

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON**

UM 1971

In the Matter of

WACONDA SOLAR, LLC,

Complainant,

v.

PORTLAND GENERAL ELECTRIC
COMPANY,

Defendant.

DECLARATION OF JOHN LOWE
IN SUPPORT WACONDA SOLAR'S
RESPONSE TO PORTLAND
GENERAL ELECTRIC COMPANY'S
MODIFIED SECOND MOTION FOR
SUMMARY JUDGMENT

I, John R. Lowe, declare under the penalty of perjury as follows:

1. I am the founder and director of the Renewable Energy Coalition (the "Coalition"). This declaration is based on my personal knowledge and, if called to testify to the following facts, I could and would competently do so. I submit this declaration in support of Waconda Solar's Response to PGE's Modified Second Motion for Summary Judgment.
2. My name is John R. Lowe. I am the founder and director of the Renewable Energy Coalition (the "Coalition"). My business address is P.O. Box 25576, Portland, Oregon 97298.
3. In 1975, I graduated from Oregon State University with a Bachelor of Science degree.
4. From 1975 to 2006, I was employed by PacifiCorp. Over most of that 30-year period, my responsibilities were primarily related to PacifiCorp's contracting and policies

under the Public Utility Regulatory Policies Act of 1978 (“PURPA”) throughout the utility’s multi-state service territory, which includes Washington, Oregon, California, Idaho, Wyoming, and Utah. My responsibilities included all contractual matters arising under PURPA and supervision of other matters related to both power purchases and interconnections. In that capacity, I was involved in scores of contract negotiations, helped develop new contract concepts, terms and language, and became familiar with terminology commonly used in the electric utility industry in utility tariffs and written power purchase agreements (“PPA”) for purchases from qualifying facilities (“QF”).

5. Since 2009, I have been directing and managing the activities of the Coalition as well as providing consulting services to individual members of the Coalition related to both power purchases and interconnections. My interconnection work at the Coalition has been primarily related to small generation projects. Generally, when working with PacifiCorp, we have been able to reach a mutually agreeable resolution of the issues, which often resulted in modifications agreed to by the utility.

6. There was a significant amount of PURPA activity during the early 1980s, primarily related to small scale hydroelectric and biomass in PacifiCorp’s service territory. After this initial burst of development, there was only modest development in PacifiCorp’s service territory and almost none in PGE’s service territory. PURPA activity increased following the energy crisis in the early 2000s as well as the Commission’s seminal PURPA cases in Docket No. UM 1129 (establishing new PURPA policies) and AR 521 and UM 1401 (establishing interconnection rules and policies). This resulted in a modest level of new projects selling power to PacifiCorp and Idaho Power (as well as the closure of large co-generation and biomass projects due to

difficulties in those industries and harmful Commission policies). There remained only a very small amount of new projects selling power to PGE. Thus, PacifiCorp and Idaho Power have had nearly forty years of working with and understanding the power purchase and interconnection issues associated with PURPA projects, while PGE has had almost none until the last few years.

7. The changes in the early 2000s resulted in a need to refocus PacifiCorp's efforts on PURPA, including on the interconnection side. I was on the PPA side, but in 2004 I moved over to help on interconnection. I worked with an ad hoc team to establish processes and procedures for PacifiCorp's QF interconnection contracting process and facilitating the design, engineering, and interconnection of small power production facilities. I worked on this until I left PacifiCorp in 2006.

8. In 2007, the AR 521 docket was opened at the Commission to address Oregon's small generator interconnection rules. Due to my past experience working on QF contracting and interconnection, Sorenson Engineering, Inc. ("Sorenson") retained me to advise them and represent them in that proceeding. Sorenson is an engineer, developer, owner, and operator of numerous hydro qualifying facilities. I served as an expert consultant on their behalf and participated in numerous workshops that occurred in the AR 521 process. Sorenson was primarily concerned in this proceeding with two issues: 1) the use of third-party consultants; and 2) the utility's reimbursement of interconnection operations and maintenance ("O&M") expenses over the term of the interconnection agreement. As background, some utilities charged interconnection customers an annual fee for O&M that was equal to a fixed percentage of the up-front interconnection cost, which could be significant. As relevant to the issues in my testimony, Sorenson was

primarily concerned with having the third-party option available so that the QF could have some control over the timing of the interconnection in case the utility failed to meet its deadline, and to reduce the costs of the interconnection.

9. I am providing a declaration in this proceeding because it addresses an issue that I thought the Commission had already resolved: that the QF and the utility could mutually agree to allow the QF to construct interconnection facilities, subject to the reasonable approval and supervision by the utility.

10. Allowing an interconnection customer to hire a third-party is critically important for a number of reasons, some of which I summarize below. First, the utility may be overworked, may have insufficient expertise or experience, or may have insufficient resources to reasonably complete interconnection construction for QFs. This can result in delays and poorly performed studies and interconnection work. Second, the interconnection customer may wish to control the timing of when the interconnection is completed. Third, the interconnection customer may wish to have greater control over the work product, which can lower costs and increase the quality of the interconnection. It is a rare circumstance when a monopoly can beat the market when exposed to well supervised competition. Fourth, the utility is inherently biased against QFs, and has an economic incentive to put QFs out of business. This conflict of interest is especially important when the utility is taking aggressive steps to undermine its PURPA obligations, as PGE is now.

11. When I worked at PacifiCorp, PacifiCorp allowed interconnection customer to construct interconnection facilities or system upgrades or hire a third-party consultant to do.

12. From my understanding, PacifiCorp didn't mind allowing an applicant to hire a third-party consultant to install and build facilities or order equipment for the interconnection as long as the third party was on PacifiCorp's qualified contractor list, there was a process for PacifiCorp to review and approve the third party's work, and the developer was responsible for both the costs of the third party's work and for the cost of PacifiCorp's review and approval efforts.

13. From my understanding, PacifiCorp still allows the interconnection customer to hire third-party consultants to construct its facilities and system upgrades.

14. In AR 521 this third-party issue was addressed in that proceeding.

15. A number of parties raised the issue and commented on it. The issue was extensively discussed in the workshops, which ultimately led to an agreement that an interconnection customer could retain third-party consultants to construct many of the interconnection facilities, as long as the utility retained the ability to approve the consultant and review the final work product. The understanding was that the utility's consent would not be unreasonably withheld, and I believe that most of the parties would be shocked that a utility would take the position that the rules provided it the unilateral right to simply reject an interconnection customer's ability to hire a third-party consultant, regardless of the reasonableness of the request.

16. The Energy Trust of Oregon ("ETO") noted that the originally proposed rules were silent on the time allowed for construction of the upgrades and that the applicant has no means to ensure the construction of the upgrades occurs in a reasonable timeframe. ETO therefore recommended that the utility and interconnection applicant should identify a mutually agreeable timeline for the construction of the upgrades and the date the system

will be able to accommodate the project. Then, if the utility and applicant cannot mutually agree to a timeline, then the applicant should have the option to have the upgrades contracted to an independent contractor to obtain a more favorable timeline. The Renewable Northwest Project (now Renewable Northwest, or “RNW”) also raised the issue noting that one option for “dealing with backlogs of interconnection requests is to draft rules outlining under what situation it would be acceptable for interconnection customers to hire a private third-party contractor licensed to design, construct, and install the requisite system upgrades.” Additionally, Sorenson, who I represented in this proceeding, raised the issue of the interconnection customer’s option to construct, own, and operate interconnection facilities. They asserted that the interconnection customer should be permitted to minimize potential interconnection costs and maximize the financial benefits by having the option to design, construct, operate, maintain, and own interconnection facilities so long as electrical system safety and reliability is not compromised.

17. After the issue was raised, other parties commented on it. PGE “support[ed] the ideas raised by the [ETO] in its November 8, 2007 comments concerning using third-party contractors for interconnection construction,” specifically that the ETO “suggested that if the utility and generator cannot agree on timelines to construct necessary facilities or conduct studies for larger Tier 4 facilities, the generator should be able to substitute third parties to carry out the work.” PGE, however, proposed additional protections, including a review and screening process by the utility to ensure that the contractor is qualified to perform such work, a process for the utility to review any design work and to perform an inspection prior to energization, and finally that PGE would need to be

compensated for any costs associated with such oversight. The Oregon Department of Energy (“ODOE”) also supported ETO’s proposal to allow the use of third-party contractors so as to meet stated timelines and not allow unilateral waivers of such timelines, and ODOE noted that it “agrees with PGE’s oral comment during the November 13, 2007 Hearing that a review and inspection process by the Public Utility is desirable.”

18. The ultimate resolution of the third-party consultant issue in AR 521 was that the Commission adopted the current version of OAR 860-082-0060(8)(f) which provides that “[a] public utility and an applicant may agree in writing to allow the applicant to hire a third-party consultant to complete the interconnection facilities and system upgrades, subject to public utility oversight and approval.” The Commission also provided further guidance in its order noting that “[d]uring the rulemaking proceedings, the participants agreed that a public utility and an applicant to interconnect a small generator facility could agree to allow the applicant to hire third-party contractors to complete any interconnection facilities and system upgrades required by the interconnection, at the applicant’s expense and subject to public utility oversight and approval.”

19. Without interpreting the specific language in the Oregon small generation interconnection rules, my understanding is that the rules were intended to allow an interconnection customer to hire and pay for a third-party contractor, as long as the public utility retained oversight and the ability to approve the contractor. The idea was that the utility could provide a list of acceptable contractors, or could veto a specific contractor, but not that the utility could unreasonably withhold its approval and decide simply not to allow an interconnection customer to hire any third-party contractor.

20. From my knowledge, this Commission rule and policy have not changed for PGE since that order in 2009.

21. Further, from my knowledge, PGE has not requested any relief from that rule.

22. With regards to PGE's current interconnection process I am aware of issues in that process. Over the past few years, PGE has had some issues with meeting deadlines and providing accurate and complete information, including on its cost estimates.

23. More specifically, PGE has not adhered to the standard interconnection study and processing timelines for many projects. See, for example, the complaints filed in UM 1902 through UM 1907 on behalf of the Amity, Butler, Duus, Firwood, Starlight, and Stringtown solar projects; PGE delayed those projects by a minimum of between 115 and 340 days. In another project, PGE did not provide the results of the first study until 12 months after the interconnection application was submitted, and PGE provided no data in the interim. PGE has also held up the progression of the interconnection studies while QF avoided cost rates and PPA contracts were being litigated. PGE has even delayed interconnections by simply failing to respond to inquiries in a timely manner, like, for example, when PGE took 57 days to answer some follow up questions for the Mt. Hope Solar project. In other instances, PGE failed to respond so often that applicants have felt that they have no other option but to show up at PGE's office and ask to speak to the PGE representative that they have been trying to get a hold of. These delays also created potential delays in the commercial operation date for many projects due to the lengthy upgrade timelines provided by PGE. This delay could affect the term of many QF contracts depending on whether the Commission concludes that the fixed price period begins at execution or the time of the commercial operation date. The delays could also

result in a project missing its commercial operation date which subjects the QF to damages, or for more than a year, which could result in a QF having its contract terminated. Delays can cause a wide variety of negative impacts, including affecting a project's ability to obtain or the cost of financing, loss of tax credits or land use permits, increases in the cost of materials or labor, and breaching or paying for damages in other related contracts. Further, there is nothing within PGE's standard small generator interconnection agreement that requires them to meet the dates outlined within that agreement and there is very little recourse that a developer has if those timelines are missed. These dates and timelines are extremely important as developers and project investors make business and investment decisions, relying on these dates to do so.

24. In the last couple years, PGE has also experienced lengthy upgrade timelines. PGE claims they need 36 months to complete the upgrades for many QF projects. Even for some interconnections that required no upgrades, PGE has required the applicant to wait a full year, following a long interconnection study process, before the interconnection can be completed.

25. PGE often fails to even get basic information correct, and has provided some cost estimates in its studies, only to change that estimate after being questioned about certain requirements and removing those requirements. Other projects have been given misinformation or PGE has changed the rules partway through the process, for example by telling a project early in the process that projects 3MW and under will not be subject to communication requirements, then later changing that an indications that communications requirements will include 3MW projects. Also, PGE told applicants that they could reduce the size of projects during the process but not increase the size, only to

change that position later. For example, on the Dunn Rd Solar project, PGE removed a requirement that a recloser be replaced with a new electronic recloser after the applicant went out to the site, took photographs of the existing recloser, and emailed those photographs to PGE showing a date of 2011 along with the spec sheet indicating that the existing recloser was already an electronic recloser. PGE did not deny that it was emailed the photographs and the spec sheet or that PGE responded by indicating that the electronic recloser should not have been included as a requirement, but rather PGE, just attached those emails to its answer as exhibits. It is my understanding that a similar issue occurred in the Sandy River case, where PGE initially required a recloser then removed that requirement. PGE has also changed its costs assumptions partway through the process, for example, by changing its assumption for fiber costs from \$60,000 per mile to \$75,000 per mile, or requiring developers to pay for poles to be replaced, even though PGE has stated that they don't actually look at the poles until after an interconnection agreement is executed. In some instances, PGE has not even provided a schedule for payment or an online date in the interconnection agreement. In those instances, the developer had to contact PGE to create a payment and work schedule for the projects. PGE required a 30% payment in December of 2018 and has not yet contacted the developer regarding the point of interconnection design, and PGE says that it will take a full year to bring those projects online, even though there are no required upgrades. Further, some developers have called PGE to obtain a statement of their interconnection requirements so they can better understand the interconnection design, and PGE's representative have stated that they do not have formal design requirements and that the only way to obtain them is through a phone conversation.

26. In its interconnection agreements, PGE usually provides a schedule for construction and payment, and the developer is required to pay over 30% of the upgrade costs before PGE contacted the developer to begin the point of interconnection design process. For example, see the Dunn Rd Facility Study attached to PGE's Answer in that case as Exhibit C, showing a "1/3 of Estimated Cost" payment required on the same day that the executed interconnection agreement is due, and the "Balance of Estimated Cost" due before the construction is even scheduled. This causes significant issues. For example, another project had an interconnection cost of \$522,500 and an executed interconnection agreement. The developer began making payments according to the schedule. Then the developer of that project heard from another developer that PGE had removed many of the requirements for that project. The developer called PGE to discuss in January 2019. PGE stated that they had known about the change in the requirements since October 2018, and in the meantime, the developer had made a \$348,334 interconnection payment in December 2018.

27. A result of missed deadlines and inaccuracies in the interconnection process is that if the project gets delayed long enough or gets a high-enough interconnection cost estimate, it could kill the project. QF developers are making business decisions at each stage of the interconnection process, evaluating whether the project is still viable and whether it is worth it to continue the process. For example, a QF developer may choose its commercial operation date with consideration of its land use permits and other timelines, but if PGE delays long enough, the project's land-use permit may expire and the project becomes no longer viable. Further, with the project mentioned in my previous statement, PGE gave a cost estimate that was \$377,500 too high. The developer could

have concluded at that stage that the project was uneconomic and given up on it, and the developer may have never found out that PGE gave it an inaccurate estimate. In essence, PGE succeeds in killing the projects when it delays or gives inaccurate information.

28. Those of us like myself and the Commission that work in the utility business tend to forget how unusual it is that a customer has only one service provider to perform the work on their system as with a monopoly utility service. In an ordinary market, the forces of competition and government regulation drive prices down and maintain high quality of service. There are perfectly good reasons why an essential business like the distribution and transmission of electricity should be owned by a monopoly, including reliability, safety and affordability. However, the Commission should strive to use the forces of competition and customer choice to lower cost and increase service quality, as long as the core principles of safety, reliability, and affordability are met. There is no reason why most interconnection facilities cannot be installed by third parties, which are often the same entities that the utility would hire.

29. In addition, there is an inherent conflict of interest here. PGE, as a monopoly utility that owns both generation and distribution/transmission, has an incentive to own generation and not to enter into PPAs with QF developers. That has become apparent to anyone paying attention to the Oregon market in that PGE is doing everything in can within (and often outside of) the law to not enter into contracts with QFs, and creatively interpret its contracts to harm QFs. It appears that PGE's hardball and anti-QF policies are rearing their ugly head in the interconnection process. The Commission should protect customers like Waconda Solar because PGE can effectively put its competition out of business.

30. Regarding remedies for PGE's delays and inaccuracies in the interconnection process, I think it would be appropriate for PGE to agree to allow an interconnection customer to hire a third-party consultant to complete the interconnection work. This would hand over some of the work to an outside entity that does not have the incentive to put interconnection applicants out of business. Further, the original justifications for allowing the applicant to hire third-party consultants were to deal with backlogs of interconnection requests, to get projects on-line by the applicant's desired on-line date, and to do so at potentially lower costs. These issues that PGE is facing are exactly the types of issues that the third-party consultant rules were designed to address.

31. I am not aware of any instance where PGE has allowed an applicant to hire a third-party consultant. It is my understanding that PGE has carte blanche refused to allow any applicant to hire a third-party consultant.

32. It is unreasonable for a utility to say "no" in all circumstances. There are always going to be some instances where it is appropriate to allow the applicant to hire a third-party consultant to complete some or all of the interconnection work. The Commission's small generator interconnection rules were drafted, in part, based on a reliance of what PGE said at the time, that it supported the idea of allowing an applicant to hire a third-party consultant so long as there was utility oversight and approval. Now it is unreasonable for PGE to change its mind later when a complaint is filed against it without first seeking a change to the Commission's policy or some sort of waiver of that rule. Before Sandy River and this case, the rule and PGE's AR 521 statements appear to be the only statements on the records regarding this issue. A developer, who has read the rules and the statements PGE made in AR 521, would be acting in reliance upon that

record in pursuing its interconnection and requesting to hire its own third-party consultants. In my opinion, if PGE wishes to change that record, the proper means for doing so is not through litigation of individual complaints but rather to seek a waiver of that rule or a formal rulemaking change.

I hereby declare that the above statement is true to the best of my knowledge and belief, and that I understand it is made for use as evidence in court and is subject to penalty for perjury.

DATED this 26 day of November 2021.

A handwritten signature in black ink, appearing to read "John Lowe", with a stylized, cursive script.

John Lowe

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON**

UM 1971

In the Matter of

WACONDA SOLAR, LLC,

Complainant,

v.

PORTLAND GENERAL ELECTRIC
COMPANY,

Defendant.

DECLARATION OF TROY
SNYDER IN SUPPORT WACONDA
SOLAR'S RESPONSE TO
PORTLAND GENERAL ELECTRIC
COMPANY'S
MODIFIED SECOND MOTION FOR
SUMMARY JUDGMENT

I, Troy Snyder, declare under the penalty of perjury as follows:

1. I am the President of TLS Capital, Inc. TLS Capital owns 100% of Waconda Solar, LLC ("Waconda Solar") and Waconda Solar is member managed.
2. This declaration is based on my personal knowledge and, if called to testify to the following facts, I could and would competently do so. I submit this declaration in support of Waconda Solar's Response to PGE's Modified Second Motion for Summary Judgment.
3. When selecting Waconda Solar's scheduled commercial operation date ("COD"), I reviewed various System Impact Studies conducted by Portland General Electric Company ("PGE") to better understand an estimated timeline that it would take to construct the necessary interconnection upgrades. I relied on the following studies and estimated the average construction timeline was 12 months. Further, I estimated it would take around 9 months to complete the interconnection studies with PGE.

4. Here are the studies I relied on:

Project	Queue #	Date of SIS	Months to Complete Work
Drift Creek	SPQ0007	7/5/2017	12
Brush Creek	SPQ0008	7/5/2017	18
Balston	SPQ0011	5/22/2017	6
Palmer Creek	SPQ0010	5/22/2017	12
Case Creek	SPQ0022A	5/22/2017	12
O'Neil Creek	SPQ0017	5/15/2017	9
Day Hill	SPQ0027	12/18/2017	8
Willamina Mill	SPQ0022	7/17/2017	18
Kale Patch	SPQ0028	5/23/2017	12
Boring	SPQ0010	5/22/2017	12
Labish	SPQ0021	4/14/2017	6
Rafael	SPQ0020	5/15/2017	12
Tickle Creek	SPQ0030	9/22/2017	6
St Louis	SPQ0018	4/24/2017	12
Thomas Creek	SPQ0038	4/14/2017	12
Yamhill Creek	SPQ0044	4/14/2017	6
Volcano	SPQ0045	4/14/2017	6
		Average	10.53

5. Waconda Solar filed an interconnection application with PGE in March 2018. I reasonably estimated that it would take 21 months to complete the whole process. 9 months for the interconnection studies and 12 months for the actual construction of the interconnection upgrades. Therefore, I picked a COD that was approximately 22 months from when I filed an interconnection application in March 2018. From my knowledge at the time, this was a reasonable COD given PGE's System Impact Studies I reviewed at the time were estimating how long it would take to complete interconnection upgrades.

I hereby declare that the above statement is true to the best of my knowledge and belief, and that I understand it is made for use as evidence in court and is subject to penalty for perjury.

DATED this 22nd day of November 2021.

A handwritten signature in black ink, appearing to read 'Troy Snyder', with a stylized, cursive script.

Troy Snyder