

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON
UM 1967**

SANDY RIVER SOLAR, LLC,

Complainant,

vs.

PORTLAND GENERAL ELECTRIC
COMPANY,

Defendant.

**PORTLAND GENERAL ELECTRIC
COMPANY'S RESPONSES TO
COMPLAINANT'S SECOND SET OF
DATA REQUESTS**

Defendant Portland General Electric Company ("PGE") responds as follows to Complainant Sandy River Solar's Second Set of Data Requests:

GENERAL OBJECTIONS

1. PGE's responses are made to the best of its knowledge, information, and belief. PGE's responses are at all times subject to such additional discovery or investigation that further discovery or investigation may disclose and are subject to such refreshing of recollection, and such additional knowledge of facts, as may result from further discovery or investigation.

2. By stating in these responses that PGE will produce documents or provide information (subject to protective order or otherwise), PGE does not represent that any documents or information actually exists, but rather that in good faith PGE will search and attempt to ascertain whether such documents or information does, in fact, exist.

3. PGE objects to Complainant's requests to the extent those requests seek documents or information that is subject to the attorney-client privilege, the work product doctrine, or any other applicable privilege on the ground that such documents or information is exempt from discovery.

4. PGE objects to all definitions, instructions, and document requests to the extent Complainant seeks documents not currently in PGE's possession, custody, or control, or refer to persons, entities or events not known to PGE, on the grounds that such definitions or requests seek to require more of PGE than any obligation imposed by law, would subject PGE to unreasonable and undue annoyance, oppression, burden, and expense, and would seek to impose on PGE an obligation to investigate or discover information or materials from third parties or sources that are equally accessible to Complainant.

5. PGE reserves all objections or other questions as to the competency, authenticity, relevance, materiality, privilege, or admissibility as evidence in any subsequent proceeding in, or trial of, this or any other action for any purpose whatsoever of this response and any document or thing produced in response to Complainant's requests.

6. PGE objects to Complainant's requests to the extent they seek to impose obligations on PGE not authorized by Public Utility Commission of Oregon ("Commission") rules or the Oregon Rules of Civil Procedure.

7. PGE objects to the instructions set forth in Complainant's First and Second Sets of Data Requests to the extent that those instructions impose obligations on PGE that exceed, are unauthorized by, or are inconsistent with applicable discovery rules, including OAR 860-001-500 to OAR 860-001-540.

8. PGE objects to Complainant's requests to the extent they are vague, ambiguous, unintelligible, overly broad as to time and subject matter, seek irrelevant and/or immaterial information, to the extent they are not reasonably calculated to lead to the discovery of admissible evidence, and/or to the extent they cause undue burden, harassment, or annoyance.

9. Each of these general objections is incorporated into each of PGE's specific responses as if set forth in full below.

RESPONSES TO INDIVIDUAL REQUESTS

Sandy River Solar Data Request No. 017:

Admit or deny that it took PGE 57 days to respond to a question from the Mt. Hope Solar project.

Response to Sandy River Solar Data Request No. 017:

Sandy River Solar Data Request Nos. 017 through 020 and 022 through 30 seek information on interconnection requests that have no direct relationship to or impact on the Sandy River Solar project because the interconnection requests in question are all located on feeders other than the feeder to which the Sandy River Solar project seeks to interconnect. Sandy River Solar Data Request Nos. 017-020 and 022-030 therefore seek irrelevant information and are overbroad and unduly burdensome. In addition, Data Request Nos. 017-020 and 022-030 are vague, ambiguous, and/or unintelligible in that they do not provide enough information for PGE to identify the specific information sought by each request. In addition, the cumulative impact of Data Request Nos. 017-020 and 022-030 is to seek to make PGE engage in extensive work to respond to data requests that are irrelevant to the issues to be resolved by the Commission in this case. As a result, and in addition to the general objections stated above, PGE objects to Sandy River Solar's Data Request No. 017 on the grounds that it is vague, ambiguous, unintelligible, overbroad, unduly burdensome, seeks irrelevant information, and/or seeks information whose probative value is substantially outweighed by a danger of unfair prejudice, confusing the issues, subjecting PGE to undue burden, or needlessly presenting cumulative evidence.

Sandy River Solar Data Request No. 018:

Admit or deny that PGE provided Mt. Hope Solar with a study that double counted the cost of some upgrades or requirements.

Response to Sandy River Solar Data Request No. 018:

Sandy River Solar Data Request Nos. 017 through 020 and 022 through 30 seek information on interconnection requests that have no direct relationship to or impact on the Sandy River Solar project because the interconnection requests in question are all located on feeders other than the feeder to which the Sandy River Solar project seeks to interconnect. Sandy River Solar Data Request Nos. 017-020 and 022-030 therefore seek irrelevant information and are overbroad and unduly burdensome. In addition, Data Request Nos. 017-020 and 022-030 are vague, ambiguous, and/or unintelligible in that they do not provide enough information for PGE to identify the specific information sought by each request. In addition, the cumulative impact of Data Request Nos. 017-020 and 022-030 is to seek to make PGE engage in extensive work to respond to data requests that are irrelevant to the issues to be resolved by the Commission in this case. As a result, and in addition to the general objections stated above, PGE objects to Sandy River Solar's Data Request No. 018 on the grounds that it is vague, ambiguous, unintelligible, overbroad, unduly burdensome, seeks irrelevant information, and/or seeks information whose probative value is substantially outweighed by a danger of unfair prejudice, confusing the issues, subjecting PGE to undue burden, or needlessly presenting cumulative evidence.

Sandy River Solar Data Request No. 019:

Admit or deny that PGE provided Mt. Hope Solar with a facility study that requires the installation of fiber optic line for transfer trip, and indicated that a higher queued project SPQ0069 does not have a requirement to install transfer trip or fiber. Please provide the most recent study performed for SPQ0069.

Response to Sandy River Solar Data Request No. 019:

Sandy River Solar Data Request Nos. 017 through 020 and 022 through 30 seek information on interconnection requests that have no direct relationship to or impact on the Sandy River Solar project because the interconnection requests in question are all located on feeders other than the feeder to which the Sandy River Solar project seeks to interconnect. Sandy River Solar Data Request Nos. 017-020 and 022-030 therefore seek irrelevant information and are overbroad and unduly burdensome. In addition, Data Request Nos. 017-020 and 022-030 are vague, ambiguous, and/or unintelligible in that they do not provide enough information for PGE to identify the specific information sought by each request. In addition, the cumulative impact of Data Request Nos. 017-020 and 022-030 is to seek to make PGE engage in extensive work to respond to data requests that are irrelevant to the issues to be resolved by the Commission in this case. As a result, and in addition to the general objections stated above, PGE objects to Sandy River Solar's Data Request No. 019 on the grounds that it is vague, ambiguous, unintelligible, overbroad, unduly burdensome, seeks irrelevant information, and/or seeks information whose probative value is substantially outweighed by a danger of unfair prejudice, confusing the issues, subjecting PGE to undue burden, or needlessly presenting cumulative evidence.

Sandy River Solar Data Request No. 020:

Admit or deny that PGE provided Mt. Hope Solar a facility study that affirmed the results of the system impact study, yet required Mt. Hope Solar to replace poles despite PGE providing a system impact study that did not require pole replacement.

Response to Sandy River Solar Data Request No. 020:

Sandy River Solar Data Request Nos. 017 through 020 and 022 through 30 seek information on interconnection requests that have no direct relationship to or impact on the Sandy River Solar project because the interconnection requests in question are all located on feeders other than the feeder to which the Sandy River Solar project seeks to interconnect. Sandy River Solar Data Request Nos. 017-020 and 022-030 therefore seek irrelevant information and are overbroad and unduly burdensome. In addition, Data Request Nos. 017-020 and 022-030 are vague, ambiguous, and/or unintelligible in that they do not provide enough information for PGE to identify the specific information sought by each request. In addition, the cumulative impact of Data Request Nos. 017-020 and 022-030 is to seek to make PGE engage in extensive work to respond to data requests that are irrelevant to the issues to be resolved by the Commission in this case. As a result, and in addition to the general objections stated above, PGE objects to Sandy River Solar's Data Request No. 020 on the grounds that it is vague, ambiguous, unintelligible, overbroad, unduly burdensome, seeks irrelevant information, and/or seeks information whose probative value is substantially outweighed by a danger of unfair prejudice, confusing the issues, subjecting PGE to undue burden, or needlessly presenting cumulative evidence.

Sandy River Solar Data Request No. 021:

Admit or deny that PGE studies whether poles are to be replaced during the interconnection study process.

Response to Sandy River Solar Data Request No. 021:

In addition to the general objections stated above, PGE objects to Sandy River Solar's Data Request No. 021 on the grounds that it is vague, ambiguous, unintelligible, overbroad, unduly burdensome, seek irrelevant information, and/or seek information whose probative value is substantially outweighed by a danger of unfair prejudice, confusing the issues, subjecting PGE to undue burden, or needlessly presenting cumulative evidence. Notwithstanding and without waiving PGE's general objections or these specific objections, PGE responds to Sandy River Solar's Data Request No. 021 as follows:

PGE admits that when an interconnection will require the re-conductoring of a line segment or the installation of fiber optic cable for transfer trip, PGE makes a determination as to whether any poles will need to be replaced to accommodate the re-conductoring or fiber optic cable as part of the detailed engineering design conducted after the interconnection applicant has signed an interconnection agreement and paid the required deposit. PGE has previously provided Sandy River Solar with information regarding this subject in response to Sandy River Solar Data Request No. 011.

Sandy River Solar Data Request No. 022:

Admit or deny that PGE gave Eola Solar a facility study where the estimated costs nearly doubled from the system impact study despite no changes in the requirements.

Response to Sandy River Solar Data Request No. 022:

Sandy River Solar Data Request Nos. 017 through 020 and 022 through 30 seek information on interconnection requests that have no direct relationship to or impact on the Sandy River Solar project because the interconnection requests in question are all located on feeders other than the feeder to which the Sandy River Solar project seeks to interconnect. Sandy River Solar Data Request Nos. 017-020 and 022-030 therefore seek irrelevant information and are overbroad and unduly burdensome. In addition, Data Request Nos. 017-020 and 022-030 are vague, ambiguous, and/or unintelligible in that they do not provide enough information for PGE to identify the specific information sought by each request. In addition, the cumulative impact of Data Request Nos. 017-020 and 022-030 is to seek to make PGE engage in extensive work to respond to data requests that are irrelevant to the issues to be resolved by the Commission in this case. As a result, and in addition to the general objections stated above, PGE objects to Sandy River Solar's Data Request No. 022 on the grounds that it is vague, ambiguous, unintelligible, overbroad, unduly burdensome, seeks irrelevant information, and/or seeks information whose probative value is substantially outweighed by a danger of unfair prejudice, confusing the issues, subjecting PGE to undue burden, or needlessly presenting cumulative evidence.

Sandy River Solar Data Request No. 023:

Admit or deny that PGE gave River Valley Solar a facility study where the estimated costs nearly doubled from the system impact study despite no changes in the requirements.

Response to Sandy River Solar Data Request No. 023:

Sandy River Solar Data Request Nos. 017 through 020 and 022 through 30 seek information on interconnection requests that have no direct relationship to or impact on the Sandy River Solar project because the interconnection requests in question are all located on feeders other than the feeder to which the Sandy River Solar project seeks to interconnect. Sandy River Solar Data Request Nos. 017-020 and 022-030 therefore seek irrelevant information and are overbroad and unduly burdensome. In addition, Data Request Nos. 017-020 and 022-030 are vague, ambiguous, and/or unintelligible in that they do not provide enough information for PGE to identify the specific information sought by each request. In addition, the cumulative impact of Data Request Nos. 017-020 and 022-030 is to seek to make PGE engage in extensive work to respond to data requests that are irrelevant to the issues to be resolved by the Commission in this case. As a result, and in addition to the general objections stated above, PGE objects to Sandy River Solar's Data Request No. 023 on the grounds that it is vague, ambiguous, unintelligible, overbroad, unduly burdensome, seeks irrelevant information, and/or seeks information whose probative value is substantially outweighed by a danger of unfair prejudice, confusing the issues, subjecting PGE to undue burden, or needlessly presenting cumulative evidence.

Sandy River Solar Data Request No. 024:

Admit or deny that PGE gave Brush College Solar a facility study with 61% higher costs that what was in the system impact study, despite there being no changes in the requirements.

Response to Sandy River Solar Data Request No. 024:

Sandy River Solar Data Request Nos. 017 through 020 and 022 through 30 seek information on interconnection requests that have no direct relationship to or impact on the Sandy River Solar project because the interconnection requests in question are all located on feeders other than the feeder to which the Sandy River Solar project seeks to interconnect. Sandy River Solar Data Request Nos. 017-020 and 022-030 therefore seek irrelevant information and are overbroad and unduly burdensome. In addition, Data Request Nos. 017-020 and 022-030 are vague, ambiguous, and/or unintelligible in that they do not provide enough information for PGE to identify the specific information sought by each request. In addition, the cumulative impact of Data Request Nos. 017-020 and 022-030 is to seek to make PGE engage in extensive work to respond to data requests that are irrelevant to the issues to be resolved by the Commission in this case. As a result, and in addition to the general objections stated above, PGE objects to Sandy River Solar's Data Request No. 024 on the grounds that it is vague, ambiguous, unintelligible, overbroad, unduly burdensome, seeks irrelevant information, and/or seeks information whose probative value is substantially outweighed by a danger of unfair prejudice, confusing the issues, subjecting PGE to undue burden, or needlessly presenting cumulative evidence.

Sandy River Solar Data Request No. 025:

Admit or deny that PGE gave Brush College Solar a facility study but when questioned on certain aspects of it, PGE determined that a voltage regulator was not actually needed.

Response to Sandy River Solar Data Request No. 025:

Sandy River Solar Data Request Nos. 017 through 020 and 022 through 30 seek information on interconnection requests that have no direct relationship to or impact on the Sandy River Solar project because the interconnection requests in question are all located on feeders other than the feeder to which the Sandy River Solar project seeks to interconnect. Sandy River Solar Data Request Nos. 017-020 and 022-030 therefore seek irrelevant information and are overbroad and unduly burdensome. In addition, Data Request Nos. 017-020 and 022-030 are vague, ambiguous, and/or unintelligible in that they do not provide enough information for PGE to identify the specific information sought by each request. In addition, the cumulative impact of Data Request Nos. 017-020 and 022-030 is to seek to make PGE engage in extensive work to respond to data requests that are irrelevant to the issues to be resolved by the Commission in this case. As a result, and in addition to the general objections stated above, PGE objects to Sandy River Solar's Data Request No. 025 on the grounds that it is vague, ambiguous, unintelligible, overbroad, unduly burdensome, seeks irrelevant information, and/or seeks information whose probative value is substantially outweighed by a danger of unfair prejudice, confusing the issues, subjecting PGE to undue burden, or needlessly presenting cumulative evidence.

Sandy River Solar Data Request No. 026:

Admit or deny that PGE provided Mountain Meadow Solar with a feasibility study that said the project would backfeed despite there being a load on the line that far exceeded the total generation.

Response to Sandy River Solar Data Request No. 026:

Sandy River Solar Data Request Nos. 017 through 020 and 022 through 30 seek information on interconnection requests that have no direct relationship to or impact on the Sandy River Solar project because the interconnection requests in question are all located on feeders other than the feeder to which the Sandy River Solar project seeks to interconnect. Sandy River Solar Data Request Nos. 017-020 and 022-030 therefore seek irrelevant information and are overbroad and unduly burdensome. In addition, Data Request Nos. 017-020 and 022-030 are vague, ambiguous, and/or unintelligible in that they do not provide enough information for PGE to identify the specific information sought by each request. In addition, the cumulative impact of Data Request Nos. 017-020 and 022-030 is to seek to make PGE engage in extensive work to respond to data requests that are irrelevant to the issues to be resolved by the Commission in this case. As a result, and in addition to the general objections stated above, PGE objects to Sandy River Solar's Data Request No. 026 on the grounds that it is vague, ambiguous, unintelligible, overbroad, unduly burdensome, seeks irrelevant information, and/or seeks information whose probative value is substantially outweighed by a danger of unfair prejudice, confusing the issues, subjecting PGE to undue burden, or needlessly presenting cumulative evidence.

Sandy River Solar Data Request No. 027:

Admit or deny that following the facility study and draft interconnection agreement, PGE determined that Red Prairie was not required to replace a recloser, but it should have been the responsibility of a project built last year. Admit or deny that Red Prairie questioned PGE about this requirement after the system impact study and first draft of the facility study.

Response to Sandy River Solar Data Request No. 027:

Sandy River Solar Data Request Nos. 017 through 020 and 022 through 30 seek information on interconnection requests that have no direct relationship to or impact on the Sandy River Solar project because the interconnection requests in question are all located on feeders other than the feeder to which the Sandy River Solar project seeks to interconnect. Sandy River Solar Data Request Nos. 017-020 and 022-030 therefore seek irrelevant information and are overbroad and unduly burdensome. In addition, Data Request Nos. 017-020 and 022-030 are vague, ambiguous, and/or unintelligible in that they do not provide enough information for PGE to identify the specific information sought by each request. In addition, the cumulative impact of Data Request Nos. 017-020 and 022-030 is to seek to make PGE engage in extensive work to respond to data requests that are irrelevant to the issues to be resolved by the Commission in this case. As a result, and in addition to the general objections stated above, PGE objects to Sandy River Solar's Data Request No. 027 on the grounds that it is vague, ambiguous, unintelligible, overbroad, unduly burdensome, seeks irrelevant information, and/or seeks information whose probative value is substantially outweighed by a danger of unfair prejudice, confusing the issues, subjecting PGE to undue burden, or needlessly presenting cumulative evidence.

Sandy River Solar Data Request No. 028:

Admit or deny that PGE has not required the same protection requirements for higher- queued project(s), or online project(s) (including net metering project(s)) as it has for Waconda, despite the fact that higher-queued project(s), or online project(s) create the same backfeed condition.

Response to Sandy River Solar Data Request No. 028:

Sandy River Solar Data Request Nos. 017 through 020 and 022 through 30 seek information on interconnection requests that have no direct relationship to or impact on the Sandy River Solar project because the interconnection requests in question are all located on feeders other than the feeder to which the Sandy River Solar project seeks to interconnect. Sandy River Solar Data Request Nos. 017-020 and 022-030 therefore seek irrelevant information and are overbroad and unduly burdensome. In addition, Data Request Nos. 017-020 and 022-030 are vague, ambiguous, and/or unintelligible in that they do not provide enough information for PGE to identify the specific information sought by each request. In addition, the cumulative impact of Data Request Nos. 017-020 and 022-030 is to seek to make PGE engage in extensive work to respond to data requests that are irrelevant to the issues to be resolved by the Commission in this case. As a result, and in addition to the general objections stated above, PGE objects to Sandy River Solar's Data Request No. 028 on the grounds that it is vague, ambiguous, unintelligible, overbroad, unduly burdensome, seeks irrelevant information, and/or seeks information whose probative value is substantially outweighed by a danger of unfair prejudice, confusing the issues, subjecting PGE to undue burden, or needlessly presenting cumulative evidence.

Sandy River Solar Data Request No. 029:

Admit or deny that it took PGE over two years to complete the interconnection studies for Drift Creek and Brush Creek, and that PGE did not inform of a substation replacement until over a year into the process.

Response to Sandy River Solar Data Request No. 029:

Sandy River Solar Data Request Nos. 017 through 020 and 022 through 30 seek information on interconnection requests that have no direct relationship to or impact on the Sandy River Solar project because the interconnection requests in question are all located on feeders other than the feeder to which the Sandy River Solar project seeks to interconnect. Sandy River Solar Data Request Nos. 017-020 and 022-030 therefore seek irrelevant information and are overbroad and unduly burdensome. In addition, Data Request Nos. 017-020 and 022-030 are vague, ambiguous, and/or unintelligible in that they do not provide enough information for PGE to identify the specific information sought by each request. In addition, the cumulative impact of Data Request Nos. 017-020 and 022-030 is to seek to make PGE engage in extensive work to respond to data requests that are irrelevant to the issues to be resolved by the Commission in this case. As a result, and in addition to the general objections stated above, PGE objects to Sandy River Solar's Data Request No. 029 on the grounds that it is vague, ambiguous, unintelligible, overbroad, unduly burdensome, seeks irrelevant information, and/or seeks information whose probative value is substantially outweighed by a danger of unfair prejudice, confusing the issues, subjecting PGE to undue burden, or needlessly presenting cumulative evidence.

Sandy River Solar Data Request No. 030:

Admit or deny that PGE provided St. Louis with a feasibility study that did not include transfer trip, yet included it in future studies.

Response to Sandy River Solar Data Request No. 030:

Sandy River Solar Data Request Nos. 017 through 020 and 022 through 30 seek information on interconnection requests that have no direct relationship to or impact on the Sandy River Solar project because the interconnection requests in question are all located on feeders other than the feeder to which the Sandy River Solar project seeks to interconnect. Sandy River Solar Data Request Nos. 017-020 and 022-030 therefore seek irrelevant information and are overbroad and unduly burdensome. In addition, Data Request Nos. 017-020 and 022-030 are vague, ambiguous, and/or unintelligible in that they do not provide enough information for PGE to identify the specific information sought by each request. In addition, the cumulative impact of Data Request Nos. 017-020 and 022-030 is to seek to make PGE engage in extensive work to respond to data requests that are irrelevant to the issues to be resolved by the Commission in this case. As a result, and in addition to the general objections stated above, PGE objects to Sandy River Solar's Data Request No. 030 on the grounds that it is vague, ambiguous, unintelligible, overbroad, unduly burdensome, seeks irrelevant information, and/or seeks information whose probative value is substantially outweighed by a danger of unfair prejudice, confusing the issues, subjecting PGE to undue burden, or needlessly presenting cumulative evidence.

Sandy River Solar Data Request No. 031:

Please indicate the date which PGE first provided Sandy River with the higher queued project's interconnection timelines and schedules.

Response to Sandy River Solar Data Request No. 031:

In addition to the general objections stated above, PGE objects to Sandy River Solar's Data Request No. 031 on the grounds that it is vague and ambiguous. Notwithstanding and without waiving PGE's general objections or these specific objections, PGE responds to Sandy River Solar's Data Request No. 031 as follows:

PGE first provided Sandy River Solar with information regarding a higher queued project's interconnection timeline or schedule on June 21, 2018.

Sandy River Solar Data Request No. 032:

For all interconnection applications submitted since January 2015, please indicate whether PGE issued any revised interconnection studies and the reason for the revision, and provide copies of the original and revised interconnection studies.

Response to Sandy River Solar Data Request No. 032:

In addition to the general objections stated above, PGE objects to Sandy River Solar's Data Request No. 032 on the grounds that the request is vague, ambiguous, unintelligible, overbroad, unduly burdensome, seek irrelevant information, and/or seeks information whose probative value is substantially outweighed by a danger of unfair prejudice, confusing the issues, subjecting PGE to undue burden, or needlessly presenting cumulative evidence. PGE further objects to Data Request No. 032 to the extent it seeks to compel PGE to develop information for Sandy River Solar. Notwithstanding and without waiving PGE's general objections or these specific objections, PGE responds to each sub-part of Complainant's Data Request No. 032 as follows:

PGE objects to the request that PGE assemble the requested information for every interconnection application of 3 MW or less submitted since January 2015. PGE estimates that there are approximately 183 such requests and that it would take PGE at least two months to develop the requested information responsive to Sandy River Solar Data Requests No. 015, 032 and 033. Such information is overbroad, unduly burdensome, irrelevant, or the probative value of the information is substantially outweighed by a danger of unfair prejudice, confusing the issues, subjecting PGE to undue burden, or needlessly presenting cumulative evidence. In response to Sandy River Data Request No. 032, PGE has provided the requested information with regard to the three interconnection requests on the same feeder as the Sandy River Solar Project that have resulted in any study results: SPQ0010, SPQ0051, and SPQ0070.

SPQ0010: PGE issued a System Impact Study for SPQ0010 on May 22, 2017. PGE has already provided a copy of this study as Attachment 001A. PGE issued a Facilities Study for SPQ0010 on November 30, 2017. PGE has already provided a copy of this study as Attachment 001B. PGE has not issued revisions to either study.

SPQ0051: PGE issued a System Impact Study on December 22, 2017. PGE has already provided a copy of this study as Attachment 001C. PGE has not issued a revision to this study. PGE did not issue a Facilities Study because the applicant withdrew its application following the System Impact Study.

SPQ0070: PGE issued a System Impact Study for SPQ0070 on January 7, 2018. PGE has already provided a copy of this study as Attachment 001D. PGE issued a Facilities Study for SPQ0070 on April 16, 2018. PGE has already provided a copy of this study as Attachment 001D. PGE has not issued revisions to either study.

Sandy River Solar Data Request No. 033:

For all interconnection agreements executed since January 2015, please indicate whether the schedule in each interconnection agreement has been modified, amended or updated following the execution of the agreement and the reason for the revision, and provide copies of the original and revised interconnection agreements.

Response to Sandy River Solar Data Request No. 033:

In addition to the general objections stated above, PGE objects to Sandy River Solar's Data Request No. 033 on the grounds that the request is vague, ambiguous, unintelligible, overbroad, unduly burdensome, seek irrelevant information, and/or seeks information whose probative value is substantially outweighed by a danger of unfair prejudice, confusing the issues, subjecting PGE to undue burden, or needlessly presenting cumulative evidence. PGE further objects to Data Request No. 033 to the extent it seeks to compel PGE to develop information for Sandy River Solar. Notwithstanding and without waiving PGE's general objections or these specific objections, PGE responds Complainant's Data Request No. 033 as follows:

PGE objects to the request that PGE assemble the requested information for every interconnection agreement executed since January 2015. PGE estimates that there have been at least 183 interconnection requests submitted since January 2015, and that it would take PGE at least two months to develop the requested information responsive to Sandy River Solar Data Requests No. 015, 032 and 033. Such information is overbroad, unduly burdensome, irrelevant, or the probative value of the information is substantially outweighed by a danger of unfair prejudice, confusing the issues, subjecting PGE to undue burden, or needlessly presenting cumulative evidence. In response to Sandy River Data Request No. 033, PGE has provided the requested information with regard to the three interconnection requests on the same feeder as the Sandy River Solar Project that have resulted in any study results: SPQ0010, SPQ0051, and SPQ0070. The Interconnection Agreements provided in response to this Data Request 033 have been redacted to remove the name and location of each project. The schedule and milestones for each Interconnection Agreement are contained in Attachment D to each Interconnection Agreement.

SPQ0010: PGE and SPQ0010 entered into an Interconnection Agreement on November 10, 2017. It includes as Attachment D a list of the milestones and associated dates for the interconnection work. The original version of this Attachment D states that the milestones and associated dates are "to be determined." A redacted copy of the Interconnection Agreement with the original version of Attachment D is provided as Attachment 033A. Subsequently, the parties agreed to replace the original Attachment D with a revised Attachment D that contains specific milestones and dates. PGE has already provided a copy of the revised Attachment D in response to Sandy River Solar Data Request No. 001 as Attachment 001F.

SPQ0051: PGE and the interconnection customer have not entered into an Interconnection Agreement because the applicant withdrew its application following the System Impact Study.

SPQ0070: PGE and SPQ0070 entered into an Interconnection Agreement on November 30, 2018. A redacted copy of the Interconnection Agreement, including the Attachment D schedule, is provided as Attachment 033B. The Attachment D schedule has not been modified, amended or updated following the execution of the Interconnection Agreement.

Sandy River Solar Data Request No. 034:

Please provide a copy of PGE’s interconnection standards that are applicable to the Sandy River project and any changes that have been made to these standards since January 2015.

Response to Sandy River Solar Data Request No. 034:

In addition to the general objections stated above, PGE objects to Sandy River Solar’s Data Request No. 034 as the request is vague, ambiguous, unintelligible, overbroad, unduly burdensome, seek irrelevant information, and/or seeks information whose probative value is substantially outweighed by a danger of unfair prejudice, confusing the issues, subjecting PGE to undue burden, or needlessly presenting cumulative evidence. Notwithstanding and without waiving PGE’s general objections or these specific objections, PGE responds to Complainant’s Data Request No. 034 as follows:

The interconnection standards that PGE applied to Sandy River Solar’s request to interconnect to the Dunns Corner 13 feeder are: the 2003 edition of the Institute of Electrical and Electronics Engineers Standard 1547 (“IEEE 1547”); prudent electric practice; and the applicable requirements of OAR Chapter 860, Division 029. PGE is not aware of any changes to the language of the 2003 version of IEEE 1547 or OAR Chapter 860, Division 029 since January 2015. Prudent electric practice evolves depending on the state of PGE’s electric system, the volume and complexity of distributed energy resources interconnected to the system, and the evolution of technology and industry best practices.

PGE objects to Sandy River Solar Data Request No. 034 to the extent it seeks documents or information that is subject to copyright and/or that is equally available to Complainant or which is already within Complainant’s possession or control. In particular, the IEEE 1547 standard document is subject to copyright protections and Complainant can secure its own copy of the document from IEEE. It is unduly burdensome, inappropriately cumulative, and otherwise inappropriate or improper to request that PGE provide information that is subject to a third-party copyright and to which Complainant already has access, possession, or control.

Sandy River Solar Data Request No. 035:

Admit or deny that PGE leases, licenses, or otherwise allows third-party companies to use PGE owned utility poles within its service territory.

Response to Sandy River Solar Data Request No. 035:

PGE admits that it allows authorized third-parties to make use of PGE owned utility poles subject to application qualifications and meeting applicable standards and requirements. Joint use of PGE poles are generally subject to the requirements of OAR Chapter 860, Division 028 governing pole and conduit attachments. Joint use typically involves joint use of PGE's poles by the municipality in which the poles are located or by a provider of utility services (e.g., a telecommunication utility using PGE's poles to string telecommunications wire or cable).

Sandy River Solar Data Request No. 036:

Please provide a copy of any leases, licenses, or other agreements that allow third-party companies to use PGE's poles along Dunn Rd, adjacent to the Sandy River project.

Response to Sandy River Solar Data Request No. 036:

In addition to the general objections stated above, PGE objects to Sandy River Solar's Data Request No. 036 as the request is vague, ambiguous, unintelligible, overbroad, unduly burdensome, seek irrelevant information, and/or seeks information whose probative value is substantially outweighed by a danger of unfair prejudice, confusing the issues, subjecting PGE to undue burden, or needlessly presenting cumulative evidence. Notwithstanding and without waiving PGE's general objections or these specific objections, PGE responds to Complainant's Data Request No. 036 as follows:

WaveDivision VII, LLC, is the only third-party company authorized to make joint use of PGE's poles located along Dunn Road between the proposed point of interconnection of the Sandy River Solar project and the Dunns Corner substation. WaveDivision VII is a provider of broadband communication services.

Sandy River Solar Data Request No. 037:

Please provide a list of PGE approved contractors and the process in which PGE reviews and approves contractors to work on their system.

Response to Sandy River Solar Data Request No. 037:

In addition to the general objections stated above, PGE objects to Sandy River Solar's Data Request No. 037 as the request is vague, ambiguous, unintelligible, overbroad, unduly burdensome, seek irrelevant information, and/or seeks information whose probative value is substantially outweighed by a danger of unfair prejudice, confusing the issues, subjecting PGE to undue burden, or needlessly presenting cumulative evidence. Notwithstanding and without waiving PGE's general objections or these specific objections, PGE responds to Complainant's Data Request No. 037 as follows:

PGE's customers, including without limitation QF interconnection customers, are allowed to use third-party contractors to trench and install conduit and vaults as needed to establish the path for a service extension ("Customer Pathway Work"). A PGE customer who seeks to perform Customer Pathway Work within the right of way under PGE's permit must use a PGE-approved third-party contractor. PGE has provided a list of contractors who have been approved by PGE to perform Customer Pathway Work within the right of way as Attachment 037A. The list of contractors provided as Attachment 037A is subject to change at any time.

The process (which is subject to modification) used by PGE to review third-party contractors to perform Customer Pathway Work in the right of way is:

- PGE's Service Design Project Manager (SDPM) contacts PGE's Construction Contract Services group to determine if customer's chosen contractor is on record and current;
- PGE's Construction Contract Services keeps a record of third-party contractors authorized to perform work in the right of way under PGE's permit;
- PGE's Construction Contract Services notifies the SDPM regarding the status of documentation;
- If customer's chosen contractor is on record and all necessary documents are on file, the contractor may proceed.
- If customer's chosen contractor is not on record, SDPM informs customer of the documents required for a third-party contractor to perform work in the right of way;
- The following documentation must be provided to and approved by PGE's Construction Contract Services in order for a third-party contractor to perform work in the right of way under PGE's permit:
 - Certificate of Insurance from the contractor (in compliance with amounts noted in the Contract Agreement).
 - Contract Agreement for performing utility work in the right of way under PGE's permit signed by the contractor and PGE.
- Work is inspected by PGE Field Construction Coordinator who notifies the third-party contractor when the work is approved.

Regardless of whether the work to install the conduit and vaults for a service extension is performed by the customer or the customer's third-party contractor, such work must satisfy the PGE electric service requirements which can be found at:

<https://www.portlandgeneral.com/construction/electric-service-requirements>.

PGE does not allow customers to hire third-party contractors to install PGE-owned electric or communications facilities. Once a PGE customer or the customer's third-party contractor has trenched and installed any required vaults and conduit to establish the pathway for a service extension, PGE or its third-party contractor will install all PGE-owned conductor, PGE-owned fiber optic cable, and any other PGE-owned electrical or communications equipment or facilities.

Where a third-party provider of utility services has been authorized to make joint use of PGE poles, such "joint use party" or its contractor is typically authorized to install the equipment and facilities that will be owned by the joint use party.

Dated this 26th day of December 2018.

By,



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Interconnection Agreement for Small Generator Facility Tier 1, Tier 2, Tier 3 or Tier 4 Interconnection

(Small Generator Facilities with Electric Nameplate Capacities of 10 MW or Less)

This Interconnection Agreement (sometimes also referred to as "Agreement") is made and entered into this 10th day of NOVEMBER 2017 by and between Applicant, an individual a company, ("Applicant") and Portland General Electric Company, a corporation existing under the laws of the State of Oregon, ("PGE"). Applicant and PGE each may be referred to as a "Party," or collectively as the "Parties."

Recitals:

Whereas, the Applicant is proposing to develop a Small Generator Facility, or to add generating capacity to an existing Small Generator Facility, consistent with the Application completed on April 20, 2016 ;

Whereas, the Applicant desires to interconnect the Small Generator Facility with PGE's Transmission and Distribution System (T&D System); and

Whereas, the Agreement shall be used for all approved Tier 1, Tier 2, Tier 3 and Tier 4 Interconnection Applications according to the procedures set forth in OPUC Rule OAR 860, Division 082 (Rule). Terms with initial capitalization, when used in this Agreement, shall have the meanings given in the Rule and, to the extent this Agreement conflicts with the Rule, the Rule shall take precedence.

Now, therefore, in consideration of and subject to the mutual covenants contained herein, the Parties agree as follows:

Article 1. **Scope and Limitations of Agreement**

1.1 Scope

The Agreement establishes standard terms and conditions approved by the Commission under which the Small Generator Facility with a Nameplate Capacity of 10 MW or less will interconnect to, and operate in parallel with PGE's T&D System. Additions, deletions or changes to the standard terms and conditions of an Interconnection Agreement will not be permitted unless they are mutually agreed to by the Parties or approved by the Commission if required by the Rule.

1.2 Power Purchase

The Agreement does not constitute an agreement to purchase, transmit, or deliver the Applicant's power nor does it constitute an electric service agreement.

1.3 Other Agreements

Nothing in the Interconnection Agreement is intended to affect any other agreement between PGE and the Applicant or another Interconnection Customer. However, in the event that the provisions of the Agreement are in conflict with the provisions of other PGE tariffs, PGE tariff shall control.

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1.4 Responsibilities of the Parties

- 1.4.1 The Parties shall perform all obligations of this Agreement in accordance with all applicable laws.
- 1.4.2 The Applicant will construct, own, operate, and maintain its Small Generator Facility in accordance with the Agreement, IEEE Standard 1547, the National Electrical Code and applicable standards required by the Commission.
- 1.4.3 Each Party shall be responsible for the safe installation, maintenance, repair and condition of their respective lines and appurtenances on their respective sides of the Point of Interconnection. Each Party shall provide Interconnection Facilities that adequately protect the other Parties' facilities, personnel, and other persons from damage and injury. The allocation of responsibility for the design, installation, operation, maintenance and ownership of Interconnection Facilities is prescribed in the Rule.

1.5 Parallel Operation and Maintenance Obligations

Once the Small Generator Facility has been authorized to commence Parallel Operation by execution of the Interconnection Agreement, the Applicant will abide by all written provisions for operating and maintenance as required by the Rule and detailed by PGE in Form 7, title "**Interconnection Equipment As Built Specifications, Initial Settings and Operating Requirements**" a copy of which is provided on PGE's website.

1.6 Metering and Monitoring

The Interconnection Customer will be responsible for metering and monitoring as required by OAR 860-082-0070.

1.7 Power Quality

The Applicant will design its Small Generator Facility to maintain a composite power delivery at continuous rated power output at the Point of Interconnection that meets the requirements set forth in IEEE 1547. PGE may, in some circumstances, also require the Applicant to follow voltage or VAR schedules used by similarly situated, comparable generators in the control area. Any special operating requirements will be detailed in Form 7 provided on the Commission website and completed by PGE as required by the Rule. Under no circumstances shall these additional requirements for voltage or reactive power support exceed the normal operating capabilities of the Small Generator Facility. For purposes of this Agreement, "control area" shall mean an electrical system or systems bounded by interconnection metering and telemetry, capable of controlling generation to maintain its interchange schedule with other control areas and contributing to frequency regulation of the interconnection.

Article 2. Inspection, Testing, Authorization, and Right of Access

2.1 Equipment Testing and Inspection

The Applicant will test and inspect its Small Generator Facility Facilities prior to interconnection in accordance with IEEE 1547 Standards as provided for in the Rule. The Interconnection will not be final until the Witness Test and Certificate of Completion provisions in the Rule have been satisfied. Operation of the Small Generator Facility requires an-Interconnection Agreement; electricity sales require a Power Purchase Agreement.—To the extent that the Applicant decides to conduct interim testing of the Small Generator Facility prior to the Witness Test, it may request that PGE observe these tests and that these tests be deleted from the final Witness Test. If PGE agrees to send

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qualified personnel to the Small Generator Facility to observe such interim testing, it will be doing so at its own expense unless the Parties agree otherwise

2.2 Right of Access

As provided in OAR 860-082-0020, PGE will have access to the Applicant's premises for any reasonable purpose in connection with the Interconnection Application and any Interconnection Agreement that is entered in to pursuant to this Rule or if necessary to meet the legal obligation to provide service to its customers. Access will be requested at reasonable hours and upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition.

Article 3. Effective Date, Term, Termination, and Disconnection

3.1 Effective Date

The Agreement shall become effective upon execution by the Parties.

3.2 Term of Agreement

The Agreement will be effective on the Effective Date and will remain in effect for a period of twenty (20) years or the life of the Power Purchase Agreement, whichever is shorter or a period mutually agreed to by Parties, unless terminated earlier by the default or voluntary termination by the Interconnection Customer or by action of the Commission.

3.3 Termination

No termination will become effective until the Parties have complied with all applicable laws and any clauses of the Rule or this Agreement applicable to such termination.

3.3.1 The Applicant may terminate this Agreement at any time by giving PGE twenty (20) business days written notice.

3.3.2 Either Party may terminate this Agreement after default pursuant to Article 5.6 of this Agreement.

3.3.3 The Commission may order termination of this Agreement.

3.3.4 Upon termination of this Agreement, the Small Generator Facility will be disconnected from PGE's T&D System at the Applicant's expense. The termination of this Agreement will not relieve either Party of its liabilities and obligations, owed or continuing at the time of the termination.

3.3.4 The provisions of this Article shall survive termination or expiration of this Agreement.

3.4 Temporary Disconnection

PGE or the Applicant may temporarily disconnect the Small Generator Facility from its T&D System for so long as reasonably necessary, as provided in OAR 860-082-0075 of the Rule, in the event one or more of the following conditions or events occurs:

3.4.1 Under emergency conditions, PGE or the Interconnection Customer may immediately suspend interconnection service and temporarily disconnect the Small Generator Facility. PGE shall notify the Applicant promptly when it becomes aware of an emergency condition that may reasonably be expected to affect the Small Generator Facility operation. The Applicant will notify PGE promptly when it becomes aware of an emergency condition that may reasonably be expected to affect PGE's T&D System. To the extent information is known, the notification shall describe the emergency condition, the extent of the damage or deficiency, the expected effect on the operation of both Parties' facilities and operations, its anticipated duration, and the necessary corrective action.

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- 3.4.2 For routine Maintenance, Parties will make reasonable efforts to provide five (5) business days notice prior to interruption caused by routine maintenance or construction and repair to the Small Generator Facility or PGE's T&D system and shall use reasonable efforts to coordinate such interruption.
- 3.4.3 For Forced outages of the T&D System, PGE shall use reasonable efforts to provide the Applicant with prior notice of forced outages to effect immediate repairs to the T&D System. If prior notice is not given, PGE shall, upon request, provide the Applicant written documentation after the fact explaining the circumstances of the disconnection.
- 3.4.4 For disruption or deterioration of service, where PGE determines that operation of the Small Generator Facility will likely cause disruption or deterioration of service to other customers served from the same electric system, or if operating the Small Generator Facility could cause damage to PGE's T&D System, PGE may disconnect the Small Generator Facility. PGE will provide the Applicant upon request all supporting documentation used to reach the decision to disconnect. PGE may disconnect the Small Generator Facility if, after receipt of the notice, the Applicant fails to remedy the adverse operating effect within a reasonable time which shall be at least five (5) business days from the date the Applicant receives PGE's written notice supporting the decision to disconnect, unless emergency conditions exist, in which case the provisions of 3.4.1 of the Agreement apply.
- 3.4.5 If the Applicant makes any change other than Minor Equipment Modifications without prior written authorization of PGE, PGE will have the right to temporarily disconnect the Small Generator Facility.

3.5 Restoration of Interconnection

The Parties shall cooperate with each other to restore the Small Generator Facility, Interconnection Facilities, and PGE's T&D System to their normal operating state as soon as reasonably practicable following any disconnection pursuant to section 3.4.

Article 4. Cost Responsibility and Billing

The Applicant is responsible for the application fee and for such facilities, equipment, modifications and upgrades as required in 860-082-0035.

4.1 Minor T&D System Modifications

Modifications to the existing T&D System identified by PGE and set forth in Attachment A, such as changing meters, fuses or relay settings, are deemed Minor Modifications. It is PGE's sole discretion to decide what constitutes a Minor Modification. The Applicant will bear the costs of making such Minor Modifications as may be necessary to gain approval of an Application.

4.2 Interconnection Facilities

PGE will identify, under the study procedures of an Application review, the Interconnection Facilities necessary to safely interconnect the Small Generator Facility with PGE. Attachment A itemizes the Interconnection Facilities for the Applicant, including the cost of the facilities and the time required to build and install those facilities. The Applicant is responsible for the cost of the Interconnection Facilities.

4.3 Interconnection Equipment

The Applicant is responsible for all reasonable expenses, including overheads, associated with owning, operating, maintaining, repairing, and replacing its Interconnection Equipment.

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4.4 System Upgrades

PGE will design, procure, construct, install, and own any System Upgrades. The actual cost of the System Upgrades, including overheads, is set forth in Attachment A and will be directly assigned to the Applicant. An Interconnection Customer may be entitled to financial compensation from other PGE Interconnection Customers who, in the future, benefit from the System Upgrades paid for by the Interconnection Customer. Such compensation will be governed by separate rules promulgated by the Commission or by terms of a tariff filed and approved by the Commission. Such compensation will only be available to the extent provided for in the separate rules or tariff.

4.5 Adverse System Impact

PGE is responsible for identifying Adverse System Impacts on any Affected Systems and for determining what mitigation activities or upgrades may be required to accommodate a Small Generator Facility. The actual cost of any actions taken to address the Adverse System Impacts, including overheads, shall be directly assigned to the Applicant. The Applicant may be entitled to financial compensation from other public utilities or other Interconnection Customers who, in the future, utilize the upgrades paid for by the Applicant, to the extent as allowed by the Commission. Adverse System Impacts are set forth in Attachment A.

4.6 Billings

PGE may require a deposit of not more than 50% of the cost estimate, not to exceed \$1,000, to be paid up front by the Applicant for studies necessary to complete an Application and to interconnect the Small Generator Facility to the T&D System. PGE may require a deposit of no more than 25% of the estimated costs, not to exceed \$10,000, for Interconnection Facilities necessary to complete an Application and to interconnect the Small Generator Facility to the T&D System. Progress billing, final billing and payment schedules must be agreed to by Parties prior to commencing work.

Article 5. Assignment, Liability, Indemnity, Force Majeure, Consequential Damages, and Default

5.1 Assignment

The Interconnection Agreement may be assigned by either Party upon fifteen (15) business days prior written notice. Except as provided in Articles 5.1.1 and 5.1.2, said assignment shall only be valid upon the prior written consent of the non-assigning Party, which consent shall not be unreasonably withheld.

5.1.1 Either Party may assign the Agreement without the consent of the other Party to any affiliate (which shall include a merger of the Party with another entity), of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement;

5.1.2 The Applicant shall have the right to assign the Agreement, without the consent of PGE, for collateral security purposes to aid in providing financing for the Small Generator Facility. For Small Generator systems that are integrated into a building facility, the sale of the building or property will result in an automatic transfer of the Agreement to the new owner who shall be responsible for complying with the terms and conditions of this Agreement.

5.1.3 Any attempted assignment that violates this Article is void and ineffective. Assignment shall not relieve a Party of its obligations, nor shall a Party's

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obligations be enlarged, in whole or in part, by reason thereof. An assignee is responsible for meeting the same obligations as the Applicant.

5.2 Limitation of Liability and Consequential Damages

A Party is liable for any loss, cost claim, injury, or expense including reasonable attorney's fees related to or arising from any act or omission in its performance of the provisions of an Interconnection Agreement entered into pursuant to the Rule except as provided for in ORS 757.300(4)(c). Neither Party will seek redress from the other Party in an amount greater than the amount of direct damage actually incurred.

5.3 Indemnity

- 5.3.1 This provision protects each Party from liability incurred to third parties as a result of carrying out the provisions of the Agreement. Liability under this provision is exempt from the general limitations on liability found in Article 5.2.
- 5.3.2 Each Party shall, to the extent allowed by law, and subject to the limitations imposed by ORS 30.260 to ORS 30.300, if applicable, at all times indemnify, defend, and hold the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demands, suits, recoveries, costs and expenses, court costs, attorney fees at trial and on appeal, and all other obligations by or to third parties (hereinafter "Harm"), arising out of or resulting from its negligent action or failure to meet its obligations under this Agreement. Such indemnity obligation shall be limited to the proportional extent the Harm is caused by the negligence of the indemnified Party.
- 5.3.3 If an indemnified person is entitled to indemnification under this Article as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under this Article, to assume the defense of such a claim, such indemnified person may at the expense of the indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.
- 5.3.4 If an indemnifying party is obligated to indemnify and hold any indemnified person harmless under this Article, the amount owing to the indemnified person shall be the amount of such indemnified person's actual loss, net of any insurance or other recovery.
- 5.3.5 Promptly after receipt by an indemnified person of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this Article may apply, the indemnified person shall notify the indemnifying party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying party.
- 5.3.6 The indemnifying Party shall have the right to assume the defense thereof with counsel designated by such indemnifying Party and reasonably satisfactory to the indemnified person. If the defendants in any such action include one or more indemnified persons and the indemnifying Party and if the indemnified person reasonably concludes that there may be legal defenses available to it and/or other indemnified persons which are different from or additional to those available to the indemnifying Party, the indemnified person shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the indemnifying

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Party shall only be required to pay the fees and expenses of one additional attorney to represent an indemnified person or indemnified persons having such differing or additional legal defenses.

5.3.7 The indemnified person shall be entitled, at its expense, to participate in any such action, suit or proceeding, the defense of which has been assumed by the indemnifying Party. Notwithstanding the foregoing, the indemnifying Party (i) shall not be entitled to assume and control the defense of any such action, suit or proceedings if and to the extent that, in the opinion of the indemnified person and its counsel, such action, suit or proceeding involves the potential imposition of criminal liability on the indemnified person, or there exists a conflict or adversity of interest between the indemnified person and the indemnifying Party, in such event the indemnifying Party shall pay the reasonable expenses of the indemnified person, and (ii) shall not settle or consent to the entry of any judgment in any action, suit or proceeding without the consent of the indemnified person, which shall not be reasonably withheld, conditioned or delayed.

5.4 Consequential Damages

Neither Party shall be liable to the other Party, under any provision of the Agreement, for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to the other Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

5.5 Force Majeure

5.5.1 As used in this Agreement, a Force Majeure Event shall mean "any act of God, labor disturbance, act of the public enemy, war, acts of terrorism, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment through no direct, indirect, or contributory act of a Party, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure Event does not include an act of negligence or intentional wrongdoing."

5.5.2 If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, the Party affected by the Force Majeure Event (Affected Party) shall promptly notify the other Party of the existence of the Force Majeure Event. The notification must specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the Affected Party is taking to mitigate the effects of the event on its performance, and if the initial notification was verbal, it should be promptly followed up with a written notification. The Affected Party shall keep the other Party informed on a continuing basis of developments relating to the Force Majeure Event until the event ends the Affected Party will be entitled to suspend or modify its performance of obligations under this Agreement (other than the obligation to make payments) only to the extent that the effect of the Force Majeure Event cannot be reasonably mitigated. The Affected Party will use reasonable efforts to resume its performance as soon as possible. The Parties shall immediately report to the Commission should a Force Majeure

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Event prevent performance of an action required by Rule that the Rule does not permit the Parties to mutually waive.

5.6 Default

5.6.1 No default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of a Force Majeure Event as defined in this Agreement, or the result of an act or omission of the other Party. Upon a default, the non-defaulting Party shall give written notice of such default to the defaulting Party. Except as provided in Article 5.6.2, the defaulting Party shall have sixty (60) calendar days from receipt of the default notice within which to cure such default; provided however, if such default is not capable of cure within sixty (60) calendar days, the defaulting Party shall commence such cure within twenty (20) calendar days after notice and continuously and diligently complete such cure within six (6) months from receipt of the default notice; and, if cured within such time, the default specified in such notice shall cease to exist.

5.6.2 If a default is not cured as provided for in this Article, or if a default is not capable of being cured within the period provided for herein, the non-defaulting Party shall have the right to terminate the Agreement by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not that Party terminates the Agreement, to recover from the defaulting Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. Alternately, the non-defaulting Party shall have the right to seek dispute resolution pursuant to Article 7 with the Commission in lieu of default. The provisions of this Article will survive termination of the Agreement.

Article 6. Insurance

A Party is liable for any loss, cost claim, injury, or expense including reasonable attorney's fees related to or arising from any act or omission in its performance of the provisions of this Rule or the Interconnection Agreement entered into pursuant to this Rule.

6.1 Pursuant to the Rule adopted by the Commission, PGE may not require the Interconnection Customer to maintain general liability insurance in relation to the interconnection of a Small Generator Facility with an Electric Nameplate Capacity of 200 kW or less. With regard to the interconnection of a Small Generator Facility with an Electric Nameplate Capacity equal to or less than 10 MW but in excess of 200 kW, the Interconnection Customer shall, at its own expense, maintain in force throughout the period of this Agreement general liability insurance sufficient to protect any person (including PGE) who may be affected by the Interconnection Customer's Small Generator Facility and its operation and such insurance shall be sufficient to satisfy the Interconnection Customer's indemnification responsibilities under Article 5.3 of this Agreement.

6.2 Within ten (10) business days following execution of this Agreement, and as soon as practicable after the end of each fiscal year or at the renewal of the insurance policy and in any event within ninety (90) calendar days thereafter, the Interconnection Customer shall provide the Public Utility with certification of all insurance required in this Agreement, executed by each insurer or by an authorized representative of each insurer.

6.3 All insurance required by this Article 6 shall name the Public, its parent, associated and Affiliate companies and their respective directors, officers, agents, servants and employees ("Other Party Group") as additional insured. All policies shall contain provisions whereby

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the insurers waive all rights of subrogation against the Other Party Group and provide thirty (30) calendar days advance written notice to the Other Party Group prior to anniversary date of cancellation or any material change in coverage or condition. The Interconnection Customer's insurance shall contain provisions that specify that the policies are primary and shall apply to such extent without consideration for other policies separately carried and shall state that each insured is provided coverage as though a separate policy had been issued to each, except the insurer's liability shall not be increased beyond the amount for which the insurer would have been liable had only one insured been covered. The insurance policies, if written on a Claims First Made Basis, shall be maintained in full force and effect for two (2) years after termination of this Agreement, which coverage may be in the form of tail coverage or extended reporting period coverage if agreed by the Parties.

- 6.4 The Parties agree to report to each other in writing as soon as practical all accidents or occurrences resulting in injuries to any person, including death, and any property damage arising out of this Agreement.
- 6.5 The requirements contained herein as to insurance are not intended to and shall not in any manner limit or qualify the liabilities and obligations assumed by the Parties under this Agreement.

Article 7. Dispute Resolution

Parties will adhere to the dispute resolution provisions in OAR 860-082-0080.

Article 8. Miscellaneous

8.1 Governing Law, Regulatory Authority, and Rules

The validity, interpretation and enforcement of the Agreement and each of its provisions shall be governed by the laws of the State of Oregon, without regard to its conflicts of law principles. The Agreement is subject to all applicable laws. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a governmental authority.

8.2 Amendment

The Parties may mutually agree to amend the Agreement by a written instrument duly executed by both Parties in accordance with provisions of the Rule and applicable Commission Orders and provisions of the laws if the State of Oregon.

8.3 No Third-Party Beneficiaries

The Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.

8.4 Waiver

- 8.4.1 The failure of a Party to the Agreement to insist, on any occasion, upon strict performance of any provision of the Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.
- 8.4.2 The Parties may agree to mutually waive a section of this Agreement so long as prior Commission approval of the waiver is not required by the Rule.
- 8.4.3 Any waiver at any time by either Party of its rights with respect to the Agreement shall not be deemed a continuing waiver or a waiver with respect to any other

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failure to comply with any other obligation, right, or duty of the Agreement. Any waiver of the Agreement shall, if requested, be provided in writing.

8.5 Entire Agreement

The Interconnection Agreement, including any supplementary Form attachments that may be necessary, constitutes the entire Agreement between the Parties with reference to the subject matter hereof and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of the Agreement. There are no other agreements, representations, warranties, or covenants that constitute any part of the consideration for, or any condition to, either Party's compliance with its obligations under the Agreement.

8.6 Multiple Counterparts

The Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

8.7 No Partnership

The Agreement will not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

8.8 Severability

If any provision or portion of the Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other governmental authority; (1) such portion or provision shall be deemed separate and independent; (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling; and (3) the remainder of the Agreement shall remain in full force and effect.

8.9 Subcontractors

Nothing in the Agreement shall prevent a Party from utilizing the services of any subcontractor, or designating a third party agent as one responsible for a specific obligation or act required in the Agreement (collectively subcontractors), as it deems appropriate to perform its obligations under the Agreement; provided, however, that each Party will require its subcontractors to comply with all applicable terms and conditions of the Agreement in providing such services and each Party will remain primarily liable to the other Party for the performance of such subcontractor.

8.9.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under the Agreement. The hiring Party shall be fully responsible to the other Party for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made. Any applicable obligation imposed by the Agreement upon the hiring Party shall be equally binding upon, and will be construed as having application to, any subcontractor of such Party.

8.9.2 The obligations under this Article will not be limited in any way by any limitation of subcontractor's insurance.

8.10 Reservation of Rights

Either Party will have the right to make a unilateral filing with the Commission to modify the Interconnection Agreement. This reservation of rights provision will include but is not limited to modifications with respect to any rates terms and conditions, charges, classification of service, rule or regulation under tariff rates or any applicable State or

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Federal law or regulation. Each Party shall have the right to protest any such filing and to participate fully in any proceeding before the Commission in which such modifications may be considered.

Article 9. Notices and Records

9.1 General

Unless otherwise provided in the Agreement, any written notice, demand, or request required or authorized in connection with the Agreement shall be deemed properly given if delivered in person, delivered by recognized national courier service, or sent by first class mail, postage prepaid, to the person specified below:

If to the Applicant:

Applicant: _____
Attention: _____
Address: _____
City: _____ State: _____ Zip: _____
Phone: _____
Fax: _____
E-mail: _____

If to PGE:

Attention: Small Power Production
Address: 121 SW Salmon St, 3WTC0402
City: Portland State: Oregon Zip: 97204
Phone: 503-464-8300
Fax: _____
E-mail: small.powerproduction@pgn.com

9.2 Records

The utility will maintain a record of all Interconnection Agreements and related Form attachments for as long as the interconnection is in place as required by OAR 860-082-065. PGE will provide a copy of these records to the Applicant or Interconnection Customer within fifteen (15) business days if a request is made in writing.

9.3 Billing and Payment

Billings and payments shall be sent to the addresses set out below:

If to the Applicant (complete if different than Article 9.1):

Applicant: _____
Attention: _____
Address: _____
City: _____ State: _____ Zip: _____

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If to PGE (complete if different than Article 9.1):

Attention: _____
Address: _____
City: _____ State: _____ Zip: _____

9.4 Designated Operating Representative

The Parties will designate operating representatives to conduct the communications which may be necessary or convenient for the administration of the operations provisions of the Agreement. This person will also serve as the point of contact with respect to operations and maintenance of the Party's facilities:

Applicant's Operating Representative (complete if different than Article 9.1):

Attention: TBC
Address: _____
City: _____ State: _____ Zip: _____
Phone: _____
Fax: _____
E-mail: _____

PGE's Operating Representative (complete if different than Article 9.1):

Attention: _____
Address: _____
City: _____ State: _____ Zip: _____
Phone: _____
Fax: _____
E-mail: _____

9.5 Changes to the Notice Information

Either Party may change this notice information by giving five (5) business days written notice prior to the effective date of the change.


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Article 10. Signatures

IN WITNESS WHEREOF, the Parties have caused the Agreement to be executed by their respective duly authorized representatives.

For the Applicant:

Signature:  _____

Printed Name:  _____

Title (if applicable):  _____

Date: 10/10/2017

For PGE: *KMI*
Signature:  _____

Printed Name: _____ **BRUCE BARNEY**

Title: _____ **SPECIALIZED PROGRAMS**

Date: NOV 10 2017 **MANAGER**

PGE

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Attachment A

**Description and Costs of Minor Modifications, Interconnection
Facilities, System Upgrades, and Adverse System Impacts**

Distribution Requirements:

Design and construct new 12.47 kV 3-phase, 4-wire distribution service to site including a primary metering point.

Distribution estimate is: \$35,000.00.

Substation Requirements:

Replace feeder relay panel and install a VT to achieve hot-line blocking protection scheme.

Substation estimate is: \$70,000.00

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Attachment B

**Description of Interconnection Facilities
and Metering Equipment Operated or Maintained by the Public Utility**

PGE will provide description and best estimate itemized cost, including overheads, to operate and maintain the Interconnection Facilities and metering equipment for the interconnected small generator (if applicable).

PGE will only own the following interconnection equipment at the site:

- Primary voltage service conductors from PGE's area feeder circuit to the termination point in PV plant's switchgear, and
- Metering equipment (Meter, potential transformers, current transformers and associated wiring) that will be installed in the applicant-supplied switchgear.

There is no routine maintenance that PGE would conduct on the aforementioned equipment. If at any time they were damaged or otherwise need maintenance, the applicant, or any subsequent assignees of this agreement, is responsible for all associated costs. If at any point, the applicant wishes to make any changes to the interconnection facilities that require PGE personnel or equipment, the applicant is responsible for all associated costs.

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Attachment C

One-Line Diagram

One-line diagram depicting the Generator Facility, Interconnection Facilities, metering equipment, and upgrades including safety lockout features and any special accessibility requirements.

To be filled in with as-built drawings upon completion of the project.

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Attachment D

Scope of Work/Milestones

In-Service Date: To Be Determined

Critical milestones and responsibility as agreed to by the Parties:

	Milestone/Date	Responsible Party
(1)	<u>Execute Interconnection Agreement / TBD</u>	<u>Applicant / PGE</u>
(2)	<u>Distribution Design Complete / TBD</u>	<u>PGE</u>
(3)	<u>Switchgear Installed and Inspected / TBD</u>	<u>Applicant</u>
(4)	<u>Interconnection Facilities Complete / TBD</u>	<u>PGE</u>
(5)	<u>Testing and Commissioning / TBD</u>	<u>Applicant</u>
(6)	<u>Review Commissioning Documentation / TBD</u>	<u>PGE</u>
(7)	<u>In-Service Date / TBD</u>	<u>PGE</u>
(8)	<u> </u>	<u> </u>
(9)	<u> </u>	<u> </u>
(10)	<u> </u>	<u> </u>

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Attachment E

Additional Operating Requirements

No additional operating requirements were identified.

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Interconnection Agreement for Small Generator Facility Tier 1, Tier 2, Tier 3 or Tier 4 Interconnection

(Small Generator Facilities with Electric Nameplate Capacities of 10 MW or Less)

This Interconnection Agreement (sometimes also referred to as "Agreement") is made and entered into this 27th day of November, 2018 by and between Applicant, an individual an Oregon limited liability company, ("Applicant") and Portland General Electric Company, a corporation existing under the laws of the State of Oregon, ("PGE"). Applicant and PGE each may be referred to as a "Party," or collectively as the "Parties."

Recitals:

Whereas, the Applicant is proposing to develop a Small Generator Facility, or to add generating capacity to an existing Small Generator Facility, consistent with the Application completed on June 1, 2017;

Whereas, the Applicant desires to interconnect the Small Generator Facility with PGE's Transmission and Distribution System (T&D System); and

Whereas, the Agreement shall be used for all approved Tier 1, Tier 2, Tier 3 and Tier 4 Interconnection Applications according to the procedures set forth in OPUC Rule OAR 860, Division 082 (Rule). Terms with initial capitalization, when used in this Agreement, shall have the meanings given in the Rule and, to the extent this Agreement conflicts with the Rule, the Rule shall take precedence.

Now, therefore, in consideration of and subject to the mutual covenants contained herein, the Parties agree as follows:

Article 1. **Scope and Limitations of Agreement**

1.1 Scope

The Agreement establishes standard terms and conditions approved by the Commission under which the Small Generator Facility with a Nameplate Capacity of 10 MW or less will interconnect to, and operate in parallel with PGE's T&D System. Additions, deletions or changes to the standard terms and conditions of an Interconnection Agreement will not be permitted unless they are mutually agreed to by the Parties or approved by the Commission if required by the Rule.

1.2 Power Purchase

The Agreement does not constitute an agreement to purchase, transmit, or deliver the Applicant's power nor does it constitute an electric service agreement.

1.3 Other Agreements

Nothing in the Interconnection Agreement is intended to affect any other agreement between PGE and the Applicant or another Interconnection Customer. However, in the event that the provisions of the Agreement are in conflict with the provisions of other PGE tariffs, PGE tariff shall control.

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1.4 Responsibilities of the Parties

- 1.4.1 The Parties shall perform all obligations of this Agreement in accordance with all applicable laws.
- 1.4.2 The Applicant will construct, own, operate, and maintain its Small Generator Facility in accordance with the Agreement, IEEE Standard 1547 (2003 ed), the National Electrical Code (2005 ed) and applicable standards required by the Commission.
- 1.4.3 Each Party shall be responsible for the safe installation, maintenance, repair and condition of their respective lines and appurtenances on their respective sides of the Point of Interconnection. Each Party shall provide Interconnection Facilities that adequately protect the other Parties' facilities, personnel, and other persons from damage and injury. The allocation of responsibility for the design, installation, operation, maintenance and ownership of Interconnection Facilities is prescribed in the Rule.

1.5 Parallel Operation and Maintenance Obligations

Once the Small Generator Facility has been authorized to commence Parallel Operation by execution of the Interconnection Agreement, the Applicant will abide by all written provisions for operating and maintenance as required by the Rule and detailed by PGE in Form 7, title "**Interconnection Equipment As Built Specifications, Initial Settings and Operating Requirements**" a copy of which is provided on PGE's website.

1.6 Metering and Monitoring

The Interconnection Customer will be responsible for metering and monitoring as required by OAR 860-082-0070.

1.7 Power Quality

The Applicant will design its Small Generator Facility to maintain a composite power delivery at continuous rated power output at the Point of Interconnection that meets the requirements set forth in IEEE 1547. PGE may, in some circumstances, also require the Applicant to follow voltage or VAR schedules used by similarly situated, comparable generators in the control area. Any special operating requirements will be detailed in Form 7 provided on the Commission website and completed by PGE as required by the Rule. Under no circumstances shall these additional requirements for voltage or reactive power support exceed the normal operating capabilities of the Small Generator Facility. For purposes of this Agreement, "control area" shall mean an electrical system or systems bounded by interconnection metering and telemetry, capable of controlling generation to maintain its interchange schedule with other control areas and contributing to frequency regulation of the interconnection.

Article 2. Inspection, Testing, Authorization, and Right of Access**2.1 Equipment Testing and Inspection**

The Applicant will test and inspect its Small Generator Facility Facilities prior to interconnection in accordance with IEEE 1547 Standards as provided for in the Rule. The Interconnection will not be final until the Witness Test and Certificate of Completion provisions in the Rule have been satisfied. Operation of the Small Generator Facility requires an-Interconnection Agreement; electricity sales require a Power Purchase Agreement.—To the extent that the Applicant decides to conduct interim testing of the Small Generator Facility prior to the Witness Test, it may request that PGE observe these tests and that these tests be deleted from the final Witness Test. If PGE agrees to send

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qualified personnel to the Small Generator Facility to observe such interim testing, it will be doing so at its own expense unless the Parties agree otherwise

2.2 Right of Access

As provided in OAR 860-082-0020, PGE will have access to the Applicant's premises for any reasonable purpose in connection with the Interconnection Application and any Interconnection Agreement that is entered in to pursuant to this Rule or if necessary to meet the legal obligation to provide service to its customers. Access will be requested at reasonable hours and upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition.

Article 3. Effective Date, Term, Termination, and Disconnection

3.1 Effective Date

The Agreement shall become effective upon execution by the Parties.

3.2 Term of Agreement

The Agreement will be effective on the Effective Date and will remain in effect for a period of twenty (20) years or the life of the Power Purchase Agreement, whichever is shorter or a period mutually agreed to by Parties, unless terminated earlier by the default or voluntary termination by the Interconnection Customer or by action of the Commission.

3.3 Termination

No termination will become effective until the Parties have complied with all applicable laws and any clauses of the Rule or this Agreement applicable to such termination.

3.3.1 The Applicant may terminate this Agreement at any time by giving PGE twenty (20) business days written notice.

3.3.2 Either Party may terminate this Agreement after default pursuant to Article 5.6 of this Agreement.

3.3.3 The Commission may order termination of this Agreement.

3.3.4 Upon termination of this Agreement, the Small Generator Facility will be disconnected from PGE's T&D System at the Applicant's expense. The termination of this Agreement will not relieve either Party of its liabilities and obligations, owed or continuing at the time of the termination.

3.3.4 The provisions of this Article shall survive termination or expiration of this Agreement.

3.4 Temporary Disconnection

PGE or the Applicant may temporarily disconnect the Small Generator Facility from its T&D System for so long as reasonably necessary, as provided in OAR 860-082-0075 of the Rule, in the event one or more of the following conditions or events occurs:

3.4.1 Under emergency conditions, PGE or the Interconnection Customer may immediately suspend interconnection service and temporarily disconnect the Small Generator Facility. PGE shall notify the Applicant promptly when it becomes aware of an emergency condition that may reasonably be expected to affect the Small Generator Facility operation. The Applicant will notify PGE promptly when it becomes aware of an emergency condition that may reasonably be expected to affect PGE's T&D System. To the extent information is known, the notification shall describe the emergency condition, the extent of the damage or deficiency, the expected effect on the operation of both Parties' facilities and operations, its anticipated duration, and the necessary corrective action.

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- 3.4.2 For routine Maintenance, Parties will make reasonable efforts to provide five (5) business days notice prior to interruption caused by routine maintenance or construction and repair to the Small Generator Facility or PGE's T&D system and shall use reasonable efforts to coordinate such interruption.
- 3.4.3 For Forced outages of the T&D System, PGE shall use reasonable efforts to provide the Applicant with prior notice of forced outages to effect immediate repairs to the T&D System. If prior notice is not given, PGE shall, upon request, provide the Applicant written documentation after the fact explaining the circumstances of the disconnection.
- 3.4.4 For disruption or deterioration of service, where PGE determines that operation of the Small Generator Facility will likely cause disruption or deterioration of service to other customers served from the same electric system, or if operating the Small Generator Facility could cause damage to PGE's T&D System, PGE may disconnect the Small Generator Facility. PGE will provide the Applicant upon request all supporting documentation used to reach the decision to disconnect. PGE may disconnect the Small Generator Facility if, after receipt of the notice, the Applicant fails to remedy the adverse operating effect within a reasonable time which shall be at least five (5) business days from the date the Applicant receives PGE's written notice supporting the decision to disconnect, unless emergency conditions exist, in which case the provisions of 3.4.1 of the Agreement apply.
- 3.4.5 If the Applicant makes any change other than Minor Equipment Modifications without prior written authorization of PGE, PGE will have the right to temporarily disconnect the Small Generator Facility.

3.5 Restoration of Interconnection

The Parties shall cooperate with each other to restore the Small Generator Facility, Interconnection Facilities, and PGE's T&D System to their normal operating state as soon as reasonably practicable following any disconnection pursuant to section 3.4.

Article 4. Cost Responsibility and Billing

The Applicant is responsible for the application fee and for such facilities, equipment, modifications and upgrades as required in 860-082-0035.

4.1 Minor T&D System Modifications

Modifications to the existing T&D System identified by PGE and set forth in Attachment A, such as changing meters, fuses or relay settings, are deemed Minor Modifications. It is PGE's sole discretion to decide what constitutes a Minor Modification. The Applicant will bear the costs of making such Minor Modifications as may be necessary to gain approval of an Application.

4.2 Interconnection Facilities

PGE will identify, under the study procedures of an Application review, the Interconnection Facilities necessary to safely interconnect the Small Generator Facility with PGE. Attachment A itemizes the Interconnection Facilities for the Applicant, including the cost of the facilities and the time required to build and install those facilities. The Applicant is responsible for the cost of the Interconnection Facilities.

4.3 Interconnection Equipment

The Applicant is responsible for all reasonable expenses, including overheads, associated with owning, operating, maintaining, repairing, and replacing its Interconnection Equipment.

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4.4 System Upgrades

PGE will design, procure, construct, install, and own any System Upgrades. The actual cost of the System Upgrades, including overheads, is set forth in Attachment A and will be directly assigned to the Applicant. An Interconnection Customer may be entitled to financial compensation from other PGE Interconnection Customers who, in the future, benefit from the System Upgrades paid for by the Interconnection Customer. Such compensation will be governed by separate rules promulgated by the Commission or by terms of a tariff filed and approved by the Commission. Such compensation will only be available to the extent provided for in the separate rules or tariff.

4.5 Adverse System Impact

PGE is responsible for identifying Adverse System Impacts on any Affected Systems and for determining what mitigation activities or upgrades may be required to accommodate a Small Generator Facility. The actual cost of any actions taken to address the Adverse System Impacts, including overheads, shall be directly assigned to the Applicant. The Applicant may be entitled to financial compensation from other public utilities or other Interconnection Customers who, in the future, utilize the upgrades paid for by the Applicant, to the extent as allowed by the Commission. Adverse System Impacts are set forth in Attachment A.

4.6 Billings

PGE may require a deposit of not more than 50% of the cost estimate, not to exceed \$1,000, to be paid up front by the Applicant for studies necessary to complete an Application and to interconnect the Small Generator Facility to the T&D System. PGE may require a deposit of no more than 25% of the estimated costs, not to exceed \$10,000, for Interconnection Facilities necessary to complete an Application and to interconnect the Small Generator Facility to the T&D System. Progress billing, final billing and payment schedules must be agreed to by Parties prior to commencing work.

Article 5. Assignment, Liability, Indemnity, Force Majeure, Consequential Damages, and Default

5.1 Assignment

The Interconnection Agreement may be assigned by either Party upon fifteen (15) business days prior written notice. Except as provided in Articles 5.1.1 and 5.1.2, said assignment shall only be valid upon the prior written consent of the non-assigning Party, which consent shall not be unreasonably withheld.

5.1.1 Either Party may assign the Agreement without the consent of the other Party to any affiliate (which shall include a merger of the Party with another entity), of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement;

5.1.2 The Applicant shall have the right to assign the Agreement, without the consent of PGE, for collateral security purposes to aid in providing financing for the Small Generator Facility. For Small Generator systems that are integrated into a building facility, the sale of the building or property will result in an automatic transfer of the Agreement to the new owner who shall be responsible for complying with the terms and conditions of this Agreement.

5.1.3 Any attempted assignment that violates this Article is void and ineffective. Assignment shall not relieve a Party of its obligations, nor shall a Party's

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obligations be enlarged, in whole or in part, by reason thereof. An assignee is responsible for meeting the same obligations as the Applicant.

5.2 Limitation of Liability and Consequential Damages

A Party is liable for any loss, cost claim, injury, or expense including reasonable attorney's fees related to or arising from any act or omission in its performance of the provisions of an Interconnection Agreement entered into pursuant to the Rule except as provided for in ORS 757.300(4)(c). Neither Party will seek redress from the other Party in an amount greater than the amount of direct damage actually incurred.

5.3 Indemnity

5.3.1 This provision protects each Party from liability incurred to third parties as a result of carrying out the provisions of the Agreement. Liability under this provision is exempt from the general limitations on liability found in Article 5.2.

5.3.2 Each Party shall, to the extent allowed by law, and subject to the limitations imposed by ORS 30.260 to ORS 30.300, if applicable, at all times indemnify, defend, and hold the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demands, suits, recoveries, costs and expenses, court costs, attorney fees at trial and on appeal, and all other obligations by or to third parties (hereinafter "Harm"), arising out of or resulting from its negligent action or failure to meet its obligations under this Agreement. Such indemnity obligation shall be limited to the proportional extent the Harm is caused by the negligence of the indemnified Party.

5.3.3 If an indemnified person is entitled to indemnification under this Article as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under this Article, to assume the defense of such a claim, such indemnified person may at the expense of the indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

5.3.4 If an indemnifying party is obligated to indemnify and hold any indemnified person harmless under this Article, the amount owing to the indemnified person shall be the amount of such indemnified person's actual loss, net of any insurance or other recovery.

5.3.5 Promptly after receipt by an indemnified person of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this Article may apply, the indemnified person shall notify the indemnifying party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying party.

5.3.6 The indemnifying Party shall have the right to assume the defense thereof with counsel designated by such indemnifying Party and reasonably satisfactory to the indemnified person. If the defendants in any such action include one or more indemnified persons and the indemnifying Party and if the indemnified person reasonably concludes that there may be legal defenses available to it and/or other indemnified persons which are different from or additional to those available to the indemnifying Party, the indemnified person shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the indemnifying

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Party shall only be required to pay the fees and expenses of one additional attorney to represent an indemnified person or indemnified persons having such differing or additional legal defenses.

- 5.3.7 The indemnified person shall be entitled, at its expense, to participate in any such action, suit or proceeding, the defense of which has been assumed by the indemnifying Party. Notwithstanding the foregoing, the indemnifying Party (i) shall not be entitled to assume and control the defense of any such action, suit or proceedings if and to the extent that, in the opinion of the indemnified person and its counsel, such action, suit or proceeding involves the potential imposition of criminal liability on the indemnified person, or there exists a conflict or adversity of interest between the indemnified person and the indemnifying Party, in such event the indemnifying Party shall pay the reasonable expenses of the indemnified person, and (ii) shall not settle or consent to the entry of any judgment in any action, suit or proceeding without the consent of the indemnified person, which shall not be reasonably withheld, conditioned or delayed.

5.4 Consequential Damages

Neither Party shall be liable to the other Party, under any provision of the Agreement, for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to the other Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

5.5 Force Majeure

- 5.5.1 As used in this Agreement, a Force Majeure Event shall mean "any act of God, labor disturbance, act of the public enemy, war, acts of terrorism, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment through no direct, indirect, or contributory act of a Party, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure Event does not include an act of negligence or intentional wrongdoing."
- 5.5.2 If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, the Party affected by the Force Majeure Event (Affected Party) shall promptly notify the other Party of the existence of the Force Majeure Event. The notification must specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the Affected Party is taking to mitigate the effects of the event on its performance, and if the initial notification was verbal, it should be promptly followed up with a written notification. The Affected Party shall keep the other Party informed on a continuing basis of developments relating to the Force Majeure Event until the event ends the Affected Party will be entitled to suspend or modify its performance of obligations under this Agreement (other than the obligation to make payments) only to the extent that the effect of the Force Majeure Event cannot be reasonably mitigated. The Affected Party will use reasonable efforts to resume its performance as soon as possible. The Parties shall immediately report to the Commission should a Force Majeure

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Event prevent performance of an action required by Rule that the Rule does not permit the Parties to mutually waive.

5.6 Default

- 5.6.1 No default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of a Force Majeure Event as defined in this Agreement, or the result of an act or omission of the other Party. Upon a default, the non-defaulting Party shall give written notice of such default to the defaulting Party. Except as provided in Article 5.6.2, the defaulting Party shall have sixty (60) calendar days from receipt of the default notice within which to cure such default; provided however, if such default is not capable of cure within sixty 60 calendar days, the defaulting Party shall commence such cure within twenty (20) calendar days after notice and continuously and diligently complete such cure within six (6) months from receipt of the default notice; and, if cured within such time, the default specified in such notice shall cease to exist.
- 5.6.2 If a default is not cured as provided for in this Article, or if a default is not capable of being cured within the period provided for herein, the non-defaulting Party shall have the right to terminate the Agreement by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not that Party terminates the Agreement, to recover from the defaulting Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. Alternately, the non-defaulting Party shall have the right to seek dispute resolution pursuant to Article 7 with the Commission in lieu of default. The provisions of this Article will survive termination of the Agreement.

Article 6. Insurance

A Party is liable for any loss, cost claim, injury, or expense including reasonable attorney's fees related to or arising from any act or omission in its performance of the provisions of this Rule or the Interconnection Agreement entered into pursuant to this Rule.

- 6.1 Pursuant to the Rule adopted by the Commission, PGE may not require the Interconnection Customer to maintain general liability insurance in relation to the interconnection of a Small Generator Facility with an Electric Nameplate Capacity of 200 kW or less. With regard to the interconnection of a Small Generator Facility with an Electric Nameplate Capacity equal to or less than 10 MW but in excess of 200 kW, the Interconnection Customer shall, at its own expense, maintain in force throughout the period of this Agreement general liability insurance sufficient to protect any person (including PGE) who may be affected by the Interconnection Customer's Small Generator Facility and its operation and such insurance shall be sufficient to satisfy the Interconnection Customer's indemnification responsibilities under Article 5.3 of this Agreement.
- 6.2 Within ten (10) business days following execution of this Agreement, and as soon as practicable after the end of each fiscal year or at the renewal of the insurance policy and in any event within ninety (90) calendar days there after, the Interconnection Customer shall provide the Public Utility with certification of all insurance required in this Agreement, executed by each insurer or by an authorized representative of each insurer.
- 6.3 All insurance required by this Article 6 shall name the Public, its parent, associated and Affiliate companies and their respective directors, officers, agents, servants and employees ("Other Party Group") as additional insured. All policies shall contain provisions whereby

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the insurers waive all rights of subrogation against the Other Party Group and provide thirty (30) calendar days advance written notice to the Other Party Group prior to anniversary date of cancellation or any material change in coverage or condition. The Interconnection Customer's insurance shall contain provisions that specify that the policies are primary and shall apply to such extent without consideration for other policies separately carried and shall state that each insured is provided coverage as though a separate policy had been issued to each, except the insurer's liability shall not be increased beyond the amount for which the insurer would have been liable had only one insured been covered. The insurance policies, if written on a Claims First Made Basis, shall be maintained in full force and effect for two (2) years after termination of this Agreement, which coverage may be in the form of tail coverage or extended reporting period coverage if agreed by the Parties.

- 6.4 The Parties agree to report to each other in writing as soon as practical all accidents or occurrences resulting in injuries to any person, including death, and any property damage arising out of this Agreement.
- 6.5 The requirements contained herein as to insurance are not intended to and shall not in any manner limit or qualify the liabilities and obligations assumed by the Parties under this Agreement.

Article 7. Dispute Resolution

Parties will adhere to the dispute resolution provisions in OAR 860-082-0080.

Article 8. Miscellaneous

8.1 Governing Law, Regulatory Authority, and Rules

The validity, interpretation and enforcement of the Agreement and each of its provisions shall be governed by the laws of the State of Oregon, without regard to its conflicts of law principles. The Agreement is subject to all applicable laws. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a governmental authority.

8.2 Amendment

The Parties may mutually agree to amend the Agreement by a written instrument duly executed by both Parties in accordance with provisions of the Rule and applicable Commission Orders and provisions of the laws of the State of Oregon.

8.3 No Third-Party Beneficiaries

The Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.

8.4 Waiver

- 8.4.1 The failure of a Party to the Agreement to insist, on any occasion, upon strict performance of any provision of the Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.
- 8.4.2 The Parties may agree to mutually waive a section of this Agreement so long as prior Commission approval of the waiver is not required by the Rule.
- 8.4.3 Any waiver at any time by either Party of its rights with respect to the Agreement shall not be deemed a continuing waiver or a waiver with respect to any other

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failure to comply with any other obligation, right, or duty of the Agreement. Any waiver of the Agreement shall, if requested, be provided in writing.

8.5 Entire Agreement

The Interconnection Agreement, including any supplementary Form attachments that may be necessary, constitutes the entire Agreement between the Parties with reference to the subject matter hereof and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of the Agreement. There are no other agreements, representations, warranties, or covenants that constitute any part of the consideration for, or any condition to, either Party's compliance with its obligations under the Agreement.

8.6 Multiple Counterparts

The Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

8.7 No Partnership

The Agreement will not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

8.8 Severability

If any provision or portion of the Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other governmental authority; (1) such portion or provision shall be deemed separate and independent; (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling; and (3) the remainder of the Agreement shall remain in full force and effect.

8.9 Subcontractors

Nothing in the Agreement shall prevent a Party from utilizing the services of any subcontractor, or designating a third party agent as one responsible for a specific obligation or act required in the Agreement (collectively subcontractors), as it deems appropriate to perform its obligations under the Agreement; provided, however, that each Party will require its subcontractors to comply with all applicable terms and conditions of the Agreement in providing such services and each Party will remain primarily liable to the other Party for the performance of such subcontractor.

8.9.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under the Agreement. The hiring Party shall be fully responsible to the other Party for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made. Any applicable obligation imposed by the Agreement upon the hiring Party shall be equally binding upon, and will be construed as having application to, any subcontractor of such Party.

8.9.2 The obligations under this Article will not be limited in any way by any limitation of subcontractor's insurance.

8.10 Reservation of Rights

Either Party will have the right to make a unilateral filing with the Commission to modify the Interconnection Agreement. This reservation of rights provision will include but is not limited to modifications with respect to any rates terms and conditions, charges, classification of service, rule or regulation under tariff rates or any applicable State or

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Federal law or regulation. Each Party shall have the right to protest any such filing and to participate fully in any proceeding before the Commission in which such modifications may be considered.

Article 9. Notices and Records

9.1 General

Unless otherwise provided in the Agreement, any written notice, demand, or request required or authorized in connection with the Agreement shall be deemed properly given if delivered in person, delivered by recognized national courier service, or sent by first class mail, postage prepaid, to the person specified below:

If to the Applicant:

Applicant: _____
Attention: _____
Address: _____
City: _____ State: _____ Zip: _____
Phone: _____
Fax: _____
E-mail: _____

If to PGE:

Attention: Small Power Production
Address: 121 SW Salmon St., 3WTC0402
City: Portland State: OR Zip: 97204
Phone: 503-464-7264
Fax: 503-464-2115
E-mail: small.powerproduction@pgn.com

9.2 Records

The utility will maintain a record of all Interconnection Agreements and related Form attachments for as long as the interconnection is in place as required by OAR 860-082-065. PGE will provide a copy of these records to the Applicant or Interconnection Customer within fifteen (15) business days if a request is made in writing.

9.3 Billing and Payment

Billings and payments shall be sent to the addresses set out below:

If to the Applicant (complete if different than Article 9.1 above):

Applicant: _____
Attention: _____
Address: _____
City: _____ State: _____ Zip: _____

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If to PGE (complete if different than Article 9.1 above):

Attention: _____

Address: _____

City: _____ State: _____ Zip: _____

9.4 Designated Operating Representative

The Parties will designate operating representatives to conduct the communications which may be necessary or convenient for the administration of the operations provisions of the Agreement. This person will also serve as the point of contact with respect to operations and maintenance of the Party's facilities:

Applicant's Operating Representative (complete if different than Article 9.1 above):

Attention: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____

Fax: _____

E-mail: _____

PGE's Operating Representative (complete if different than Article 9.1 above):

Attention: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____

Fax: _____

E-mail: _____

9.5 Changes to the Notice Information

Either Party may change this notice information by giving five (5) business days written notice prior to the effective date of the change.

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Article 10. Signatures

IN WITNESS WHEREOF, the Parties have caused the Agreement to be executed by their respective duly authorized representatives.

For the Applicant:

Signature: _____

Printed Name: _____

Title (if applicable): _____

Date: 11.27.2018

For PGE:

Signature: _____ *Jim Cox* *OV BB*

Printed Name: Jim Cox

Title: Director

Date: 11/30/18

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Attachment A

**Description and Costs of Minor Modifications, Interconnection Facilities,
System Upgrades, and Adverse System Impacts**

The following System Upgrades are required:

- Install new primary service and metering package.
- Install a set of SEL-487E relay panels.
- Install transfer trip communication via SEL Mirror Bits including a fiber optic cable from the Dunns Corner Substation to the point of interconnection.

PGE's Responsibilities

PGE will design, procure, install and maintain the new underground service conductor and metering equipment. However, the conduit and trench from the Point of Interconnection to the riser pole will be installed by the Interconnection Customer.

In the Dunns Corner Substation PGE will design, procure, install and maintain a new set of SEL-487E relay panels.

Additionally, transfer trip communication will be implemented from the Dunns Corner Substation to the point of interconnection. A fiber optic line will follow the current distribution route to the site. PGE will provide the meet-me cabinet. PGE's preferred method for transfer trip is Schweitzer's Mirrored Bits communications. During the engineering of the transfer trip protection scheme additional costs or time may be incurred should the existing utility poles need to be replaced or modified to accommodate the fiber optic line.


Interconnection Customers Responsibilities

For the new service the Interconnection Customer will need to trench and install 4" conduit from the Point of Interconnection to the riser pole in accordance with PGE's standards. Additionally, a pull rope will need to be placed in the conduit to allow PGE to pull in the new service conductors.

The Interconnection Customer will also be responsible for the installation of the CT's. The CT's will be provided by PGE and wired by PGE after they have been installed.

Space in the Interconnection Customers switchgear will need to be made available for a meet-me cabinet where PGE can connect the fiber optic line to the Interconnection Customers equipment.

The Interconnection Customer will acquire all necessary property rights and permits for the construction of the required Interconnection Facilities as well as distribution line easements (meeting PGE requirements), including easements for PGE's owned underground cable route for the new service.


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New Primary Service and Metering Package	\$30,000.00
Protection Requirements	\$148,000.00
Communications Requirements	\$65,000.00
Total	\$243,000.00

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Attachment B

**Description of Interconnection Facilities
and Metering Equipment Operated or Maintained by the Public Utility**

PGE will only own the following interconnection equipment at the site:

- Primary voltage service conductors from PGE's area feeder circuit to the termination point in PV plant's switchgear, and
- Metering equipment (Meter, potential transformers, current transformers and associated wiring) that will be installed in the applicant-supplied switchgear.

There is no routine maintenance that PGE would conduct on the aforementioned equipment. If at any time they were damaged or otherwise need maintenance, the Applicant, or any subsequent assignees of this Agreement, is responsible for all associated costs. If at any point, the Applicant wishes to make any changes to the Interconnection Facilities that require PGE personnel or equipment, the Applicant is responsible for all associated costs.

The Applicant shall pay for the cost of the Interconnection Facilities itemized in this Agreement as well as design, engineering, procurement, construction, and commissioning costs of PGE provided interconnection facilities and distribution upgrades contemplated by this Agreement. The cost set forth herein is only for the scopes of work that will be performed by PGE. Costs for any work being performed by the Applicant or for any Applicant-owned, supplied and installed equipment and associated design and engineering are not included.

PGE will not perform services under this Agreement until payments are received by PGE as set forth under this Agreement. Payments must be received by PGE within thirty (30) calendar days of the issuance of PGE's invoice to Applicant. Applicant will be in default per Section 5.6 of the Agreement if PGE does not receive payment of any sum due to PGE within said (30) days.

Within one hundred and twenty (120) calendar days of completing the construction and installation of PGE's interconnection facilities and Distribution Upgrades described in this Agreement, PGE shall provide Applicant with a final accounting report of any difference between (1) the actual cost incurred to complete the construction and installation and the budget estimate provided to the Applicant and a written explanation for any significant variation; and (2) the Applicant's previous deposit and aggregate payments to PGE for such interconnection facilities and distribution upgrades. If the Applicant's cost responsibility exceeds its previous deposit and aggregate payments, PGE shall invoice the Applicant for the amount due and the Applicant shall make payment to PGE within thirty (30) calendar days. If the Applicant's previous deposit and aggregate payments exceed its cost responsibility under this Agreement, PGE shall refund to Applicant an amount equal to the difference within thirty (30) calendar days of the final accounting report.

The Applicant will acquire all necessary property rights and permits for the construction of the required facilities as well as distribution line easements (meeting PGE requirements), including easements for PGE's owned underground cable route for the new service.

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Attachment C

One-Line Diagram

One-line diagram depicting the Generator Facility, Interconnection Facilities, metering equipment, and upgrades including safety lockout features and any special accessibility requirements.

To be filled in with as-built drawings later

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Attachment D

Scope of Work/Milestones

In-Service Date: February 17, 2020

Critical milestones and responsibility as agreed to by the Parties:

	Milestone/Date	Responsible Party
(1)	<u>Executed Interconnection Agreement / 11-28-2018</u>	<u>Applicant</u>
(2)	<u>\$10,000 of Estimated Cost / 11-28-2018</u>	<u>Applicant</u>
(3)	<u>Engineering Design Starts / 12-21-2018</u>	<u>PGE</u>
(4)	<u>\$71,000 of Estimated Cost / 4-19-2019</u>	<u>Applicant</u>
(5)	<u>*Engineering Design Complete / 4-19-2019</u>	<u>PGE</u>
(6)	<u>PGE Construction Scheduled / 8-1-2019</u>	<u>PGE</u>
(7)	<u>Remaining Balance of \$81,000 / 9-1-2019</u>	<u>Applicant</u>
(8)	<u>Switchgear Installed and Inspection / 12-16-2019</u>	<u>Applicant</u>
(9)	<u>Interconnection Facilities Complete / 1-17-2020</u>	<u>PGE</u>
(10)	<u>Testing and Commissioning / 2-3-2020</u>	<u>Applicant</u>
(11)	<u>In-Service Date / 2-17-2020</u>	<u>PGE</u>

* During the design of the communication scheme additional costs or time may be incurred should the existing utility poles need to be replaced or modified to accommodate the fiber optic line.

PGE does not guarantee completion of any project on a targeted date as the schedule is dependent on a number of variables, including but not limited to, construction of other potential interconnection projects.

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Attachment E

Additional Operating Requirements

No additional operating requirements have been placed on **Applicant**

List of Contractors Approved to Conduct "Customer Pathway Work" (as defined in PGE's Response to Sandy River Solar's Data Request No. 037) in PGE's Right of Way Under PGE's Permit

Effective on December 26, 2018 – Subject to Change Without Notice – Customer Must Confirm with PGE that Contractor is Still Approved Before Use

A T Underground, Inc.	Duke Construction & Excavation, LLC
A-Affordable Septic Serv.	Earthworks Excavation and Constr., Inc
Aaken Corporation	EC Company
ADK Electric	Eddy Excavation, LLC
Advanced Boring Specialists, Inc.	Elkhorn Construction LLC
Alltech Directional Drilling Inc.	Elk Mountain Construction, Inc.
At Grade Construction, Inc.	Environmental Works, LLC
BANR Enterprises, LLC	The Excavators LLC
BCA Directional Drilling, LLC	Excavators NW, Inc.
BCA Construction, LLC	Ferrari Enterprises, Inc.
Brothers Construction, Inc.	Flying H Construction
Benting Construction, Inc.	Folden Construction, Inc.
Bill Erickson Heavy Construction	GT Excavating, LLC
Black Diamond Homes Inc	Global Electric Inc.
Black Rock Underground LLC	Goodfellow Bros., Inc.
Blu Construction, LLC	Granite Construction Company
Breaking Ground Excavation, Inc.	Green Construction Inc.
Brian Clopton Excavating, Inc.	Green Deconstruction Services Inc.
Bulls Eye Directional Boring Inc.	Green Power Electrical Contractors Inc
Canby Excavating, Inc	Gregory Pacific Corp
Capstone Solutions, Inc.	Hal's Construction Inc.
Cascade Utilities Inc.	Hamilton Excavating LLC
Chris Cory Excavating LLC	Hewett Construction LLC
CivilWorks NW, Inc.	Hillsboro Pump Service
Complete Inc	Pipe & Supply Inc.
CRN Excavation Inc.	HPS Construction, Inc.
Cunningham Construction Inc.	I & E Construction, Inc.
Curtis Heintz Excavating, Inc.	Iowa Hill Farms, Inc
D Fischer Excavating, Inc.	JDI Construction NW, LLC
D & T Excavation, Inc	JD Rainwater, Inc.
Dalke Construction Co	JKR Construction LLC
David Linn Trucking & Excavation LLC	KPDM Properties LLC
Day Management Corp dba Day	Jackson Industries, LLC
Wireless Systems	Jeff Miller Construction, Inc.
Demolition Contractors, Inc.	JK Directional Bore, Inc.
Don Burke Excavation	Jonas Co.
Downing Diversified, LLC	JT Underground LLC

JW Underground, Inc.
Ken Leahy Construction Inc.
Kevin Noland Driscoll
Konell Construction & Demolition
Lawson Corp Excavation
Leggett Asphalt Inc.
Linescape LLC
LMS Earthworks LLC
Lovett Services
M&M Construction Services
Majestic Floors & Countertops, LLC
Matton Utility Inc.
McDonald Excavating, Inc.
Moore Excavation, Inc.
N8 Excavation
North Sky Communications LLC
Northwest Drilling and Boring
Northwest Metal Fab & Pipe
Pacific National Development Inc.
Pacific Underground Co.
Paragon Excavation, LLC dba Paragon
Northwest
Parker Pacific Development LCC
Professional Underground Services, Inc.
RDF Builders Co
Ranes Excavating Inc.
Reynolds Sewer, Inc.
RG Construction & Associates LLC

River City Environmental Inc.
Rychart Excavation, Inc.
S & W Underground, Inc.
Sanitech LLC
Saunders Company, Inc., The
Scott Lee Excavating, Inc.
Sonicom Corporation
Stellar J Construction, Inc.
Strauss Excavating, Inc.
Strickland Directional Drilling, LLC
Subcom Excavation & Util.
Taking Care of Business LLC
TCJ Construction Co, Inc.
Ted Riehl Excavating & Trucking, Inc.
Ted Rudiger Jr Excavation Inc
TFT Construction Inc
Thorud Companies, Inc.
Torry L. Collins Inc.
Tri-County Construction Co.
V&K Nussbaumer Enterprises, LLC
Weitman Excavation, LLC
Westech Construction, Inc.
WHO ltd
Willamette Construction Services, Inc.
dba: LaneCo, Inc.
Willamette Valley Excavating LLC
Willamette Valley Underground, Inc.