

August 7, 2020

Via Electronic Mail

Chair Megan Decker Commissioner Letha Tawney Commissioner Mark Thompson Oregon Public Utility Commission 201 High Street SE, Suite 100 Salem, OR 97301-3398

Re: PacifiCorp's Queue Reform Proposal's Impact on Lacomb Irrigation District Docket No. UM 2108

To the Oregon Public Utility Commissioners:

The Lacomb Irrigation District (LID) sends this letter because PacifiCorp's Queue Reform Proposal (QRP) raises several issues for our qualifying facility, which has been interconnected to PacifiCorp's system since 1986. LID requests that the Oregon Public Utility Commission (the Commission) either reject PacifiCorp's QRP or approve it subject to specific conditions that protect existing interconnection customers, like LID. We also believe that our project, which will be affected by this proposal, should have the choice to remain in the current Serial Queue process subject to the Commission's existing rules.

We only learned of PacifiCorp's QRP *the day before yesterday*, and this letter should not be construed as identifying all the possible issues that we may have with the QRP. Because we only learned about the QRP this week, we had to quickly spend our time and resources engaging with knowledgeable parties who collaborated with us to write this letter. It is not fair to LID or other interconnection customers for the Commission to adopt a fundamental change in its interconnection policies and rules when those most impacted by it have never been informed. The Commission should hit the "pause" button and delay this process so all impacted interconnection customers can be made aware of the filing, and the Commission can better understand how it will impact existing projects like LID's.

LID's project, the Lacomb Irrigation & Hydro project, generates 0.962 MW of power and interconnects to PacifiCorp's Lebanon substation in Linn County, Oregon. This project is in the process of renewing its power purchase agreement (PPA) and interconnection agreement (IA) with PacifiCorp. Our current PPA and IA are combined into one contract, and it terminates on December 31, 2022.

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Currently, the project is coming to the end of its combined IA and PPA, which was executed before Oregon adopted its small generator interconnections rules. Naturally, our project is now subject to those rules. To comply in renewing our IA, we applied for a Tier 2 interconnection, but were rejected. The Interconnection Review Report encouraged us to apply for a Tier 4 interconnection, which we plan to do. That Report is attached to this letter.

PacifiCorp has estimated that it will cost over \$10,000 to construct new facilities for LID's project. It is possible, however, that the total interconnection costs could be in the hundreds of thousands of dollars. We are not asking the Commission to address any potential disputes regarding the specific interconnection facilities or their costs that may (or may not) be required, but we are providing this information as background.

We wish to identify the following specific concerns and urge the Commission to, at a minimum, require PacifiCorp to revise its QRP accordingly.

# 1. PacifiCorp Never Provided Notice of its QRP to LID

First, LID is extremely concerned that it only found out about PacifiCorp's queue reform proposal *the day before yesterday*. Even more concerning, is that we did not learn about the QRP from PacifiCorp despite our frequent conversations with an Interconnection Project Manager regarding our IA application. Because LID's last IA was executed back in 1986, we did not even know what an OASIS website site is, or that we could check PacifiCorp's OASIS site for updates. This is unfortunately where PacifiCorp decided to post its only form of communication to its customers regarding its complete overhaul of its study process in Oregon. LID takes issue with this lack of notice because PacifiCorp's QRP allowed pending applicants to choose whether they want to stay in a Serial Queue or Cluster Study, but the deadline to choose was back in April of this year. LID missed the opportunity to choose before this deadline, in part, due to this lack of notice.

To resolve this issue, the Commission should delay its decision and require PacifiCorp to notify all potentially impacted interconnection customers so they can be made aware of the upcoming change that might affect them. Furthermore, the Commission should extend the deadline to give interconnection customers who were not notified adequate time to decide whether they want to participate in a Cluster or Serial Study.

# 2. PacifiCorp's Rule Waiver Request Leaves LID Wondering What Rules Would Apply to Its Tier 4 Application

Second, PacifiCorp tells us that we should pursue the Tier 4 application process for our next IA. However, if the QRP is approved as is, it will waive a substantial portion of Oregon's wellestablished Tier 4 rules. After looking at PacifiCorp's QRP edits to the existing Tier 4 rules, LID is concerned because it is not sure what legal rules it will be processed under. It is extremely important to small interconnection customers like LID to have clearly defined rules to help us understand our legal rights and obligations. Interconnection matters are complex and PacifiCorp UM 2108 Page 3 of 5

difficult to understand, and we should not have to review the hundreds of pages of documents in UM 2108 to try to understand what our rights and obligations are. It would prevent a lot of legal headaches if the Commission would simply require PacifiCorp to provide a revised and well-vetted administrative rule for Tier 4 generators being studied in Cluster Studies, similar to the current rule for Tier 4 generators being studied in a Serial Queue.

# **3.** LID Could Incur Much Larger Costs Under the New QRP That it Would Not Incur in a Serial Queue

Third, LID is very concerned about PacifiCorp's proposed per capita allocation for station network upgrades, given its electrical output. It is our understanding that the costs associated with station upgrades will be split evenly between the number of projects participating in the study. LID is concerned that it may have to evenly split those costs with larger generators even though LID's project only contributes less than 1 MW of power to the substation in Lebanon. LID believes splitting the costs on a pro rata basis is much more appropriate.

We understand that PacifiCorp has tried to reassure small generators that they will not have to contribute to any network upgrades identified in the Cluster Study if they are below a floor of 1% of total capacity within the cluster. While LID is a smaller generator, this is still not reassuring because there is no way to know whether it will fall into that 1% capacity bracket within the cluster until after you are already in the study. The Commission could better protect small generators by increasing the capacity floor percentage to 10% or some larger number.

# 4. Thirty Days is Not Enough Time for a Small Interconnection Customers Like LID to Decide Whether to Move Forward with Interconnection

Fourth, LID has not completed an IA process in several decades. Despite being an existing and operating project on PacifiCorp's system, PacifiCorp has identified potentially significant and expensive upgrades. It is concerned that the proposed 30 days after receiving study results will not be enough time for it to fully understand whether it should pursue interconnection. LID is a small irrigation district with 180 members made up of a few managing individuals who are not professionals in interconnection. LID has its own governance and decision-making process that often take more than 30 days.

As a result, LID would want more time to work with PacifiCorp after receiving its study results to ensure that it fully understands all the relevant costs, obligations, upgrades, and timelines associated with interconnection. It would also want to make sure it has time to secure any needed financing. After several decades of not needing to engage in an interconnection process, thirty days is simply not enough time to fully understand what is required for interconnection, engage with those in the irrigation district where appropriate, and determine whether to move forward. The Commission should require that PacifiCorp give study participants more time to decide whether they will move forward with interconnection.

# 5. LID Does Not Want to Lose Its Current Spot in the Serial Queue if that Increases Its Costs

Fifth, LID recognizes that it is valuable to be a small generator high up on the interconnection Serial Queue. When there is space on the system, small generators like LID can take advantage of the extra space without needing to go through the network upgrade process. If LID is forced out of the Serial Queue and into a Cluster Study, then it could be subject to much higher costs than it would have incurred had it just stayed in the Serial Queue. If there is interconnection capacity available, then LID does not want to lose its spot in the Serial Queue if participating in a Cluster Study will materially increase the costs of interconnection. Accordingly, the Commission should give unnotified interconnection customers extra time to decide whether to participate in a Cluster or Serial Study.

# 6. LID is Concerned About Preserving its Right to Enter into a New PPA Within Three Years of Its Current PPA's Expiration Date

Sixth, LID needs to enter into a new PPA with PacifiCorp, and it has a right to do so within three years of the expiration of its current PPA. Its current PPA expires on December 31, 2022, so LID is currently in the window where it should be able to enter into a new PPA. Unfortunately, if LID is forced to participate in a Cluster Study and obtain study results before PacifiCorp will offer a new PPA, then LID will essentially lose its right to enter into a PPA now. LID may have to wait until it receives its Cluster Study report in April 2021 before continuing on in the PPA contracting process. By then, prices will likely be lower as well. LID does not wish to have to litigate to preserve its basic right to a PURPA PPA.

LID would like to point out there are likely other similarly situated generators who are currently in an even worse position because they *still* may not know this new QRP was proposed. If they miss the window to participate in this first Cluster Study, then they might be waiting until April 2022 to receive their cluster study reports. To resolve this issue, the Commission should suspend this approval process so all impacted existing interconnection customers can be made aware of this filing, and it should allow all unnotified interconnection customers to choose the study process that is most supportive of their PPA renewals.

# 7. Conclusion

In sum, LID has already been through one application process and now must go through another. If it must participate in this new Cluster Study process, it is extremely concerned about the additional costs and delays. The last thing LID wants is to be forced into a lengthy process that requires it to shut down its existing project while it waits for PPA approval and a new IA, or possibly permanently.

LID assumes that there are similarly situated existing interconnection customers in Oregon that may have the same concerns. For that reason, LID asks the Commission to allow existing interconnection customers that did not receive notice to remain in the current Serial Queue. That

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way, projects like LID's can rely on a known process and may not have to worry about any unexpected cost increases or temporary decommissioning caused by a Cluster Study process.

We hope that you consider this much-needed amendment to the current QRP.

Sincerely,

Julie McKinnon

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# Small Generator Interconnection **Tier 2 Interconnection Review Report**

# Completed for Lacomb Irrigation District ("Applicant") A Qualifying Facility

Proposed Interconnection On PacifiCorp's Existing Circuit 4M63 out of Lebanon Substation at 20.8 kV (At approximately 44.59507°N, 122.68039°W)

July 27, 2020



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#### 1.0 DESCRIPTION OF THE GENERATING FACILITY

Lacomb Irrigation District ("Applicant") has 0.962 MW of existing generation interconnected to PacifiCorp's ("Public Utility") circuit 4M63 out of Lebanon substation located in Linn County, Oregon. The Lacomb Irrigation & Hydro project consists of one (1) Kato Engineering 962 kW synchronous turbine generator for a total output of 0.962 MW. The requested commercial operation date is approximately December 31, 2022 based on existing power purchase agreement with embedded interconnection agreement.

Applicant will operate this generator as a Qualified Facility as defined by the Public Utility Regulatory Policies Act of 1978 (PURPA).

The Public Utility has assigned the project "OTP172."

#### 2.0 APPROVAL CRITERIA FOR TIER 2 INTERCONNECTION REVIEW

Pursuant to 860-082-0050(1) A public utility must use the Tier 2 interconnection review procedures for an application to interconnect a small generator facility that meets the following requirements:

- (a) The small generator facility does not qualify for or failed to meet Tier 1 interconnection review requirements;
- (b) The small generator facility must have a nameplate capacity of two (2) megawatts or less;
- (c) The small generator facility must be interconnected to either a radial distribution circuit or a spot network distribution circuit limited to serving one customer;
- (d) The small generator facility must not be interconnected to a transmission line; and
- (e) The small generator facility must use interconnection equipment that is either lab-tested equipment or field –tested equipment. For equipment to gain status as field-tested equipment, the applicant must provide all the documentation from the prior Tier 4 study, review, and approval, including any interconnection studies and the certificate of completion.

#### **3.0 PROPOSED POINT OF INTERCONNECTION**

The Interconnection Customer's generation facility is interconnected to the Public Utility's distribution circuit 4M63 out of Lebanon substation via a primary meter. The Point of Interconnection ("POI") is located at approximately 44.59507°N, 122.68039°W. Figures 1 and 2 below are a map and one line diagram that illustrate the interconnection of the generating facility to the Public Utility's system.





Figure 1: Map

# **3.1** Study Assumptions

- All active higher priority transmission service and/or generator interconnection requests will be considered in this study and are listed in Appendix 1. If any of these requests are withdrawn, the Transmission Provider reserves the right to restudy this request, as the results and conclusions contained within this study could significantly change:
  - Transmission Service Queue: to the extent practical, all network upgrades that are required to accommodate active transmission service requests and are expected to be in-service on or after the Applicant's requested in-service date for the Project will be modeled in this study.
  - Generation Interconnection Queue: when relevant, interconnection facilities associated with higher queue interconnection requests will be modeled in this study. However, network upgrades required to provide delivery will only be modeled for projects which have requested network resource integration service only or qualified facility status. No generation will be simulated from any higher queued project unless a commitment has been made to obtain transmission service.
- The Applicant's request for interconnection service in and of itself does not convey transmission service.
- This study assumes the Project will be integrated into Public Utility's system at the agreed upon and/or proposed point of interconnection.
- The Applicant will construct and own any facilities required between the point of interconnection and the Project.
- Generator tripping may be required for certain outages.
- All facilities will meet or exceed the minimum WECC, NERC, and Public Utility



performance and design standards.

- The generator is expected to operate seasonally. The primary meter (point of interconnection) power factor range studied was <u>0.9</u> leading/lagging.
- This is an existing interconnected generation project that has no known operability issues.
- This report is based on information available at the time of the study. It is the Applicant's responsibility to check the Transmission Provider's web site regularly for transmission system updates (http://www.pacificorp.com/tran.html)



Figure 2: System One Line Diagram



#### 4.0 TIER 2 INTERCONNECTION REVIEW RESULTS

#### 4.1 860-082-0050(2)(a)

For interconnection of a small generator facility to a radial distribution circuit, the aggregated nameplate capacity on the circuit must not exceed 15 percent of the line section annual peak load as most recently measured at the substation or calculated for the line section.

#### **Result: Fail**

Most recent peak load is recorded at 5,802 kW, name plate capacity of the circuit is 11,300 kW. Total aggregated generation on circuit 1,242 kW or 21%.

#### 4.2 860-082-0050(2)(b)

For interconnection of a small generator facility to the load side of spot network protectors, the aggregated nameplate capacity on the load side of the spot network protectors must not exceed the lesser of five percent of a spot network's maximum load or 50 kilowatts.

#### **Result:** N/A

Not connected to a spot network.

#### 4.3 860-082-0050(2)(c)

The aggregated nameplate capacity must not contribute more than 10 percent to the distribution circuit's maximum fault current at the point on the primary voltage distribution line nearest the point of interconnection.

#### **Result: Fail**

Available fault current excluding the generator is 373 amps L-G excluding the generator at the POI. Generator modeling indicates a contribution of 96 amps of fault current or approximately 26% of what is available at the generator.

#### 4.4 860-082-0050(2)(d)

The aggregated nameplate capacity on the distribution circuit must not cause any distribution protective devices and equipment (including substation breakers, fuse cutouts, and line reclosers) or other public utility equipment on the transmission or distribution system to be exposed to fault currents exceeding 90 percent of the short circuit interrupting capability. The small generator facility's point of interconnection must not be located on a circuit that already exceeds 90 percent of the short circuit interrupting capability.

#### **Result: Pass**

No coordination threshold issues were identified as a result of this existing facility.

#### 4.5 860-082-0050(2)(e)

The aggregated nameplate capacity on the distribution side of a substation transformer feeding the circuit where the small generator facility proposes to interconnect must not exceed 10 megawatts in an area where there are known or posted transient stability



limitations to generating units located in the general electrical vicinity (for example, three or four distribution busses from the point of interconnection).

# Result: N/A

There are no known or posted transient stability limitations to generating units located in the general electrical vicinity.

# 4.6 860-082-0050(2)(f)

If the small generator facility interconnection is to a primary line on the distribution system, then the interconnection must meet the following criteria:

- (A) If the small generator facility is three-phase or single-phase and will be connected to a three-phase, three-wire primary line, then the small generator facility must be connected phase-to-phase.
- (B) If the small generator facility is three-phase or single-phase and will be connected to a three-phase, four-wire primary line, then the small generator facility must be connected line-to-neutral and effectively grounded.

## **Result: Pass**

Customer one line shows a grounded wye connection to our grounded wye system.

## 4.7 860-082-0050(2)(g)

For interconnection of a small generator facility to a single-phase shared service line on the transmission or distribution system, the aggregated nameplate capacity on the shared secondary line must not exceed 20 kilowatts.

#### **Result:** N/A

Three phase generation.

#### 4.8 860-082-0050(2)(h)

For interconnection of a single-phase small generator facility to the center tap neutral of a 240-volt service line, the addition of the small generator facility must not create a current imbalance between the two sides of the 240-volt service line of more than 20 percent of the nameplate rating of the service transformer.

#### **Result:** N/A

Three phase generation.

# 4.9 860-082-0050(2)(i)

Except as provided in subsection (2)(1), the interconnection of the small generator facility must not require system upgrades or interconnection facilities different from or in addition to the applicant's proposed interconnection equipment.

#### **Result: Fail**

A communication system to support a transfer trip circuit will be required between the field recloser 4M66 and the small generating facility.



# 4.10 860-082-0050(2)(j)

The aggregated nameplate capacity, in combination with exiting transmission loads, must not cause the transmission system circuit directly connected to the distribution circuit where the small generator facility interconnection is proposed to exceed its design capacity.

#### **Result: Pass**

There is no reverse power flow to the transmission system as a result of the generation on the distribution.

## 4.11 860-082-0050(2)(k)

If the public utility's distribution circuit uses high speed reclosing with less than two seconds of interruption, then the small generator facility must not be a synchronous machine. If the small generator facility is a synchronous machine, then the applicant must submit a Tier 4 application.

#### **Result: Fail**

This is a synchronous generator.

## 4.12 **860-082-0050(2)(l)**

If the small generator facility fails to meet one or more of the criteria in subsections (2)(a) through (k), but the public utility determines that the small generator facility could be interconnected safely if minor modifications to the transmission or distribution system were made (for example, changing meters, fuses, or relay settings), then the public utility must offer the applicant a good-faith, non-binding estimate of the costs of such proposed minor modifications. Modifications are not considered minor under this subsection if the total cost of the modifications exceeds \$10,000. If the applicant authorizes the public utility to proceed with the minor modifications and agrees to pay the entire cost of the modifications, then the public utility must approve the application under Tier 2.

#### **Result: Fail**

In order to continue to be interconnected the Public Utility's system the Public Utility will require upgrades that will exceed \$10,000.

#### 5.0 FAST TRACK ANALYSIS – NEXT STEPS

As the Public Utility has determined that the OTP172 generating facility cannot continue to be safely interconnected without additional review and facilities construction, Applicant will be required to submit a new application under the Tier 4 of the Oregon Administrative Rule 860-082-0050(5) or interconnection request will be withdrawn.

#### 6.0 PARTICIPATION BY AFFECTED SYSTEMS

BPA has been identified as potential affected systems.

#### 7.0 APPENDICES

Appendix 1: Higher Priority Requests





# **APPENDIX 1: HIGHER PRIORITY REQUESTS**

All active higher priority transmission service and/or generator interconnection requests will be considered in this study and are identified below. If any of these requests are withdrawn, the Public Utility reserves the right to restudy this request, as the results and conclusions contained within this study could significantly change.

Transmission/Generation Interconnection Queue Requests considered:

None