-build wind resources.
  - b. The portion of integration costs attributable to reserves costs should be based on the difference in such costs between the wind QF and the Company proxy plant.

#### FIRST REVISED SHEET NO. 85-13 CANCELS ORIGINAL SHEET NO. 85-13

# SCHEDULE 85 COGENERATION AND SMALL POWER PRODUCTION STANDARD CONTRACT RATES (Continued)

### GUIDELINES FOR NEGOTIATION OF POWER PURCHASE AGREEMENTS FOR QFS NOT MEETING THE ELIGIBILITY THRESHOLD (Continued)

- c. The Company should base first-year integration costs on the actual level of wind resources in the control area, plus the proposed QF. Integration costs for years two through five of the contract should be based on the expected level of wind resources in the control area each year, including the new resources the Company expects to add. Integration costs should be fixed at the year-five level, adjusted for inflation, for the remainder of the life of the wind projects in the control area.
- d. The Company is prohibited from using a long-range planning target for wind resources as the basis for integration costs. However, if the Company is subject to near-term targets under a mandatory Renewable Portfolio Standard, the Company may base its integration costs on the level of renewable resources it must acquire over the next 10 years.
- e. In determining integration costs, the Company should make reasonable estimates regarding the portion of renewable resources to be acquired that will be intermittent resources.
- 13. The Company should adjust avoided cost rates for QF line losses relative to the Company proxy plant based on a proximity-based approach.
- 14. The Company should evaluate whether there are potential savings due to transmission and distribution system upgrades that can be avoided or deferred as a result of the QFs location relative to the Company proxy plant and adjust avoided cost rates accordingly.
- 15. The Company should not adjust avoided cost rates for any distribution or transmission system upgrades needed to accept QF power. Such costs should be separately charged as part of the interconnection process.
- 16. The Company should not adjust avoided cost rates based on its determination of the additional cost it might incur for any debt imputation by a credit rating agency.
- 17. Regarding Surplus Sale and Simultaneous Purchase and Sale:
  - a. QFs may either contract with the Company for a "surplus sale" or for a "simultaneous purchase and sale" provided, however, that the QFs selection of either such contractual arrangement shall not be inconsistent with any retail tariff provision of the Company then in effect or any agreement between the QF and the Company;
  - b. The two sale/purchase arrangements described in paragraph 17. a will be available to QFs regardless of whether they qualify for standard contracts and rates or non-standard contracts and rates, however the "simultaneous purchase and sale" is not available to QFs not directly connected to the Company's electrical system;
  - c. The negotiation parameters and guidelines should be the same for both sale/purchase arrangements described in paragraph 17, a; and
  - d. The avoided cost calculations by the Company do not require adjustment solely as a result of the selection of one of the sale/purchase arrangements described in paragraph 17.a., rather than the other.

## BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

#### UM 1931

| ) |
|---|
| ) |
| ) |
| ) |
| ) |
|   |

#### **EXHIBIT CREA-NIPPC-REC/103**

## ONEENERGY OREGON STANDARD CONTRACT PPA

**December 28, 2018** 

#### STANDARD CONTRACT POWER PURCHASE AGREEMENT

THIS AGREEMENT, entered into this 19th day, of February 2014, is between OneEnergy Oregon Solar, LLC ("Seller") and Portland General Electric Company ("PGE") (hereinafter each a "Party" or collectively, "Parties").

#### RECITALS

Seller intends to construct, own, operate and maintain a <u>solar photovoltaic</u> facility for the generation of electric power located in <u>Polk</u> County, <u>Oregon, at approximately</u> 45° 4'5.00"N; 123°28'14.31"W, with a Nameplate Capacity Rating of <u>2,500</u> kilowatt ("kW") alternating current (AC), 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 a period between PGE's readings of its power purchase billing meter at the Facility in the normal course of PGE's business. Such periods typically vary and may not coincide with calendar months.
- 1.3. "Capacity Value" has the meaning provided for in Schedule 201 (as defined below).
- 1.4. "Cash Escrow" means an agreement by two parties to place money into the custody of a third party for delivery to a grantee only after the fulfillment of the conditions specified.
- 1.5. "Commercial Operation Date" means the date that the Facility is deemed by PGE to be fully operational and reliable which shall require, among other things, that all of the following events have occurred:
  - 1.5.1. 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 1.5 can be provided by one or more LPEs);

- 1.5.2. Start-Up Testing of the Facility has been completed in accordance with Section 1.27;
- 1.5.3. 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;
- 1.5.4. PGE has received a certificate addressed to PGE from an LPE stating that in accordance with the Generation Interconnection Agreement, all required interconnection facilities have been constructed, all required interconnection tests have been completed; and the Facility is physically interconnected with PGE's electric system.
- 1.5.5. 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;
- "Contract Price" means the applicable price as selected by Seller in Section 5.
- 1.7. "Contract Year" means each twelve (12) month period commencing at 00:00 hours on January 1 and ending on 24:00 hours on December 31 falling at least partially in the Term of this Agreement.
  - 1.8. "Effective Date" has the meaning set forth in Section 2.1.
- 1.9. "Environmental Attributes" means any and all current or future credits, benefits, emissions reductions, environmental air quality credits, emissions reduction credits, offsets and allowances, howsoever entitled, resulting from the avoidance of the emission of any gas, chemical or other substance attributable to the Facility during the Term, or otherwise attributable to the generation, purchase, sale or use of energy from or by the Facility during the Term, including without limitation any of the same arising out of legislation or regulation concerned with oxides of nitrogen, sulfur or carbon, with particulate matter, soot or mercury, or implementing the United Nations Framework Convention on Climate Change (the "UNFCCC") or the Kyoto Protocol to the UNFCCC or crediting "early action" emissions reduction, or laws or regulations involving or administered by the Clean Air Markets Division of the Environmental Protection Agency or successor administrator, or any State or federal entity given jurisdiction over a

program involving transferability of Environmental Attributes, and any Green Tag Reporting Rights to such Environmental Attributes.

- 1.10. "Facility" has the meaning set forth in the Recitals.
- 1.11. "Forward Replacement Price" means the price at which PGE, acting in a commercially reasonable manner, purchases for delivery at the Point of Receipt 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.
- 1.12. "Generation Interconnection Agreement" means the generation interconnection agreement to be entered into separately between Seller and PGE, providing for the construction, operation, and maintenance of PGE's interconnection facilities required to accommodate deliveries of Seller's Net Output.
- 1.13. "Letter of Credit" means an engagement by a bank or other person made at the request of a customer that the issuer will honor drafts or other demands for payment upon compliance with the conditions specified in the letter of credit.
- 1.14. "Licensed Professional Engineer" or "LPE" means a person who is licensed to practice engineering in the state where the Facility is located, who has no economic relationship, association, or nexus with the Seller, and who is not a representative of a consulting engineer, contractor, designer or other individual involved in the development of the Facility, or of a manufacturer or supplier of any equipment installed in the Facility. Such Licensed Professional Engineer shall be licensed in an appropriate engineering discipline for the required certification being made and be acceptable to PGE in its reasonable judgment.
- 1.15. "Lost Energy Value" means for a Contract Year: zero, unless the Net Output is less than Minimum Net Output and the mean Mid C Index Price is greater than the Contract Price, in which case Lost Energy Value equals: (Minimum Net Output Net Output) X (the lower of the mean Contract Price or (the Mean Mid C Index Price mean Contract Price)).
- 1.16. "Mid-Columbia" means an area which includes points at any of the switchyards associated with the following four hydro projects: Rocky Reach, Rock Island, Wanapum and Priest Rapids. These switchyards include: Rocky Reach, Rock Island, Wanapum, McKenzie, Valhalla, Columbia, Midway and Vantage. Mid-Columbia shall also include points in the "Northwest Hub," as defined by Bonneville Power Administration. For scheduling purposes, the footprint described above shall dictate the delivery point name for the then current Western Electricity Coordinating Council ("WECC") scheduling protocols. If the footprint changes during the Term, a mutually agreed upon footprint that describes an area containing the most liquidity for trading purposes shall apply.
- 1.16.1 "Mid C Index Price" means the weighted average of the day-ahead On-Peak and Off-Peak prices at Mid-Columbia, as published in ICE settlement, or if such publication no longer exists, a successor publication as designated by the PGE and

Seller; provided, that if the Mid-Columbia Price is no longer published, or if the PGE and Seller do not agree on a successor publication, each Party shall obtain quotes from two (2) independent and reputable broker, and the Mid-Columbia Price shall be the average of such quotes.

- 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. Net Output does not include any Environmental Attributes.
  - 1.20. "Off-Peak Hours" has the meaning provided in Schedule 201.
  - 1.21. "On-Peak Hours" has the meaning provided in Schedule 201.
- 1.22. "Point of Delivery" means the high side of the generation step up transformer(s) located at the point of interconnection between the Facility and PGE's distribution or transmission system, as specified in the Generation Interconnection Agreement.
- 1.23. "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. "Senior lien" means a prior lien which has precedence as to the property under the lien over another lien or encumbrance.
- 1.27. "Start-Up Testing" means the completion of applicable required factory and start-up tests as set forth in Exhibit D.
- 1.28. "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.
- 1.29. "Schedule 201" shall mean PGE rate Schedule 201 filed with the Oregon Public Utilities Commission in effect on the Effective Date of this Agreement and attached hereto as Exhibit E.
- 1.30. "Term" shall mean the period beginning on the Effective Date and ending on the Termination Date.
- 1.31. "Test Period" shall mean a period of sixty (60) days or a commercially reasonable period determined by the Seller.
- 1.32. References to Recitals, Sections, and Exhibits are to be the recitals, sections and exhibits of this Agreement.

#### SECTION 2: TERM; COMMERCIAL OPERATION DATE

- 2.1 This Agreement shall become effective upon execution by both Parties ("Effective Date").
- 2.2 Time is of the essence of this Agreement, and Seller's ability to meet certain requirements prior to the Commercial Operation Date and to complete all requirements to establish the Commercial Operation Date is critically important. Therefore.
  - 2.2.1 By July 19, 2015 Seller shall begin initial deliveries of Net Output; and
  - 2.2.2 By August 19, 2015 Seller shall have completed all requirements under Section 1.5 and shall have established the Commercial Operation Date.
  - 2.2.3 In the event Seller is unable to meet the requirements of Sections 2.2.1 and 2.2.2, Seller shall pay damages equal to the Lost Energy Value. In calculating the Lost Energy Value for use in this section, the Minimum Net Output shall be prorated to account for any operational delay.
- 2.3 This Agreement shall terminate on February 19, 2034, up to 20 years from the Effective Date, or the date the Agreement is terminated in accordance with Section 10 or 12.2, 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 2,500 kW AC.
- 3.1.9 Seller estimates that the average annual Net Output to be delivered by the Facility to PGE is 3,629,000 kilowatt-hours ("kWh"), which amount PGE will include in its resource planning.
- 3.1.10 Seller will deliver from the Facility to PGE at the Point of Delivery Net Output not to exceed a maximum of 4,597,000 kWh of Net Output during each Contract Year ("Maximum Net Output").
- 3.1.11 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 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 Rates and Standard Contract approved by the Commission at the time this Agreement is executed. Seller will provide, upon request by Buyer 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. Buyer 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 Buyer will provide all such confidential information to the Public Utility Commission of Oregon upon the Commission's request.

#### SECTION 4: DELIVERY OF POWER

- 4.1 Commencing on the Effective Date and continuing through the Term of this Agreement, Seller shall sell to PGE the entire Net Output delivered from the Facility at the Point of Delivery.
- 4.2 Provided Seller has elected the Contract Price options in Section 5.1, 5.2, or 5.3, Seller shall deliver to PGE from the Facility either a) a minimum of seventy-five percent (75%) of its average annual Net Output or b) the Alternative Minimum Amount as defined in Exhibit A during each Contract Year (hereinafter "Minimum Net Output"), provided that such Minimum Net Output for the first or last Contract Year during which Commercial Operations begins 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. PGE shall pay Seller the Contract Price for all delivered Net Output.
- 4.3 Provided Seller has elected the Contract Price options in Section 5.1, 5.2, or 5.3, Seller agrees that if Seller does not deliver the Minimum Net Output each Contract Year, 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 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 10,000kW.

- 4.5 To the extent not otherwise provided in the Generation Interconnection Agreement, all costs associated with the modifications to PGE's interconnection facilities or electric system occasioned by or related to the interconnection of the Facility with PGE's system, or any increase in generating capability of the Facility, or any increase of delivery of Net Dependable Capacity from the Facility, shall be borne by Seller.
- 4.6 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 Environmental Attributes produced with respect to the Facility, and PGE shall not report under such program that such Environmental Attributes belong to it.

#### SECTION 5: CONTRACT PRICE

PGE shall pay Seller for the price options 5.1, 5.2, 5.3 or 5.4, as selected below, pursuant to Schedule 201. Seller shall indicate which price option it chooses by marking its choice below with an X. If Seller chooses the option in Section 5.1, it must mark below a single second option from Section 5.2, 5.3, or 5.4 for all Contract Years in excess of 15 until the remainder of the Term. Except as provided herein, Sellers selection is for the Term and shall not be changed during the Term.

5.1 X Fixed Price (for the first 15 years following the Commercial Operation Date)
5.2 X Deadband Index Gas Price (for the 16th year following the Commercial Operation Date and continuing until the end of Term)
5.3 \_\_\_\_ Index Gas Price
5.4 \_\_\_ Mid-C Index Rate Price

#### SECTION 6: OPERATION AND CONTROL

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

liability or occurrence arising from the operation and maintenance by Seller of the Facility.

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

#### SECTION 7: CREDITWORTHINESS

In the event Seller: a) is unable to represent or warrant as required by Section 3 that it has not been a debtor in any bankruptcy proceeding within the past two (2) years; b) becomes such a debtor during the Term; or c) is not or will not be current on all its financial obligations, Seller shall immediately notify PGE and shall promptly (and in no less than 10 days after notifying PGE) provide default security in an amount reasonably acceptable to PGE in one of the following forms: Senior Lien, Step in Rights, a Cash Escrow or Letter of Credit. The amount of such default security that shall be acceptable to PGE shall be equal to: (annual On Peak Hours) X (On Peak Price – Off Peak Price) X (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 8: METERING

- 8.1 PGE shall design, furnish, install, own, inspect, test, maintain and replace all metering equipment at Seller's cost and as required pursuant to the Generation Interconnection Agreement.
- 8.2 Metering shall be performed at the location and in a manner consistent with this Agreement and as specified in the Generation Interconnection Agreement. All Net Output purchased hereunder shall be adjusted to account for electrical losses, if any, between the point of metering and the Point of Delivery, so that the purchased amount reflects the net amount of power flowing into PGE's system at the Point of Delivery.
- 8.3 PGE shall periodically inspect, test, repair and replace the metering equipment as provided in the Generation Interconnection Agreement. If any of the inspections or tests discloses an error exceeding two (2%) percent of the actual energy delivery, either fast or slow, proper correction, based upon the inaccuracy found, shall be made of previous readings for the actual period during which the metering equipment rendered inaccurate measurements if that period can be ascertained. If the actual period cannot be ascertained, the proper correction shall be made to the measurements

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

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

#### SECTION 9: BILLINGS, COMPUTATIONS AND PAYMENTS

- 9.1 On or before the thirtieth (30th) day following the end of each Billing Period, PGE shall send to Seller payment for Seller's deliveries of Net Output to PGE, together with computations supporting such payment. PGE may offset any such payment to reflect amounts owing from Seller to PGE pursuant to this Agreement, the Generation Interconnection Agreement, and any other agreement related to the Facility between the Parties or otherwise.
- 9.2 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 10: DEFAULT, REMEDIES AND TERMINATION

- 10.1 In addition to any other event that may constitute a default under this Agreement, the following events shall constitute defaults under this Agreement:
  - 10.1.1 Breach by Seller or PGE of a representation or warranty, except for Section 3.1.4, set forth in this Agreement.
  - 10.1.2 Seller's failure to provide default security, if required by Section 7, prior to delivery of any Net Output to PGE or within 10 days of notice.
  - 10.1.3 Seller's failure to deliver the Minimum Net Output for two consecutive Contract Years.
    - 10.1.4 If Seller is no longer a Qualifying Facility.
  - 10.1.5 Failure of PGE to make any required payment pursuant to Section 9.1.
- 10.2 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 10.1.3 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 21.1. The rights provided in this Section 10 are cumulative such that the exercise of one or more rights shall not constitute a waiver of any other rights.

- 10.3 If this Agreement is terminated as provided in this Section 10 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.
- 10.4 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. Accounts owed by Seller pursuant to this paragraph shall be due within five (5) business days after any invoice from PGE for the same.
- 10.5 In the event PGE terminates this Agreement pursuant to this Section 10, 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.
- 10.6 Sections 10.1 10.3 10.4 10.5, 11, and 20.2 shall survive termination of this Agreement.

#### SECTION 11: INDEMNIFICATION AND LIABILITY

- 11.1 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.
- 11.2 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.
- 11.3 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.

11.4 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 12: INSURANCE

- 12.1 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 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.
- 12.2 Prior to the connection of the Facility to PGE's electric system, provided such facility has a design capacity of 200kW 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.
- 12.3 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 13: FORCE MAJEURE

- 13.1 As used in this Agreement, "Force Majeure" or "an event of Force Majeure" means any cause beyond the reasonable control of the Seller or of PGE which, despite the exercise of due diligence, such Party is unable to prevent or overcome. By way of example, Force Majeure may include but is not limited to acts of God, fire, flood, storms, wars, hostilities, civil strife, strikes, and other labor disturbances, earthquakes, fires, lightning, epidemics, sabotage, restraint by court order or other delay or failure in the performance as a result of any action or inaction on behalf of a public authority which by the exercise of reasonable foresight such Party could not reasonably have been expected to avoid and by the exercise of due diligence, it shall be unable to overcome, subject, in each case, to the requirements of the first sentence of this paragraph. Force Majeure, however, specifically excludes the cost or availability of resources to operate the Facility, changes in market conditions that affect the price of energy or transmission, wind or water droughts, and obligations for the payment of money when due.
- 13.2 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:
  - 13.2.1 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
  - 13.2.2 the suspension of performance shall be of no greater scope and of no longer duration than is required by the Force Majeure; and
  - 13.2.3 the non-performing Party uses its best efforts to remedy its inability to perform its obligations under this Agreement.
- 13.3 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.
- 13.4 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 14: 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 15: 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 16: PARTIAL INVALIDITY AND PURPA REPEAL

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

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

### SECTION 17: 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 18: 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 19: SUCCESSORS AND ASSIGNS

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

### SECTION 20: ENTIRE AGREEMENT

20.1 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.

20.2 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 21: NOTICES

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:

OneEnergy Oregon Solar, LLC

206 NE 28th Avenue Portland, OR 97232

With a copy to:

OneEnergy Development, LLC

101 Yesler Way, Suite 401

Seattle, WA 98104

To PGE:

Contracts Manager

QF Contracts, 3WTCBR06 PGE - 121 SW Salmon St. Portland, Oregon 97204

21.2 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 21.

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

PGE

| Ву:   | Supp | w -N-          | TOR | Maria PORE |
|-------|------|----------------|-----|------------|
| Vame: | ,    | Vice President | 0   |            |

Name:

Title: Power Supply/Generation

ONEENERGY OREGON SOLAR, LLC

Name: William Eddie

| Appr              | PGE<br>oved By: |
|-------------------|-----------------|
| Buainess<br>Terms | B7/90           |
| Credit            | er              |
| Legal             | DFW             |
| Risk Mgt.         | TB              |

### EXHIBIT A MINIMUM NET OUTPUT

Minimum Net Output shall be 2,298,600 kWh, which represents 75% of the estimated net output of Seller's facility in the 20<sup>th</sup> year of operations, taking into account the degradation of output of solar panels procured from commonly used solar panel manufacturers.

### EXHIBIT B DESCRIPTION OF SELLER'S FACILITY

Seller's facility is a solar photovoltaic generating facility consisting of polycrystalline, monocrystalline, or thin-film solar panels totaling approximately 2,950,000 watts of direct current ("DC") generating capacity mounted on a fixed tilt or single axis tracking racking system, and inverters with a maximum output capacity of 2,500,000 watts AC. Seller's facility will also include transformers, switchgear, monitoring equipment, fencing and security equipment, and related ancillary equipment necessary to operate a solar photovoltaic generating facility.

Seller's facility will interconnect to a PGE distribution line running adjacent to Savage Road in Polk County, Oregon, at approximately 45° 4'5.00"N; 123°28'14.31"W.

Seller refers to this facility as the "Steel Bridge Solar Project."

### EXHIBIT C REQUIRED FACILITY DOCUMENTS

### [Seller list all permits and authorizations required for this project]

Sellers Generation Interconnection Agreement

Lease Agreement

Conditional Use Permit issued by Polk County

Building and Electrical Permits issued by Polk County

Access Permit (if required by Polk County)

FERC Qualifying Facility self-certification

### EXHIBIT D START-UP TESTING

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):

- Safety plan during startup and commissioning
- Review of all QA/QC testing on the DC and AC sides of inverters
- Confirm testing and energizing inverters in conformance with manufacturer's Recommended procedures; note operating voltages; and confirm inverter is performing as expected
- Energizing transformers
- Under full sun conditions, and after at least 15 minutes of operation, taking and recording PV Plant operating data—such as but not limited to MWbc, MWac, Vbc, Vac, Ibc, Iac, Solar Radiation, etc.
- Testing the system control and monitoring system to verify that it is performing correctly
- Testing the communication system for offsite monitoring
- Testing the Plant metering and protective relaying to verify they meet utility requirements
- Documentation of successful startup and commissioning procedure
- Written notification submitted by Contractor to Owner that the completion of Acceptance Testing and Commissioning has occurred

# EXHIBIT E SCHEDULE 201 [Attach currently in-effect rate Schedule 201]

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

### PURPOSE

To provide information about Avoided Costs, Standard Contracts and negotiated Power Purchase Agreements, 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 Contract Power Purchase Agreement.

### ESTABLISHING CREDITWORTHINESS

The Seller must establish creditworthiness prior to service under this schedule. For a Standard Contract Power Purchase Agreement (Standard Contract), 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 as deemed sufficient by the Company as set out in the Standard Contract.

### 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.

#### POWER PURCHASE AGREEMENT

In accordance with terms set out 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 Power Purchase Agreement 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 Contract.

Any Seller may elect to negotiate a Power Purchase Agreement 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 the filed Avoided Costs in effect at that time.

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

A Seller choosing a Standard Contract will complete all informational and price option selection requirements in the applicable Standard Contract (Appendix 1 to this schedule) and submit the executed Agreement to the Company prior to service under this schedule. The Standard Contract is available at <a href="https://www.portlandgeneral.com">www.portlandgeneral.com</a>. The available Standard Contracts are: Standard Contract Power Purchase Agreement, Standard Contract Off System Power Purchase Agreement, Standard Contract for Intermittent Resources and Standard Contract for Off System Intermittent Resources. The Standard Contracts applicable to Intermittent 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**

In order to execute the Standard Contract the Seller must complete all of the general project information requested in the applicable Standard Contract.

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

The Seller may request in writing that the Company prepare a final draft Standard Contract. 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 Contract.

When both parties are in full agreement as to all terms and conditions of the draft Standard Contract, 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, a completely executed copy will be returned to the Seller. Prices and other terms and conditions in the power purchase agreement will not be final and binding until the Standard Contract has been executed by both parties.

### OFF SYSTEM POWER PURCHASE AGREEMENT

A Seller with a facility that interconnects with an electric system other than the Company's electric system may enter into a power purchase agreement with the Company after following the applicable standard or negotiated contract 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 rates are based on the Company's Avoided Costs. 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."

The Avoided Costs as listed in Tables 1 and 2 below include monthly On- and Off-Peak prices.

### **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.

Avoided Costs are based on forward market price estimates through December 2014, the period of time during which the Company's Avoided Costs are associated with incremental purchases of Energy and capacity from the market. For the period 2015 through 2030, the 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.

### PRICING OPTIONS FOR STANDARD CONTRACTS

Pricing options represent 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 Contract 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 Contract pricing will be based on the Avoided Cost in effect at the time the agreement is executed.

### PRICING OPTIONS FOR STANDARD CONTRACTS (Continued)

Four pricing options are available for Standard Contracts. The pricing options include one Fixed Rate Option and three Market Based Options.

### 1) Fixed Price Option

The Fixed Price Option is based on Avoided Costs including forecasted natural gas prices.

This option is available for a maximum term of 15 years. Sellers with contracts exceeding 15 years will make a one time election at execution to select a Market-Based Option for all years up to five in excess of the initial 15. Under the Fixed Price Option, prices will be as established at the time the Standard Contract is executed and will be equal to the Avoided Costs in Tables 1 and 2 effective at execution for a term of up to 15 years.

|      |                           |        |        |        |        | TABLE 1  |        |        |        |        |        |        |  |  |  |
|------|---------------------------|--------|--------|--------|--------|----------|--------|--------|--------|--------|--------|--------|--|--|--|
|      |                           |        |        |        |        | olded Co |        |        |        |        |        |        |  |  |  |
|      |                           |        |        |        |        | Price O  |        |        |        |        |        |        |  |  |  |
|      | On-Peak Forecast (\$/MWH) |        |        |        |        |          |        |        |        |        |        |        |  |  |  |
| Year | Jan                       | Feb    | Mar    | Apr    | May    | Jun      | Jul    | Aug    | Sep    | Oct    | Nov    | Dec    |  |  |  |
| 2013 | 34.92                     | 34.16  | 31.10  | 28.04  | 24.48  | 20.40    | 35.69  | 41.55  | 40.53  | 36.45  | 39.25  | 42.82  |  |  |  |
| 2014 | 41,17                     | 40.26  | 36.63  | 33.00  | 28.77  | 23.93    | 42.07  | 49.03  | 47.82  | 42.98  | 46.31  | 50.54  |  |  |  |
| 2015 | 44.20                     | 43.22  | 39.33  | 35.44  | 30,89  | 25.71    | 45.17  | 52.63  | 51.33  | 46.15  | 49.71  | 54.26  |  |  |  |
| 2016 | 82.25                     | 82.05  | 81.50  | 80.01  | 80.13  | 80.28    | 80.55  | 80.68  | 80.70  | 80.95  | 81,58  | 82.88  |  |  |  |
| 2017 | 85.15                     | 84.94  | 84.40  | 82.92  | 83.03  | 83.19    | 83.47  | 83.60  | 83.63  | 83.88  | 84.45  | 85.76  |  |  |  |
| 2018 | 86.77                     | 87.01  | 86.98  | 85,65  | 85,34  | 85.44    | 85.79  | 85.86  | 86.07  | 86.56  | 88.06  | 88.27  |  |  |  |
| 2019 | 89.97                     | 90.14  | 90.35  | 89.41  | 89.41  | 89.65    | 89.86  | 90.07  | 90.18  | 90.39  | 91.36  | 91.96  |  |  |  |
| 2020 | 93.30                     | 93.58  | 93.41  | 92.71  | 92.43  | 92.60    | 93.09  | 93.27  | 93.27  | 93.65  | 95.08  | 95.57  |  |  |  |
| 2021 | 97.85                     | 98.06  | 97.82  | 96.32  | 96.32  | 96.42    | 96.60  | 96.84  | 97.05  | 97.37  | 98.73  | 99.29  |  |  |  |
| 2022 | 100.27                    | 100.55 | 99.64  | 98.25  | 98.25  | 98.49    | 98.84  | 99.09  | 99.23  | 99.50  | 101.74 | 102.19 |  |  |  |
| 2023 | 104.15                    | 104.40 | 104.29 | 103.35 | 103.35 | 103.87   | 104.29 | 104.43 | 104.22 | 104.50 | 105.58 | 106.18 |  |  |  |
| 2024 | 106.59                    | 106.35 | 104.85 | 103.80 | 103.34 | 103.76   | 104.11 | 104.60 | 104.43 | 105.02 | 106.28 | 106.77 |  |  |  |
| 2025 | 107.67                    | 107.98 | 106,31 | 105.33 | 104.95 | 105.51   | 105.68 | 106.20 | 106.10 | 106.76 | 108.05 | 108.47 |  |  |  |
| 2026 | 110.06                    | 110.34 | 109.15 | 108.17 | 107.79 | 108.17   | 108.42 | 108.91 | 108.77 | 109.36 | 110.86 | 111.46 |  |  |  |
| 2027 | 112.19                    | 112.50 | 110.86 | 109.99 | 109.85 | 110.02   | 110.62 | 110.79 | 110.65 | 111.25 | 113,10 | 113.69 |  |  |  |
| 2028 | 114.35                    | 114.56 | 112.53 | 111.52 | 111.49 | 111.66   | 112.33 | 112.71 | 112.64 | 113.37 | 115.57 | 116.24 |  |  |  |
| 2029 | 117.17                    | 117.24 | 115.99 | 114.90 | 114.69 | 114.87   | 115.64 | 116.13 | 116.09 | 116.65 | 118.40 | 119.06 |  |  |  |
| 2030 | 120.20                    | 120.45 | 118.42 | 117.58 | 116.82 | 117.06   | 118.08 | 118.63 | 118.60 | 119.30 | 121.74 | 122.34 |  |  |  |
| 2031 | 122.73                    | 123.08 | 121.09 | 119,94 | 119.87 | 119.91   | 121.06 | 121.55 | 121.13 | 121.72 | 124.06 | 124.69 |  |  |  |
| 2032 | 124.57                    | 124.92 | 122.89 | 121.72 | 121.65 | 121,69   | 122.86 | 123,36 | 122.93 | 123.54 | 125.92 | 126.56 |  |  |  |

### PRICING OPTIONS FOR STANDARD CONTRACTS (Continued) FIXED PRICE OPTION (Continued)

|      |                            |       |       |       |       | ABLE 2   | T     |       |       |       |       |       |  |  |  |
|------|----------------------------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|-------|--|--|--|
|      |                            |       |       |       | Avo   | ided Cos | ts    |       |       |       |       |       |  |  |  |
|      |                            |       |       |       |       | Price Op |       | -     |       |       |       |       |  |  |  |
|      | Off-Peak Forecast (\$/MWH) |       |       |       |       |          |       |       |       |       |       |       |  |  |  |
| Year | Jan                        | Feb   | Mar   | Apr   | May   | Jun      | Jul   | Aug   | Sep   | Oct   | Nov   | Dec   |  |  |  |
| 2013 | 30.08                      | 29.06 | 24.99 | 18.36 | 10.21 | 4.61     | 19.38 | 28.30 | 31.87 | 31.36 | 33.90 | 37,22 |  |  |  |
| 2014 | 37.34                      | 36.05 | 30.94 | 22.62 | 12.38 | 5.34     | 23.90 | 35.09 | 39.58 | 38.94 | 42.14 | 46.29 |  |  |  |
| 2015 | 40.98                      | 39.57 | 33.96 | 24.83 | 13.59 | 5.87     | 26.23 | 38.52 | 43.44 | 42.73 | 46.25 | 50.81 |  |  |  |
| 2016 | 31.27                      | 31.07 | 30.52 | 29.03 | 29.15 | 29.30    | 29.57 | 29.70 | 29.72 | 29.97 | 30.60 | 31.90 |  |  |  |
| 2017 | 32.90                      | 32.69 | 32.14 | 30.67 | 30.78 | 30,94    | 31.21 | 31.35 | 31.38 | 31.63 | 32.20 | 33.51 |  |  |  |
| 2018 | 33.72                      | 33.97 | 33.93 | 32.60 | 32.29 | 32.40    | 32.75 | 32.82 | 33.03 | 33.51 | 35.01 | 35.22 |  |  |  |
| 2019 | 35.95                      | 36.12 | 36.33 | 35.39 | 35.39 | 35.63    | 35.84 | 36.05 | 36.16 | 36.37 | 37.35 | 37.94 |  |  |  |
| 2020 | 38.46                      | 38.74 | 38.57 | 37.87 | 37.59 | 37.77    | 38.25 | 38.43 | 38.43 | 38.81 | 40.24 | 40.73 |  |  |  |
| 2021 | 41.83                      | 42.04 | 41.79 | 40.29 | 40.29 | 40.40    | 40.57 | 40.82 | 41.03 | 41.34 | 42.70 | 43.26 |  |  |  |
| 2022 | 43.21                      | 43.49 | 42.59 | 41.19 | 41.19 | 41.44    | 41.78 | 42.03 | 42.17 | 42.45 | 44.68 | 45.14 |  |  |  |
| 2023 | 45.86                      | 46.10 | 46.00 | 45.06 | 45.06 | 45.58    | 46.00 | 46.14 | 45.93 | 46.21 | 47.29 | 47.88 |  |  |  |
| 2024 | 47.60                      | 47.36 | 45.86 | 44.81 | 44.36 | 44.78    | 45.13 | 45.61 | 45,44 | 46.03 | 47.29 | 47.78 |  |  |  |
| 2025 | 47.41                      | 47.72 | 46.04 | 45.07 | 44.68 | 45.24    | 45.42 | 45.94 | 45.83 | 46.50 | 47.79 | 48.21 |  |  |  |
| 2026 | 48.69                      | 48.96 | 47.78 | 46.80 | 46.42 | 46.80    | 47.05 | 47.53 | 47.39 | 47.99 | 49.49 | 50.08 |  |  |  |
| 2027 | 49.69                      | 50.00 | 48.36 | 47.49 | 47.35 | 47.52    | 48,12 | 48.29 | 48.15 | 48.74 | 50.59 | 51.19 |  |  |  |
| 2028 | 50.70                      | 50.91 | 48.88 | 47.87 | 47.83 | 48.01    | 48,67 | 49.06 | 48.99 | 49.72 | 51,92 | 52.58 |  |  |  |
| 2029 | 52.35                      | 52.42 | 51.16 | 50.08 | 49.87 | 50,05    | 50.81 | 51.30 | 51.27 | 51.83 | 53.57 | 54.24 |  |  |  |
| 2030 | 54.19                      | 54.43 | 52.41 | 51.57 | 50.80 | 51.05    | 52.06 | 52.62 | 52.58 | 53.28 | 55.72 | 56.32 |  |  |  |
| 2031 | 55.50                      | 55.85 | 53.86 | 52.71 | 52.64 | 52.67    | 53.83 | 54.32 | 53.90 | 54.49 | 56.83 | 57.46 |  |  |  |
| 2032 | 56,53                      | 56.89 | 54.86 | 53.69 | 53.62 | 53.65    | 54.83 | 55.33 | 54.90 | 55.50 | 57.88 | 58.52 |  |  |  |

Under the Fixed Price Option, the Company will pay Seller the Off-Peak Avoided Cost pursuant to Table 2 for: (a) all Net Output delivered prior to the Commercial Operation Date; (b) all Net Output deliveries greater than Maximum Net Output in any Contract Year; (c) any generation subject to and as adjusted by the provisions of Section 4.3 of the Standard Contract; (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 the On-Peak Avoided Cost pursuant to Table 1 for all other output. (See Appendix 1, the Standard Contract for defined terms.)

PRICING OPTIONS FOR STANDARD CONTRACTS (Continued)

### MARKET BASED PRICE OPTIONS:

Market Based Price Options include Option 2, Deadband Index Gas Price; Option 3, Index Gas Price; and Option 4, Dow Jones Mid-Columbia Daily On- and Off-Peak Electricity Firm Price Index (DJ-Mid-C Firm Index). The price components for pricing Options 2 and 3 are defined as follows:

On Peak Price: Preak

Off Peak Price: Poff

VFG Variable Operating and Maintenance,

Fixed Costs, and Gas Transportation (Table 6):

Capacity Value (Table 7): C

Heat Rate: HR = 6,732 BTU/kWh

Losses: 1.9%

Forecasted Gas Price (Table 5): GP<sub>F</sub>

First of Month\* Northwest Pipeline Corp. Canadian Border Index as Reported in Platts

**GP**<sub>Sumas</sub> Inside FERC's Gas Market Report

First of Month\* one-month spot price averages for AECO/NIT transactions as Reported in

Canadian Gas Price Reporter

Natural Gas Market Report (in US dollars): **GPAECO** 

Monthly Indexed Gas Price: GPMI = (GPSumas + GPAECO )/2

Deadband Gas Index: GP<sub>DB</sub>

Where:

If GPM>GPF

 $GP_{DB} = Minimum of (GP_{MI} or 1.1*GP_F)$ 

Otherwise

 $GP_{DB} = Maximum of (GP_{MI} or .9*GP_F)$ 

<sup>&</sup>quot;First of Month" means the first such monthly issuance.

### SCHEDULE 201 (Continued)

PRICING OPTIONS FOR STANDARD CONTRACTS (Continued)
MARKET BASED PRICE OPTIONS (Continued)

Tables 3 and 4 below list applicable rates for Options 2 (Deadband Index Gas Price Option) and 3 (Index Gas Price Option) for the period through 2014. The monthly On- and Off-Peak prices will be applied for all Market Based Price Options.

|      |       |       |       |              | 1         | ABLE 3       |              |              |              |           |              |                       |
|------|-------|-------|-------|--------------|-----------|--------------|--------------|--------------|--------------|-----------|--------------|-----------------------|
|      |       |       |       |              | Avo       | ided Cos     | its          |              |              |           |              |                       |
|      |       |       | 0     | n-Peak R     | esource   | Sufficier    | icy Rate     | (\$/MWH)     |              |           |              |                       |
| 34   |       |       |       | -            |           |              |              | -            |              |           |              |                       |
| Year | Jan   | Feb   | Mar   | Apr          | May       | Jun          | Jul          | Aug          | Sep          | Oct       | Nov          | Dec                   |
| 2013 | 34.92 | 34.16 | 31.10 | Apr<br>28.04 | May 24.48 | Jun<br>20.40 | Jul<br>35.69 | Aug<br>41.55 | Sep<br>40.53 | Oct 36,45 | Nov<br>39.25 |                       |
|      |       |       |       |              | _         |              |              |              |              |           |              | Dec<br>42.82<br>50.54 |

|      |       |       |       |           | 1        | ABLE 4    |          |          |       |       |       |       |
|------|-------|-------|-------|-----------|----------|-----------|----------|----------|-------|-------|-------|-------|
|      |       |       |       |           | Avo      | ided Cos  | ts       |          |       |       |       |       |
|      |       |       | 0     | ff-Peak F | Resource | Sufficier | ncy Rate | (\$/MWH) |       |       |       |       |
| Year | Jan   | Feb   | Mar   | Apr       | May      | Jun       | Jul      | Aug      | Sep   | Oct   | Nov   | Dec   |
| 2013 | 30.08 | 29.06 | 24.99 | 18.36     | 10.21    | 4.61      | 19.38    | 28.30    | 31.87 | 31,36 | 33.90 | 37.22 |
| 2014 | 37.34 | 36.05 | 30.94 | 22.62     | 12.38    | 5.34      | 23.90    | 35.09    | 39.58 | 38.94 | 42.14 | 46.29 |
| 2015 | 40.98 | 39.57 | 33.96 | 24.83     | 13.59    | 5.87      | 26.23    | 38.52    | 43,44 | 42.73 | 46.25 | 50.81 |

PRICING OPTIONS FOR STANDARD CONTRACTS (Continued)

MARKET BASED PRICE OPTIONS (Continued)

### 2) Deadband Index Gas Price Option

The Deadband Index Gas Price Option bases the fuel price component of the Energy rate on comparisons between the Forecast Gas Price (Table 5) and the simple average of the First of Month gas indices for Sumas and AECO trading hubs. The Northwest Pipeline Gas Index (Sumas) will be as reported in <a href="Platts Inside FERC's Gas Market Report">Platts Inside FERC's Gas Market Report</a>. The AECO/NIT (AECO) Gas Index will be as reported in <a href="Canadian Gas Price Reporter Natural Gas Market Report">Canadian Gas Price Reporter Natural Gas Market Report</a> (in US dollars). The fuel price component used will be bound between 90% and 110% of the natural gas price forecast but based on the then current gas price.

The price paid per MWh will be:

 $P_{Peak} = GP_{DB}*HR/1,000/(1-Losses) +VFG +C$  $P_{Off} = GP_{DB}*HR/1,000/(1-Losses) +VFG$ 

Under the Deadband method, the Company will pay Seller the Off-Peak prices for: (a) all Net Output delivered prior to the Commercial Operation Date; (b) all Net Output deliveries greater than Maximum Net Output in any Contract Year; (c) any generation subject to and as adjusted by the provisions of Section 4.3 of the Standard Contract; (d) Net Output delivered in the Off-Peak Period; and (e) deliveries above the nameplate capacity in any hour. All other purchases will be at On-Peak prices. (See Appendix 1, the Standard Contract for defined terms.)

### SCHEDULE 201 (Continued)

PRICING OPTIONS FOR STANDARD CONTRACTS (Continued)
MARKET BASED PRICE OPTIONS (Continued)

### 3) Index Gas Price Option

The Index Gas Price Option is the simple average of the First of Month gas indices for Sumas and AECO trading hubs used in establishing the Avoided Costs. The Sumas Gas Index will be as reported in <a href="Platts Inside FERC's Gas Market Report">Platts Inside FERC's Gas Market Report</a>. The AECO Gas Index will be as reported in the <a href="Canadian Gas Price Reporter Natural Gas Market Report">Canadian Gas Price Reporter Natural Gas Market Report</a> (in US dollars).

The price paid per MWh will be:

 $P_{Peak}$  =  $GP_{MI}*HR/1,000/(1-Losses) +VFG +C$  $P_{Off}$  =  $GP_{MI}*HR/1,000/(1-Losses) +VFG$ 

Under the Index Gas Price, the Company will pay Seller the Off-Peak Prices for: (a) for all Net Output delivered prior to the Commercial Operation Date; (b) all Net Output deliveries greater than Maximum Net Output in any Contract Year; (c) any generation subject to and as adjusted by the provisions of Section 4.3 of the Standard Contract; (d) for Net Output delivered in the Off-Peak Period; and (e) deliveries above the nameplate capacity in any hour. All other purchases will be at On-Peak prices. (See Appendix 1, the Standard Contract for defined terms.)

### 4) Mid C Index Price Option

Under this option, prices paid per MWh will be based on the DJ-Mid-C Firm Index plus 0.211 ¢ per kWh for wholesale wheeling.

### PRICING OPTIONS FOR STANDARD CONTRACTS (Continued) MARKET BASED PRICE OPTIONS (Continued)

Table 5 contains the gas pricing components for Option 1 (Fixed Price Option) and Option 2 (Deadband Index Gas Price Option).

|      |  |      |      |      | 1    | ABLE 5 |      |      |      |      |      |      |  |  |  |
|------|--|------|------|------|------|--------|------|------|------|------|------|------|--|--|--|
|      | Forecasted Gas Price - GP <sub>F</sub> (\$/MMBTU) - Without Transportation |      |      |      |      |        |      |      |      |      |      |      |  |  |  |
| Year | Jan  | Feb  | Mar  | Apr  | May  | Jun    | Jul  | Aug  | Sep  | Oct  | Nov  | Dec  |  |  |  |
| 2016 | 4.54   | 4.51 | 4.43 | 4.22 | 4.24 | 4.26   | 4.30 | 4.31 | 4.32 | 4.35 | 4.44 | 4.63 |  |  |  |
| 2017 | 4.78   | 4.75 | 4.67 | 4.46 | 4.47 | 4.50   | 4.53 | 4.55 | 4.56 | 4.59 | 4.68 | 4.86 |  |  |  |
| 2018 | 4.90   | 4.93 | 4.93 | 4.74 | 4.69 | 4.71   | 4.76 | 4.77 | 4.80 | 4.87 | 5.08 | 5.11 |  |  |  |
| 2019 | 5.22   | 5.24 | 5.27 | 5.14 | 5.14 | 5.17   | 5.20 | 5.23 | 5.25 | 5.28 | 5.42 | 5.50 |  |  |  |
| 2020 | 5.58   | 5.62 | 5.59 | 5.49 | 5.45 | 5.48   | 5.55 | 5.57 | 5.57 | 5.63 | 5.83 | 5.90 |  |  |  |
| 2021 | 6.06   | 6.09 | 6.06 | 5.84 | 5.84 | 5.86   | 5.88 | 5.92 | 5.95 | 5.99 | 6.19 | 6.27 |  |  |  |
| 2022 | 6.26   | 6.30 | 6.17 | 5.97 | 5.97 | 6.01   | 6.06 | 6.09 | 6.11 | 6.15 | 6.47 | 6.54 |  |  |  |
| 2023 | 6.64   | 6.68 | 6.66 | 6.53 | 6.53 | 6.60   | 6.66 | 6.68 | 6.65 | 6.69 | 6.85 | 6.93 |  |  |  |
| 2024 | 6.89   | 6.86 | 6.64 | 6.49 | 6.43 | 6.49   | 6.54 | 6.61 | 6.58 | 6.67 | 6.85 | 6.92 |  |  |  |
| 2025 | 6.87   | 6.91 | 6.67 | 6.53 | 6.48 | 6.56   | 6.58 | 6.66 | 6.64 | 6.74 | 6.92 | 6.98 |  |  |  |
| 2026 | 7.05   | 7.09 | 6.92 | 6.78 | 6.73 | 6.78   | 6.82 | 6.89 | 6.87 | 6.95 | 7.17 | 7.25 |  |  |  |
| 2027 | 7.20   | 7.24 | 7.01 | 6.88 | 6.86 | 6.89   | 6.97 | 7.00 | 6.98 | 7.06 | 7.33 | 7.41 |  |  |  |
| 2028 | 7.34   | 7.37 | 7.08 | 6.94 | 6.93 | 6.96   | 7.05 | 7.11 | 7.10 | 7.20 | 7.52 | 7.61 |  |  |  |
| 2029 | 7.58   | 7.59 | 7.41 | 7.26 | 7.23 | 7,25   | 7.36 | 7.43 | 7.43 | 7.51 | 7.76 | 7.85 |  |  |  |
| 2030 | 7.85   | 7.88 | 7.59 | 7.47 | 7.36 | 7.40   | 7.54 | 7.62 | 7.62 | 7.72 | 8.07 | 8.15 |  |  |  |
| 2031 | 8.04   | 8.09 | 7.80 | 7.64 | 7.63 | 7.63   | 7.80 | 7.87 | 7.81 | 7.89 | 8.23 | 8.32 |  |  |  |
| 2032 | 8.18   | 8.23 | 7.94 | 7.78 | 7.77 | 7.77   | 7.94 | 8.01 | 7.95 | 8.04 | 8.38 | 8.47 |  |  |  |

PRICING OPTIONS FOR STANDARD CONTRACTS (Continued)
MARKET BASED PRICE OPTIONS (Continued)

Table 6 contains the Variable O&M and Fixed Costs that are derived from a natural gas-fired CCCT.

|      |  |      |      |      | 1    | ABLE 6 |      |      |      |      |      |      |  |  |  |
|------|--|------|------|------|------|--------|------|------|------|------|------|------|--|--|--|
|      | Variable O&M, Fixed Costs and Gas Transportation Forecast - VFG (\$/MWH) |      |      |      |      |        |      |      |      |      |      |      |  |  |  |
| Year | Jan  | Feb  | Mar  | Apr  | May  | Jun    | Jul  | Aug  | Sep  | Oct  | Nov  | Dec  |  |  |  |
| 2016 | 0.12   | 0.11 | 0.10 | 0.08 | 0.08 | 0.08   | 0.09 | 0.09 | 0.09 | 0.09 | 0.11 | 0.13 |  |  |  |
| 2017 | 0.13   | 0.12 | 0.11 | 0.09 | 0.09 | 0.09   | 0,10 | 0.10 | 0.10 | 0.10 | 0.11 | 0.14 |  |  |  |
| 2018 | 0.13   | 0.13 | 0.13 | 0.11 | 0.11 | 0.11   | 0.12 | 0.12 | 0.12 | 0.13 | 0.15 | 0.16 |  |  |  |
| 2019 | 0.16   | 0.16 | 0.17 | 0.15 | 0.15 | 0.16   | 0.16 | 0.16 | 0.16 | 0.17 | 0.19 | 0.20 |  |  |  |
| 2020 | 0.20   | 0.21 | 0.21 | 0.19 | 0.19 | 0.19   | 0,20 | 0.21 | 0.20 | 0.21 | 0.24 | 0.24 |  |  |  |
| 2021 | 0.24   | 0.25 | 0.24 | 0.22 | 0.22 | 0.22   | 0,22 | 0.23 | 0.23 | 0.24 | 0.26 | 0.27 |  |  |  |
| 2022 | 0.26   | 0.26 | 0.25 | 0.22 | 0.22 | 0.23   | 0.23 | 0.24 | 0.24 | 0.24 | 0.28 | 0.29 |  |  |  |
| 2023 | 0.29   | 0.30 | 0.30 | 0.28 | 0.28 | 0.29   | 0.30 | 0.30 | 0.30 | 0.30 | 0.32 | 0.33 |  |  |  |
| 2024 | 0.32   | 0.32 | 0.29 | 0.27 | 0.27 | 0.27   | 0.28 | 0.29 | 0.28 | 0.29 | 0.32 | 0.33 |  |  |  |
| 2025 | 0.29   | 0.30 | 0.27 | 0.25 | 0.25 | 0.26   | 0.26 | 0.27 | 0.27 | 0.28 | 0.30 | 0.31 |  |  |  |
| 2026 | 0.31   | 0.31 | 0.29 | 0.27 | 0.27 | 0.27   | 0.28 | 0.29 | 0.28 | 0.29 | 0.32 | 0.33 |  |  |  |
| 2027 | 0.31   | 0.32 | 0.29 | 0.27 | 0.27 | 0.27   | 0.28 | 0.29 | 0.28 | 0.29 | 0.33 | 0.34 |  |  |  |
| 2028 | 0,33   | 0.33 | 0.30 | 0.28 | 0.28 | 0.28   | 0.29 | 0.30 | 0,30 | 0.31 | 0.35 | 0.36 |  |  |  |
| 2029 | 0.33   | 0.33 | 0.31 | 0.29 | 0.29 | 0.29   | 0.31 | 0.32 | 0.31 | 0.32 | 0.35 | 0.37 |  |  |  |
| 2030 | 0.35   | 0.36 | 0.32 | 0.31 | 0.29 | 0.30   | 0.32 | 0.33 | 0.32 | 0.34 | 0.38 | 0.39 |  |  |  |
| 2031 | 0.36   | 0.37 | 0.33 | 0.31 | 0.31 | 0.31   | 0.33 | 0.34 | 0.33 | 0.34 | 0.39 | 0.40 |  |  |  |
| 2032 | 0.38   | 0.39 | 0.35 | 0.33 | 0.33 | 0.33   | 0.35 | 0,36 | 0.35 | 0.36 | 0.40 | 0.41 |  |  |  |

PRICING OPTIONS FOR STANDARD CONTRACTS (Continued)
MARKET BASED PRICE OPTIONS (Continued)

Table 7 represents the variable C in the formulas for Option 2 (Deadband Index Gas Price Option) and Option 3 (Index Gas Price Option).

|      |       |       |       |       | T         | ABLE 7   |          |       |       |       |       |       |
|------|-------|-------|-------|-------|-----------|----------|----------|-------|-------|-------|-------|-------|
|      |       |       |       | C     | apacity V | alue - C | (\$/MWH) |       |       |       |       |       |
| Year | Jan   | Feb   | Mar   | Apr   | May       | Jun      | Jul      | Aug   | Sep   | Oct   | Nov   | Dec   |
| 2016 | 50.98 | 50.98 | 50.98 | 50.98 | 50.98     | 50.98    | 50.98    | 50.98 | 50.98 | 50.98 | 50.98 | 50.98 |
| 2017 | 52.25 | 52.25 | 52.25 | 52.25 | 52.25     | 52.25    | 52.25    | 52.25 | 52.25 | 52,25 | 52.25 | 52.25 |
| 2018 | 53.04 | 53.04 | 53.04 | 53.04 | 53.04     | 53.04    | 53.04    | 53.04 | 53.04 | 53.04 | 53.04 | 53.04 |
| 2019 | 54.02 | 54.02 | 54.02 | 54.02 | 54.02     | 54.02    | 54.02    | 54.02 | 54.02 | 54.02 | 54.02 | 54.02 |
| 2020 | 54.84 | 54.84 | 54.84 | 54.84 | 54.84     | 54.84    | 54.84    | 54.84 | 54.84 | 54.84 | 54.84 | 54.84 |
| 2021 | 56,03 | 56.03 | 56.03 | 56.03 | 56.03     | 56.03    | 56.03    | 56.03 | 56.03 | 56.03 | 56.03 | 56.03 |
| 2022 | 57.06 | 57.06 | 57.06 | 57.06 | 57.06     | 57.06    | 57.06    | 57.06 | 57.06 | 57.06 | 57.06 | 57.06 |
| 2023 | 58.29 | 58.29 | 58.29 | 58.29 | 58.29     | 58.29    | 58.29    | 58.29 | 58.29 | 58.29 | 58.29 | 58.29 |
| 2024 | 58.99 | 58.99 | 58.99 | 58.99 | 58.99     | 58.99    | 58.99    | 58.99 | 58.99 | 58.99 | 58.99 | 58.99 |
| 2025 | 60.26 | 60.26 | 60.26 | 60.26 | 60.26     | 60.26    | 60.26    | 60.26 | 60.26 | 60.26 | 60.26 | 60.26 |
| 2026 | 61.37 | 61.37 | 61.37 | 61.37 | 61.37     | 61.37    | 61.37    | 61.37 | 61.37 | 61.37 | 61.37 | 61.37 |
| 2027 | 62.50 | 62.50 | 62.50 | 62.50 | 62.50     | 62.50    | 62.50    | 62.50 | 62.50 | 62.50 | 62.50 | 62.50 |
| 2028 | 63,65 | 63.65 | 63,65 | 63.65 | 63.65     | 63.65    | 63.65    | 63.65 | 63.65 | 63.65 | 63.65 | 63.65 |
| 2029 | 64.82 | 64.82 | 64.82 | 64.82 | 64.82     | 64.82    | 64.82    | 64.82 | 64.82 | 64.82 | 64.82 | 64.82 |
| 2030 | 66.02 | 66.02 | 66.02 | 66.02 | 66.02     | 66.02    | 66.02    | 66.02 | 66.02 | 66.02 | 66.02 | 66.02 |
| 2031 | 67.23 | 67.23 | 67.23 | 67.23 | 67.23     | 67.23    | 67.23    | 67.23 | 67.23 | 67.23 | 67.23 | 67.23 |
| 2032 | 68.03 | 68.03 | 68.03 | 68.03 | 68.03     | 68.03    | 68.03    | 68.03 | 68.03 | 68.03 | 68.03 | 68.03 |

### SCHEDULE 201 (Continued)

#### 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 Contract:

- 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 economic conditions or claims experience may warrant.
- 2) 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.
- QFs with a design capacity of 200 kW or less are encouraged to pursue liability insurance on his/her 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 THE STANDARD RATES AND STANDARD CONTRACT

A QF will be eligible to receive the standard rates and Standard Contract 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.

### 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. A unit of Oregon local government may also be a "passive investor" 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 the standard rates and Standard Contract 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 the standard rates and standard contract is sought.

### SCHEDULE 201 (Concluded)

DEFINITION OF A SMALL COGENERATION FACILITY OR SMALL POWER PRODUCTION FACILITY ELIGIBLE TO RECEIVE THE STANDARD RATES AND STANDARD CONTRACT (Continued)

#### Shared Interconnection and Infrastructure

QFs otherwise meeting the above-described separate ownership test and thereby qualified for entitlement to the standard rates and Standard Contract 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 the standard rates and Standard Contract so long as the use of the shared interconnection complies with the interconnecting utility's safety and reliability standards, interconnection contract requirements and Prudent Electrical Practices as that term is defined in the interconnecting utility's approved Standard Contract.

### 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 the standard rates and Standard Contract. Any dispute concerning a QF's entitlement to the standard rates and Standard Contract will be presented to the Commission for resolution.

### SPECIAL CONDITIONS

- Delivery of energy by Seller will be at a voltage, phase, frequency, and power factor as specified by the Company.
- 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.
- Contracts entered into pursuant to this schedule will not terminate prior to the Standard or negotiated contract's termination date if the 1978 Public Utility Regulatory Policies Act (PURPA) is repealed.

### TERM OF AGREEMENT

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