

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

UM 1971

**Served electronically at Salem, Oregon, September 28, 2018, to:**

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Re: UM 1971, WACONDA SOLAR, LLC, Complainant, vs. PORTLAND GENERAL ELECTRIC COMPANY (PGE), Defendant. Pursuant to ORS 756.500.

WACONDA SOLAR, LLC, has filed a complaint against PGE. A copy of the complaint is attached and served on Respondent, under ORS 756.512(1). The Commission has assigned Docket No. UM 1971 to this complaint. Please use this number whenever you refer to this case.

The Public Utility Commission must receive an Answer from the Respondent or its attorney by October 18, 2018, under OAR 860-001-0400(4)(a). A copy must be served on the complainants.

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

PUBLIC UTILITY COMMISSION OF OREGON

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

cc: Barbara Parr, [barbara.parr@pgn.com](mailto:barbara.parr@pgn.com)

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Attachments: Complaint  
Notice of Contested Case Rights and Procedures

## NOTICE OF CONTESTED CASE RIGHTS AND PROCEDURES

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

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

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

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

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

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

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

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

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**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

WACONDA SOLAR, LLC,

Complainant,

v.

PORTLAND GENERAL ELECTRIC  
COMPANY,

Defendant.

DOCKET NO. \_\_\_\_\_

COMPLAINT

**I. INTRODUCTION**

This is a complaint (“Complaint”) filed by Waconda Solar, LLC (“Waconda Solar” or “Complainant”) with the Oregon Public Utility Commission (the “Commission” or “OPUC”) against Portland General Electric Company (“PGE”) under ORS 756.500 and OAR 860-001-0170. PGE failed to comply with the Commission’s rules in the processing of Waconda Solar’s interconnection application for its Waconda Solar project, which is a qualifying facility (“QF”) under the Public Utility Regulatory Policies Act of 1978 (“PURPA”). The parties have not yet executed an interconnection agreement. Waconda Solar is seeking three forms of relief from the Commission and asks that the

Commission require PGE to: 1) provide complete and accurate information in its Feasibility Study; 2) provide complete and accurate information of its existing system configuration, provide reasonable access, and reasonably cooperate so that Waconda Solar can obtain an independent System Impact Study; and 3) allow Waconda Solar, subject to PGE's reasonable oversight, to hire qualified and experienced third-party consultants to properly and safely complete the interconnection studies.

Under Oregon's administrative rules, interconnection customers have the right to an independent System Impact Study in addition to the one performed by the utility. Further, the utility and interconnection customer may agree to allow the customer to hire a third-party to conduct any of the studies in lieu of the utility. PGE previously agreed that PGE and an applicant could agree to allow the applicant to hire third-party consultants to complete any interconnection facilities and system upgrades. The Commission found that it is also appropriate to allow a utility and an applicant to agree to allow the applicant to hire third-party consultants to complete any required studies. Such work and studies are subject to PGE's review and approval, but this cannot be unreasonably withheld.

Waconda Solar requests that the Commission order PGE to allow Waconda Solar to hire its own third-party consultant to conduct the remaining two studies pursuant to OAR 860-082-0060(9) and order PGE to provide reasonable information about its system, so Waconda Solar can have an independent System Impact Study under OAR 860-082-0060(7)(h). PGE has a history of preparing interconnection studies that contain errors and inaccuracies, do not adequately contain all of the information required by the Commission's rules, and are delayed past the study timelines. Waconda Solar also

requests that it be allowed to hire its own third-party consultant because PGE made a number of errors in the initial Feasibility Study for the Waconda Solar project.<sup>1</sup> These numerous errors included but were not limited to basic information such as the total existing and proposed generation on the distribution line and the rating of the substation transformer (among others). Waconda Solar immediately inquired into these errors, and after a couple weeks of prodding, PGE finally admitted that it made some errors in the study. Then, only after Waconda Solar requested it, PGE finally provided a revised Feasibility Study more than a month after the initial study was provided. The revised Feasibility Study corrected some errors but still states two differing values for the total amount of generation on the substation transformer among other errors and inconsistencies. Waconda Solar immediately inquired into the errors in the Revised Feasibility Study, but as of the date of this filing, has not received a response.

The information contained in the interconnection studies is critical to understanding the feasibility of the projects and the potential impacts and costs of those impacts. It causes significant delays and costs on interconnection customers when studies are delayed, inaccurate, or incomplete. Interconnection customers should not be required to spend additional time and resources deciphering PGE's studies and prodding PGE for clarifications and revisions.

Waconda Solar also requests that the Commission order PGE to allow Waconda Solar to hire its own third-party consultant because the interconnection is a relatively

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<sup>1</sup> The Feasibility Study is the first of three studies in PGE's interconnection process. The second is the System Impact Study, and the third is the Facilities Study.

straightforward distribution level interconnection. This interconnection does not involve any major work such as a substation rebuild. As such, PGE should not have any concerns about having a third-party consultant perform the studies and the studies should also be straightforward.

Despite numerous requests, PGE has flatly refused to allow Waconda Solar to hire third-party consultants to complete the remaining two studies. Additionally, when Waconda Solar requested to simply have an independent System Impact Study performed in addition to PGE's study, PGE did not address the issue or provide any explanation. Despite a request to explain under what conditions that it would allow Waconda Solar to hire a third party consultant. Thus, it is not clear if PGE is no longer willing to allow any interconnection customer to retain a third party consultant or if PGE has any specific concerns or objections relevant to Waconda Solar's request.

It is reasonable to allow Waconda Solar to hire a third party because, among other things, PGE itself sometimes hires third parties, PGE's small generator interconnection department is understaffed, the interconnection is relatively straightforward, and a third-party can likely complete the work more quickly and at higher quality. Yet, PGE has outright refused Waconda Solar's request giving no reasoned explanation whatsoever. Waconda Solar understands that any third-party consultant work would be subject to PGE's reasonable oversight and approval. With that, Waconda Solar requests that the Commission resolve this dispute between PGE and Waconda Solar and grant the relief requested herein.

## **II. SERVICE**

Copies of all pleadings and correspondence should be served on Complainant's counsel and representatives at the addresses below:

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In support of this Complaint, Complainant alleges as follows:

## **III. IDENTITY OF THE PARTIES**

1. PGE is an investor-owned public utility regulated by the Commission under ORS Chapter 757. PGE is headquartered at 121 Southwest Salmon Street, Portland, Oregon 97204.

2. Waconda Solar, a limited liability company organized under the laws of the state of Oregon, is the controlling owner and manager of the Waconda Solar project and will be the seller of the output from the Waconda Solar project. Waconda Solar's address is 3519 NE 15<sup>th</sup> Ave., Suite 325, Portland, OR 97212.

## **IV. APPLICABLE STATUTES AND RULES**

3. The Oregon statutes expected to be involved in this case include: ORS 756.040- 756.068, 756.500-756.558, 756.990, 757.325 and 758.505-758.575. The Oregon rules expected to be involved in this case include: OAR 860-001, 860-029, and 860-082.

4. The federal statute expected to be involved in this case is PURPA, 16 USC 824a-3. The federal rules expected to be involved in this case include: 18 CFR 292.101-292.602.

## **V. JURISDICTION**

5. FERC adopted regulations and policies governing utility purchases from QFs under PURPA. 18 CFR 292.101-292.602. State regulatory agencies are required to implement FERC's regulations. See 16 USC 824a-3(f); FERC v. Mississippi, 456 U.S. 742, 751 (1982).

6. Specifically, the state agencies that implement PURPA have authority to determine the manner for payment of interconnection costs by QFs. 18 CFR 292.306.

7. The Commission is the Oregon state agency that implements the state and federal PURPA statutes. ORS 758.505(3); OAR 860-029-0001; Snow Mountain Pine Co. v. Maudin, 84 Or App 590, 593 (1987). Public utilities are defined in ORS 758.505(7), and include PGE. The Commission has the power and jurisdiction to hear complaints by QFs against public utilities, including PGE. ORS 756.040, 756.500-756.558, and 758.505-758.555; OAR 860-001-0010(3), and 860-029-0030.

## **VI. FACTUAL BACKGROUND**

8. The Waconda Solar project will be a 2.25 megawatt ("MW") nameplate capacity solar QF located in Marion County, Oregon.

9. Waconda Solar sent a complete Interconnection Application to PGE on March 20, 2018.

10. PGE assigned the Waconda Solar project queue number SPQ0172.



11. PGE never notified Waconda Solar in writing whether or not its interconnection application was complete.
12. PGE held a scoping call on April 11, 2018.
13. The Waconda Solar interconnection is a relatively straightforward distribution level interconnection.
14. On April 12, 2018, PGE sent Waconda Solar a Feasibility Study Agreement.
15. On April 17, 2018, Waconda Solar emailed the executed Feasibility Study Agreement and placed a hard copy in the mail with the deposit check.
16. The Feasibility Study Agreement states that PGE shall perform the Feasibility Study consistent with OAR 860-082-0060(6).
17. The Feasibility Study Agreement states that the results shall be transmitted to Applicant within sixty (60) calendar days after the agreement is signed by the parties.
18. On May 21, 2018, Waconda Solar executed a Standard Renewable In-System Variable Power Purchase Agreement with PGE, which PGE counter-signed on June 4, 2018 (available at: <https://edocs.puc.state.or.us/efdocs/HAQ/re143haq164533.pdf>).
19. On July 10, 2018, PGE provided a Feasibility Study (attached hereto as Attachment A).
20. There are a number of errors and inconsistencies in PGE's Feasibility Study dated July 10, 2018.
21. The Feasibility Study starts out stating that Waconda Solar's interconnection application was received April 23, 2018, which is incorrect since the

interconnection application was sent a month prior to that on March 20, 2018 and the Feasibility Study Agreement was provided by PGE before that date on April 12, 2018.

22. The Feasibility Study states that “As set forth in the Oregon Administrative Rules 860-082-0085(29), PGE has assigned queue number SPQ0172 to the Interconnection Request.” No such administrative rule exists.

23. The Feasibility Study included sections on “Feasibility Study Scope,” “Feasibility Study Assumptions,” “Feasibility Study Interconnection Requirements,” a “Cost Estimate,” and a “Schedule.”

24. The Feasibility Study stated that it “normally consists of the following,” and then lists a number of items including documentation of impacts observed in meeting North American Electric Reliability Corporation and Western Electricity Coordination Council system performance criteria; however, nowhere in the study is there documentation of any impacts.

25. The Feasibility Study states that the proposed and existing generation on the distribution line is 15.47 MW, but that the proposed and existing generation at the substation is somehow lower at 12.45 MW; this is incorrect because the sum of the generation on all the distribution lines feeding into the transformer cannot exceed the total generation on at that transformer.

26. The Feasibility Study further stated that the substation transformer was rated at 14 MW with proposed and existing generation of 15.47 MW; this is incorrect because the transformer is actually rated 25 MW.

27. The Feasibility Study does not contain any information on any studies that were performed, the results of those studies, or the analysis of those studies.

28. The Feasibility Study estimated the costs of the interconnection at \$650,000 for “distribution modifications,” and \$300,000 for “protection requirements” for a total of \$950,000.

29. The Feasibility Study does not provide any detail associated with the estimated interconnection costs for “distribution modifications,” or for “protection requirements.”

30. It is not clear what PGE means in its Feasibility Study by “distribution modifications” and “protection requirements.”

31. The Feasibility Study estimated that it will take approximately 18 months to design, procure and construct the facilities.

32. At the same time PGE provided the Feasibility Study on July 10, 2018, PGE also provided the System Impact Study Agreement, indicating that it is due in 15 business days on July 31, 2018, if Waconda Solar “elect[s] to proceed.”

33. On July 12, 2018, Waconda Solar emailed PGE asking that PGE provide the actual studies and analysis behind the interconnection requirements in the Feasibility Study and for PGE to clarify some of the errors and inconsistencies in the study.

34. PGE delayed responding to Waconda Solar’s questions.

35. PGE also delayed significantly in responding to questions from Waconda Solar’s same developer, TLS Capital, Inc. (“TLS Capital”), on other projects; in one instance (Mt. Hope Solar) PGE did not respond for at least 57 days to TLS Capital’s questions on one study, despite TLS Capital following up with PGE on numerous occasions.

36. Waconda Solar followed up with PGE on July 17, July 25 and July 27, 2018 asking PGE to please respond to its questions.

37. In its July 27, 2018 email, Waconda Solar returned the executed System Impact Study Agreement to PGE “solely to preserve Waconda Solar’s position in the interconnection queue.”

38. In its July 27, 2018 email, Waconda Solar also requested that PGE allow it to hire third-party consultants for the remainder of the studies “because of the inconsistencies within the Feasibility Study and the fact that portions of it are simply not correct.”

39. On July 27, 2018, PGE responded that it was in the process of addressing Waconda Solar’s questions.

40. On July 27, 2018, Waconda Solar replied again stating that it would like to hire a third-party consultant complete the remaining studies.

41. On July 27, 2018, PGE responded that “[t]here are some errors that I can clear up.”

42. PGE erred in the Feasibility Study by stating that the proposed and existing generation on the distribution line is 15.47 MW; it should have read 11.65 MW.

43. PGE erred in the Feasibility Study by stating that the substation transformer was rated at 14 MW; it should have read 25 MW.

44. PGE erred in the Feasibility Study by incorrectly stating the portion of the distribution line that would need to be re-conducted.

45. On July 27, 2018, Waconda Solar replied to PGE and requested that PGE provide an updated Feasibility Study to correct the errors.

46. In its July 27 email, Waconda Solar also again asked that PGE agree to allow Waconda Solar to hire third-party consultants to complete the remainder of the studies.

47. In its July 27 email Waconda Solar also asked PGE further clarifying questions.

48. On August 9, 2018, PGE responded that it is “unwilling to agree” to Waconda Solar’s request for have future studies conducted by a third-party consultant.

49. On August 16, 2018, PGE provided a Revised Feasibility Study (attached hereto as Attachment B).

50. PGE’s Revised Feasibility Study still contained errors and inconsistencies.

51. The Revised Feasibility Study corrects a statement that the proposed and existing generation totals 11.65 MW on the distribution line.

52. The Revised Feasibility Study corrects a statement that the substation transformer is rated at 25 MW.

53. The Revised Feasibility Study included new sections of the distribution line to be re-conducted.

54. The Revised Feasibility Study added a statement that the total amount of generation on the substation transformer is 15.95 MW, but still contained an inconsistent statement that the amount of existing and proposed generation on the substation transformer totals 12.45 MW.

55. The Revised Feasibility Study included sections on “Feasibility Study Scope,” “Feasibility Study Assumptions,” “Feasibility Study Interconnection Requirements,” a “Cost Estimate,” and a “Schedule.”

56. The Revised Feasibility Study stated that it “normally consists of the following,” and then lists a number of items including documentation of impacts observed in meeting North American Electric Reliability Corporation and Western Electricity Coordination Council system performance criteria; however, nowhere in the study is there documentation of any impacts.

57. The Revised Feasibility Study does not contain any information on any studies that were performed, the results of those studies, or the analysis of those studies.

58. The Revised Feasibility Study estimated the costs of the interconnection at \$650,000 for “distribution modifications,” and \$300,000 for “protection requirements” for a total of \$950,000.

59. It is not clear what PGE means in its Revised Feasibility Study by “distribution modifications” and “protection requirements.”

60. The Revised Feasibility Study does not provide any detail associated with the estimated interconnection costs for “distribution modifications,” or for “protection requirements.”

61. The Revised Feasibility Study estimated that it will take approximately 18 months to design, procure and construct the facilities.

62. On August 17, 2018, Waconda Solar emailed PGE asking that PGE provide an accurate and correct study and to clarify some of the errors and inconsistencies in the Revised Facility Study.

63. PGE has not responded to Waconda Solar’s August 17, 2018 email.

64. PGE has a history of making errors in its interconnection studies.

65. TLS Capital experienced PGE's errors and inconsistencies in a number of other studies for other projects.

66. For Mt. Hope Solar, PGE gave Mt. Hope Solar an interconnection study that double counted some upgrades or requirements.

67. For Eola Solar, PGE gave Eola Solar a facility study where the estimated costs nearly doubled from the system impact study despite no changes in the requirements; PGE claims that this was the result of PGE's clerical error.

68. For Brush College Solar, PGE gave Brush College Solar a facility study with 61% higher costs than what was in the system impact study again, despite there being no changes to any of the requirements.

69. For Brush College Solar, PGE provided Brush College Solar with a facility study but when Brush College Solar questioned PGE on certain aspects of the study, PGE determined that voltage regulator was not actually needed.

70. For Sandy River Solar, PGE provided Sandy River Solar with a system impact study that required a recloser that was not actually needed, and PGE removed that requirement in the facility study.

71. For Mountain Meadow Solar, PGE provided Mountain Meadow Solar with a feasibility study that did not identify all adverse system impacts and the study was not accurate; it said the project would cause backfeed into the substation despite a load on the line that far exceeded the total generation.

72. In short, TLS Capital, who is the developer working on the Waconda Solar project, has experienced a number of errors and inconsistencies in PGE's interconnection studies.

73. PGE has a history of making errors in its studies.
74. PGE has a history of missing interconnection application timelines and study timelines.
75. PGE has a history of providing inadequate studies that do not contain the information required by the Commission's rules.
76. PGE's errors result in dramatically different cost estimates.
77. PGE's delays in the interconnection process cause financial harm to QFs.
78. PGE's interconnection department is understaffed.
79. Waconda Solar needs to make informed business decisions about its project.
80. Waconda Solar believes that it will get more accurate and more detailed interconnection studies from a third-party consultant.
81. Waconda Solar believes that it will be better able to make informed business decisions with interconnection studies performed by a third-party consultant.
82. PGE itself hired third-party consultants.
83. On August 24, 2018, Waconda Solar again asked PGE to allow it to hire a third-party consultant to complete the remainder of the studies under OAR 860-082-0060(9).
84. Also, on August 24, 2018, Waconda Solar informed PGE of its intent to have an independent System Impact Study performed under OAR 860-082-0060(7)(h) in addition to PGE's own study, and requested that PGE provide the existing system configuration.



85. On September 7, 2018, PGE responded that it denies Waconda Solar's request to hire a third-party consultant under OAR 860-082-0060(9).

86. PGE provided no explanation as to why it was denying the request.

87. PGE's September 7 letter did not respond to Waconda Solar's request to have an independent System Impact Study performed under OAR 860-082-0060(7)(h).

## VII. LEGAL CLAIMS

### **Complainant's First Claim for Relief**

**Waconda Solar is entitled to relief because PGE failed to provide complete and accurate information in both its Feasibility Study and revised Feasibility Study**

88. Complainant re-alleges all the preceding paragraphs.

89. PGE is obligated to purchase a QF's net output that is directly or indirectly made available to PGE. 18 CFR 292.303(a), 292.304(d); ORS 758.525(2), 758.535(2)(a)&3(b); OAR 860-029-0030(1).

90. PGE is obligated to make interconnections with any QF that may be necessary to accomplish the required purchases. 18 CFR 292.303(c); OAR 860-029-0030(3).

91. PGE is obligated to provide a copy of the Feasibility Study to Waconda Solar. OAR 860-082-0060(6)(g).

92. PGE is obligated to provide reasonably accurate information to Waconda Solar and correct its errors.

93. PGE is obligated to in its Feasibility Study, identify any potential adverse system impacts on its transmission or distribution system that may result from the interconnection of the Waconda Solar project. OAR 860-082-0060(6)(e).

94. PGE violated the Commission's rules by failing to provide a Feasibility Study with accurate information.

95. PGE violated the Commission's rules by failing to identify articulate the results of its studies in either the Feasibility Study or the Revised Feasibility Study.

96. PGE violated the Commission's rules by failing to identify the potential adverse system impacts in either its Feasibility Study or revised Feasibility Study that are driving the interconnection requirements.

97. Waconda Solar is entitled to relief because PGE's failure to provide a complete and accurate Feasibility Study is in violation of the Commission's rules.

#### **Complainant's Second Claim for Relief**

**Waconda Solar is entitled to relief because PGE unreasonably withheld its consent to allow Waconda Solar to hire a third-party consultant to complete the remainder of its interconnection studies or to complete an independent System Impact Study.**

98. Complainant re-alleges all the preceding paragraphs.

99. PGE may contract with a third-party consultant to complete a feasibility study, system impact study, or facilities study. OAR 860-082-0060(9).

100. PGE and Waconda Solar may agree in writing to allow Waconda Solar to hire a third-party consultant to complete a feasibility study, system impact study, or facilities study, subject to PGE's oversight and approval. OAR 860-082-0060(9).

101. Waconda Solar has a right to have an independent System Impact Study completed. OAR 860-082-0060(7)(h).

102. PGE has an obligation to not unreasonably refuse to grant its consent to allow Waconda Solar to hire a third-party consultant to complete the interconnection studies.

103. The Commission's policy is that it is appropriate to allow applicants to hire third-party consultants.

104. PGE has an obligation to provide a list of approved third-party consultants.

105. PGE has an obligation to inform Waconda Solar of the process upon which PGE will review any third-party consultant selected by Waconda Solar to determine whether they are qualified and have the experience and knowledge to properly and safely perform the studies.

106. PGE has an obligation to provide reasonable information and reasonable access to its system so that an independent System Impact Study can be performed.

107. PGE has not provided any explanation regarding why it has refused to provide its consent for Waconda Solar to hire a third-party consultant to complete the interconnection studies.

108. PGE unreasonably refused to consider and grant its consent to allow Waconda Solar to hire third-party consultants because PGE made numerous errors in Waconda Solar's Feasibility Study.

109. PGE unreasonably refused to consider and grant its consent to allow Waconda Solar to hire third-party consultants because PGE still made numerous errors in Waconda Solar's revised Feasibility Study.

110. PGE unreasonably refused to consider and grant its consent to allow Waconda Solar to hire third-party consultants because PGE cannot respond in a timely manner to Waconda Solar's questions.

111. PGE unreasonably refused to consider and grant its consent to allow Waconda Solar to hire third-party consultants because PGE's interconnection department is understaffed.

112. PGE unreasonably refused to consider and grant its consent to allow Waconda Solar to hire third-party consultants because PGE has and continues to provide interconnection studies with inconsistent and erroneous information.

113. PGE unreasonably refused to consider and grant its consent to allow Waconda Solar to hire third-party consultants because PGE itself has been hiring third-parties.

114. PGE unreasonably refused to consider and grant its consent to allow Waconda Solar to hire third-party consultants because PGE has a history of providing inaccurate studies.

115. PGE unreasonably refused to consider and grant its consent to allow Waconda Solar to hire third-party consultants because PGE has a history of providing inadequate studies that are missing the information required by the Commission's rules.

116. PGE unreasonably refused to consider and grant its consent to allow Waconda Solar to hire third-party consultants because PGE has a history of providing studies late or missing the study timelines.

117. PGE unreasonably refused to consider and grant its consent to allow Waconda Solar to hire third-party consultants because a third-party can provide more accurate and more detailed reports.

118. PGE unreasonably refused to consider and grant its consent to allow Waconda Solar to hire third-party consultants because a third-party can complete reports more quickly.

119. It is reasonable to allow Waconda Solar to hire a third-party to complete the remaining studies because PGE has made errors and inconsistencies in its studies prepared in-house.

120. It is reasonable to allow Waconda Solar to hire a third-party to complete the remaining studies because this interconnection is a relatively straightforward distribution level interconnection.

121. If PGE does not have the bandwidth to timely respond to questions regarding errors and inconsistencies in its own studies, then it is reasonable to allow Waconda Solar to hire a third party to complete the remaining studies.

122. It is appropriate for PGE to allow Waconda Solar to hire third-party consultants.

123. Waconda Solar is entitled to relief because PGE's failures to reasonably consider and grant its request to hire a third-party consultant violate the Commission's rules and policies, which result in Waconda Solar incurring additional cost and delay.

### **Complainant's Third Claim for Relief**

**Waconda Solar is entitled to relief because PGE failed to meet interconnection application deadlines required under the Commission’s rules.**

124. Complainant re-alleges all the preceding paragraphs.

125. PGE is obligated to make interconnections with any QF that may be necessary to accomplish the required purchases. 18 CFR 292.303(c); OAR 860-029-0030(3).

126. PGE is obligated to meet “all applicable deadlines in the small generator interconnection rules unless the deadlines have been waived by agreement.” OAR 860-082-0025(7)(g).

127. If PGE cannot meet an applicable deadline, then PGE is obligated to provide written notice to Waconda Solar explaining the reasons for the failure to meet the deadline and an estimated alternative deadline. OAR 860-082-0025(7)(g).

128. PGE is required to provide written notice regarding the completeness of its application to interconnect to Waconda Solar within 10 business days of receipt. OAR 860-082-0025(7)(a).

129. PGE violated the Commission’s rules by failing to notify Waconda Solar that its interconnection application was complete within 10 business days.

130. PGE is required to make reasonable, good-faith efforts to follow the schedule set forth in the Feasibility Study Agreement. OAR 860-082-0060(6)(d).

131. PGE did not make reasonable, good-faith efforts to follow the schedule set forth in the Feasibility Study Agreement.

132. PGE has an obligation to respond within a reasonable amount of time to Waconda Solar’s questions so as to not unduly delay the interconnection process.

133. PGE failed to respond to Waconda Solar's questions within a reasonable amount of time.

134. Waconda Solar is entitled to relief because PGE's failures to meet the Commissions deadlines and reasonably follow its study timeline and respond to questions result in Waconda Solar incurring additional cost and delay.

#### **Complainant's Fourth Claim for Relief**

**Waconda Solar is entitled to relief because PGE subjected Waconda Solar to undue or unreasonable prejudice or disadvantage and treated other people and PGE's own projects with undue or unreasonable preference or advantage.**

135. Complainant re-alleges all the preceding paragraphs.

136. PGE cannot make or give undue preference, unreasonable preference or advantage to any particular person, or subject any particular person to any undue or unreasonable prejudice or disadvantage in any respect. ORS 757.325

137. PGE subjected Waconda Solar to undue and/or unreasonable prejudice or disadvantage by not processing its interconnection application in a timely manner.

138. PGE gave undue preference and/or unreasonable preference to itself and other interconnection applicants by hiring third-party consultants to complete its own interconnection studies or for other interconnection applications.

139. PGE subjected Waconda Solar to undue and/or unreasonable prejudice or disadvantage by refusing to give its consent to allow Waconda Solar to hire third-party consultants to complete the interconnection studies.

140. Waconda Solar is entitled to relief because PGE's undue and unreasonable prejudice against Waconda Solar and PGE's undue and unreasonable preference for its

own interconnections and other interconnection applications violates the Oregon Revised Statutes and will subject Waconda Solar to additional cost and time delay.

### **VIII. PRAYER FOR RELIEF**

WHEREFORE, Complainant respectfully requests the Commission issue an order:

1. Finding PGE in violation of its obligation to provide a complete and accurate Feasibility Study including the results of its studies in the Feasibility Study and the potential adverse system impacts that are driving the interconnection requirements.
2. Finding PGE in violation of its obligation to reasonably consider and consent to Waconda Solar's request to hire a third-party consultant to complete its interconnection studies.
3. Finding PGE in violation of its obligation to provide reasonable information and access so that an independent System Impact Study can be performed.
4. Finding PGE in violation of its obligation to meet interconnection application deadlines.
5. Finding PGE in violation of its obligation to not make or give undue preference, unreasonable preference to any other person or itself, or subject Waconda Solar to undue or unreasonable prejudice or disadvantage in any respect.
6. Requiring that PGE provide a complete and accurate Feasibility Study including a complete and accurate Feasibility Study including the results of its studies in the Feasibility Study and the potential adverse system impacts that are driving the interconnection requirements.



7. Requiring that PGE allow Waconda Solar to hire a third-party consultant to complete its interconnection studies.

8. Requiring that PGE provide reasonable information and access so that an independent System Impact Study can be performed.

9. Requiring that PGE grant an extension of Waconda Solar's power purchase agreement commercial operation date and termination date to account for the delayed in-service date PGE caused.

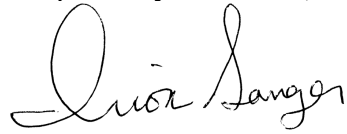
10. Requiring that PGE not make or give undue preference, unreasonable preference to any other person or itself, or subject Waconda Solar to undue or unreasonable prejudice or disadvantage in any respect.

11. Instituting penalties up to \$10,000 pursuant to ORS 756.990 against PGE and paid by PGE's shareholders for each violation of ORS 758.525(2), 758.535(2)(b)&(3)(b), 18 CFR 292.303(a)&(c), 292.304(d), OAR 806-029-0030(1)&(3), 806-082-0025(7), 806-082-0060(5)- (8), and Commission Order Nos. 09-350.

12. Granting any other such relief as the Commission deems necessary.

Dated this 28th day of September 2018.

Respectfully submitted,



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Portland, OR 97215  
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Of Attorneys for Waconda Solar, LLC

## CERTIFICATE OF FILING

I certify that on September 28, 2018, I filed the foregoing Complaint on behalf of Waconda Solar, LLC with the Oregon Public Utility Commission by electronic communication as consistent with OAR 860-001-0170.



Marie P. Barlow  
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marie@sanger-law.com

**Attachment A**

**Feasibility Study for Waconda Solar**

**Dated July 10, 2018**

# Portland General Electric



## Feasibility Study

Interconnection Request:

Waconda Solar – 2.25 MWAC

SPQ0172

July 10, 2018



## **Table of Contents**

1. Introduction .....	3
2. Feasibility Study Scope .....	3
3. Feasibility Study Assumptions .....	4
4. Feasibility Study Interconnection Requirements .....	5
5. Cost Estimate.....	6
6. Schedule .....	6



## **1. Introduction**

On April 23, 2018, Portland General Electric (PGE) received a completed Small Generator Interconnection Request. The Interconnection Request seeks to interconnect a 2.25 MWAC solar facility located in Marion County, Oregon at GPS coordinates 45.072629, -122.913603. The interconnection point will be on PGE's Waconda-13 distribution feeder connected to the Waconda substation.

As set forth in the Oregon Administrative Rules 860-082-0085(29), PGE has assigned queue number SPQ0172 to the Interconnection Request.

On April 26, 2018, PGE received an executed Feasibility Study Agreement with the appropriate deposit from the Interconnection Customer.

The Feasibility Study provides the study results based on the information provided in the Interconnection Request.

The Interconnection Customer will operate this generator as a Qualify Facility as defined by the Public Utility Regulatory Policies Act of 1978 (PURPA).

## **2. Feasibility Study Scope**

The primary purpose of the Feasibility Study is to preliminarily evaluate the feasibility of the Interconnection Request at the designated Point of Interconnection. PGE will also identify any required system additions necessary to accommodate the request. The study normally consists of the following:

- Documentation of any impacts observed in meeting the NERC/WECC System Performance Criteria that are adverse to the reliability of the electric system as a result of the interconnection.
- Documentation of other providers' to the transmission or distribution systems that are impacted, and identification of these providers as Affected Systems. Note, no Affected Systems were identified for this study.
- Documentation of fault interrupting equipment with short circuit capability limits that are exceeded as a result of the interconnection.
- A list of facility additions and upgrades which the applicable power flow, and short circuit analyses determine to be required to accommodate the interconnection.
- A non-binding, good faith estimate of cost responsibilities for making the required additions and system upgrades necessary to accommodate the interconnection.



- A non-binding, good faith estimate of the time to construct the required additions and system upgrades necessary to accommodate the request.

The Feasibility Study considers all generating facilities that, on the date the study was commenced: (i) were directly interconnected to PGE's Distribution System; (ii) were interconnect to Affected Systems and may have an impact on the Interconnection Request; (iii) generating facilities having a pending higher queued Interconnection Request to interconnect to the Distribution System.

### **3. Feasibility Study Assumptions**

The Feasibility Study considerations include the following assumptions for system conditions for all stages and seasons:

- Generating Facilities and identified PGE electrical system upgrades associated with higher queued Interconnection Requests.
- Waconda Solar was modeled at its maximum capability of 2.25 MWac.
- The Point of Interconnection will be on PGE's Waconda-13 distribution feeder.
- The nominal voltage level at the Point of Interconnection will be 13 kV.
- The Interconnection Customer will design, permit, build and maintain all facilities on the customer's side of the Point of Interconnection.
- Line reconductor or fiber underbuild required on existing poles will be assumed to follow the most direct path on the Distribution System. If during detailed design the path must be modified it may result in additional cost and timing delays for the Interconnection Customer.
- Generator tripping may be required under certain outages.
- The Generating Facility is expected to operate during daylight hours every day 7 days a week, 12 months per year. The Point of Interconnection power factor range studied was unity power factor or 1.0 as identified by the Interconnection Customer's Small Generator Interconnection Request.
- The interconnection was studied with eighteen (18) CPS, SCH125TL-DO/US-600 inverters with reactive power capabilities as shown in the provided Small Generator Interconnection Request.
- This report is based on information available at the time of the study.





## 4. Feasibility Study Interconnection Requirements

The Interconnection Request was studied such that 100% of the output of the Generation Facility can be delivered to PGE's Distribution System without displacement of existing or higher queued Interconnection Requests.

### **Distribution System Modifications**

With the addition of Waconda Solar the amount of proposed generation will exceed the thermal limits of the existing conductor. The conductor is currently rated at 336 AAC which has a summer load carrying capacity of 10 MW. Waconda Solar will need to re-conductor approximately 2.5 miles of overhead lines starting at the intersection of Waconda Rd and 50th Ave to the point of interconnection. When you include Waconda Solar the amount of proposed and existing generation totals 15.47 MW.

In addition to the conductor work one capacitor bank and an existing recloser will need to be replaced as they become overloaded with the installation of Waconda Solar. They will be replaced with electronic reclosers.

The installation of a new primary service and metering package will also be needed to service the site.

### **Protection Requirements**

The daytime minimum load on the Waconda-13 feeder is 0.18 MW which occurred on 4/22/2018 at 3:08 pm. Additionally the daytime minimum load on the Waconda BR1 substation transformer is 1.79 MW which occurred on 5/13/2018 at 1:28 pm. The Waconda BR1 substation transformer is rated at 14 MW. When you include Waconda Solar the amount of existing and proposed generation on the BR1 substation transformer totals 12.45 MW.

Under the conditions outlined above the generation can carry the entire BR1 transformer load and will backflow into the transmission system. This causes the potential for the individual generators to feed one another and slows their response time for disconnection during a fault condition. To ensure the generation is offline within 2 seconds a transfer trip protection scheme is required. Transfer trip requires running a fiber optic line from the Waconda Substation to the point of interconnection which is approximately 3 miles.

Additionally, to accomplish transfer trip an RTAC will need to be added at the substation. The RTAC allows PGE to expand the communication connections.



## 5. Cost Estimate

The following estimate represents only the scopes of work that will be performed by the Distribution Provider. Costs for any work being performed by the Interconnection Customer are not included.

<b>Distribution Modifications</b>	\$650,000.00
<b>Protection Requirements</b>	\$300,000.00
<b>Total</b>	<b>\$950,000.00</b>

## 6. Schedule

PGE estimates it will require approximately 18 months to design, procure and construct the facilities described in this report following the execution of an Interconnection Agreement. The schedule will be further developed and optimized during the System Impact Study.

**Attachment B**

**Feasibility Study for Waconda Solar**  
**Revised August 16, 2018**

# Portland General Electric



## Feasibility Study

Interconnection Request:

Waconda Solar – 2.25 MWAC

SPQ0172

Revised August 16, 2018



## **Table of Contents**

1. Introduction .....	3
2. Feasibility Study Scope .....	3
3. Feasibility Study Assumptions .....	4
4. Feasibility Study Interconnection Requirements .....	5
5. Cost Estimate.....	6
6. Schedule .....	6



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The Feasibility Study considers all generating facilities that, on the date the study was commenced: (i) were directly interconnected to PGE's Distribution System; (ii) were interconnect to Affected Systems and may have an impact on the Interconnection Request; (iii) generating facilities having a pending higher queued Interconnection Request to interconnect to the Distribution System.

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### **Distribution System Modifications**

With the addition of Waconda Solar the amount of proposed generation will exceed the thermal limits of the existing conductor. The conductor is currently rated at 336 AAC which has a summer load carrying capacity of 10 MW. Waconda Solar will need to re-conductor approximately 2.5 miles of overhead lines. There are two sections which will need to be reconducted. The first section starts on Waconda Rd near the address of 4307 Waconda Rd NE and ends at Portland Rd. The second section that will need to be reconducted starts near the address of 7020 Wapato St NE and continues south along 71st Ave NE to the point of interconnection.

When you include Waconda Solar the amount of proposed and existing QF generation totals 11.65 MW on the feeder. The total amount of generation on the Waconda BR1 substation transformer is 15.95 MW.

The study identified two protective devices which become overloaded with the installation of Waconda Solar. The first device is an existing hydraulic recloser located on Wapato St NE. The hydraulic recloser is not capable of handling the two-way flow of power. The second device is a 65T Fuse located on pole 1351. Pole 1351 is adjacent to the point of interconnection on Waconda Rd NE. The fuse will become overloaded due to an increase in amps. The increase in amps will exceed the fuse rating with the installation of the generator. Both will need to be replaced with electronic reclosers.

The installation of a new primary service and metering package will also be needed to service the site.

### **Protection Requirements**

The daytime minimum load on the Waconda-13 feeder is 0.18 MW which occurred on 4/22/2018 at 3:08 pm. Additionally the daytime minimum load on the Waconda BR1 substation transformer is 1.79 MW which occurred on 5/13/2018 at 1:28 pm. The Waconda BR1 substation transformer is rated at 25 MW. When you include Waconda Solar the amount of existing and proposed generation on the BR1 substation transformer totals 12.45 MW.

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