

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

UM 2009

MADRAS PV1, LLC,

Complainant,

v.

PORTLAND GENERAL ELECTRIC
COMPANY,

Defendant.

MADRAS SOLAR’S MOTION FOR
CLARIFICATION OF ALJ RULING

I. INTRODUCTION

Pursuant to OAR 860-001-0420, OAR 860-001-000 and ORCP 14, Madras PV1, LLC (“Madras Solar”) hereby moves for an order or ruling clarifying the administrative law judge (“ALJ”) ruling dated December 9, 2019 (the “Ruling”). Specifically, Madras Solar requests clarification as to the scope of interconnection issues that may be resolved as part of this case. The parties do not, at this time, know the full extent of the disputed interconnection issues, because the interconnection study process is still underway.

Further, of the issues that are known, many are not yet ripe for review because the parties have not fully exhausted the dispute resolution procedures outlined for large qualifying facilities (“QFs”) in the Commission’s QF Large Generator Interconnection Procedures (“QF-LGIP”), adopted in Commission Docket No. UM 1402, Order No. 10-132. It would be a violation of the Commission’s orders to substantively address many of the interconnection issues prior to completion of the processes outlined in the QF-LGIP.

In addition, Madras Solar also has not had the opportunity to identify, fully raise, seek discovery, or submit testimony on the vast majority of its concerns regarding PGE's interconnection studies. It would be extremely prejudicial to Madras Solar to resolve a wide variety of interconnection issues that have not been previously raised in this case. However, the Commission should not delay resolution of Madras Solar's narrow and discrete claims related to a handful of power purchase agreement ("PPA") provisions by expanding the scope of this docket to include the complex and potentially numerous interconnection issues. Clarification is warranted because of the extreme prejudice that could occur to Madras Solar if it must address issues in UM 2009 that are still being processed under the QF-LGIP or that it has not had the opportunity to address in the normal evidentiary process.

ALJ Moser determined that *certain* interconnection issues related to disputed PPA terms *may* be resolved in this case due to their integral ties to the PPA dispute. However, PGE appears to interpret the Ruling to require that *all* interconnection related issues *must* be brought into this proceeding, as demonstrated by PGE's recent Motion to Amend Answer and Counter Claim, in which PGE asks the Commission to conclude that PGE properly performed Madras Solar's System Impact Re-Study and Facilities Study and that Madras Solar is obligated to pay for the costs identified in the Facilities Study.¹ The ALJ's Ruling could be read in different ways and potentially contemplates resolution of three possible subsets of interconnection issues in this proceeding:

¹ See PGE's Motion to Amend Answer and Counterclaim at Attachment 1, ¶¶ 177-178.

1. Only interconnection issues that will impact the disputed PPA terms;²
2. Some subset of additional interconnection issues that do not affect the disputed PPA terms but that the parties have effectively raised;³ and
3. The entire universe of interconnection issues generally, including both subsets of issues above as well as issues regarding the costs of the disputed interconnection and other potential PGE violations.⁴

Madras Solar understands that, at a minimum, the first subset of issues based on events that occurred *prior* to the filing of the Complaint and that may affect the PPA terms will be resolved in this case. Madras Solar's preference is that only issues that impact the disputed PPA terms (subset 1) should be addressed. However, if the ALJ's ruling is more expansive and includes interconnection issues that do not affect PPA terms, then the Commission should limit its review to only the issues effectively raised by the parties (subset 2) and leave the remaining interconnection issues, including cost-related issues and technical issues, for resolution through the normal QF-LGIP process (subset 3).⁵ The range of *potential* (but not necessarily actual) interconnection issues is

² ALJ Ruling at 3 (Dec. 9, 2019) (“[b]oth parties to this proceeding should be prepared to discuss, and propose resolution for *any interconnection-related issue that impacts disputed PPA terms.*”) (emphasis added).

³ *Id.* (“both parties have effectively, through their claims, counterclaims, answers, and through their proposed and disputed PPA terms made interconnection issues part of this proceeding,”).

⁴ *Id.* at 5 (“[the ALJ] consider[s] the issue of interconnection in general, and the dispute over interconnection costs specifically, a part of this proceeding.”).

⁵ Madras Solar continues to object to the Commission resolving any interconnection issues; however, in this Motion for Clarification, Madras Solar is not seeking to challenge the ALJ's ruling and is instead seeking to understand what issues the ALJ has decided are within the scope of the proceeding.

sufficiently broad as to warrant clarification of their scope now in order to aid in judicial economy and ensure this case is processed in a speedy and efficient manner.

The first subset of interconnection issues that the Commission needs to resolve are only those that directly pertain to the disputed PPA terms. These include:

1. Whether PGE's interconnection delays, requirements, and incorrect cost estimates are a major cause for Madras Solar's inability to obtain a final, executable PPA, and their impact on the applicable avoided cost price; and
2. Whether PGE was reasonably entitled to insist upon a milestone in the PPA that required Madras Solar to execute an interconnection agreement by September 1, 2020, in light of the interconnection issues and delays that had occurred by that time and potential disputed issues.

The second subset of interconnection issues that could be resolved in this proceeding extends only to issues raised by the pleadings and testimony. If the ALJ decides that any interconnection issues that arose after the filing of Madras Solar's complaint should be resolved in this proceeding, then there are only two issues that Madras Solar believes can be addressed under the current procedural schedule, which are:

1. Whether any of the "grandfathered" transmission agreements provided for review by PGE actually limit the capacity of the Round Butte – Bethel 230 kV line to the output of PGE's Pelton Round Butte ("PRB") generation; and
2. What is the Commission's legal standard that a QF needs to achieve in order to establish that network interconnection upgrades result in quantifiable system-wide benefits.

Given that a Final Facilities Study has not been issued, there is insufficient information in the proceeding to draw any factual conclusions about whether or not the (currently undetermined) interconnection upgrades result in quantified system-wide benefits.

Finally, bringing the third subset of issues into this case would inappropriately expand the scope to include issues that are not fully developed and that the parties have not yet fully had an opportunity to resolve through established dispute resolution procedures. Furthermore, such issues would so distract from Madras Solar's PPA concerns as to serve as an undue prejudice on Madras Solar. It could require the Commission to resolve a multitude of issues that have not been identified in a complaint, answer, or counterclaim, and on which no discovery has been conducted and no testimony has been submitted. Alternatively, the Commission would need to substantially delay this case and require more rounds of testimony on over a dozen issues, some of which hopefully can be resolved without formal litigation. These issues could include:

1. Whether PGE's Total Transfer Capability ("TTC")/Available Transfer Capability ("ATC") analysis is discriminatory.
2. Whether PGE acted properly regarding its Round Butte/Cove Interconnection and Operation Agreement.
3. Whether it is appropriate for PGE to assign Madras certain network upgrades.

4. Whether the costs for the “POI Substation” and “Transmission Line Modification” identified in the draft Facilities Study are reasonable and appropriate.
5. Whether PGE properly identified and coordinated with Affected Systems, as is required in Sections 3.5 and 7.4 of the OATT and QF-LGIP.
6. Whether PGE should submit a revised Facilities Study that includes all the required facilities, including both the transmission provider’s (i.e., PGE) interconnection facilities and the interconnection customer’s (i.e., Madras Solar) interconnection facilities.
7. What network upgrades, if any, are appropriate, given PGE’s conclusions related to a lack of reliability violations.
8. Whether PGE has any load or obligations to provide energy and capacity in central Oregon.
9. Whether the Round Butte – Bethel 230 kV line is unconstrained and what network upgrades, if any, are appropriate given the conclusions about the amount of power that can be imported over that line.
10. Whether PGE application of a TTC/ATC was appropriate relative to applicable interconnection procedures.
11. Whether PGE reached the appropriate TTC and ATC conclusions, notwithstanding the appropriateness of the analysis.
12. Whether PGE’s cost estimates and planned network upgrades have appropriate support.

13. Why PGE delivered highly-overestimated Remedial Action Scheme (“RAS”) costs.

In light of these concerns, clarification regarding the scope and specific interconnection issues to resolve in this case is warranted.

II. DISCUSSION

A. The Commission Established an Interconnection Process that Has Not Yet Been Completed

It is a violation of both the Commission’s orders and policies and the QF-LGIP to consider certain interconnection issues not relevant to the PPA terms and conditions at this time. Additional steps need to be completed before Madras Solar or the Commission has a full picture of potential interconnection disputes.

The QF-LGIP interconnection process generally involves a series of three studies, in which the transmission provider studies the feasibility, system impacts, and required facilities needed to safely and reliably interconnect the generator.⁶ The transmission provider is required to make reasonable efforts to complete the Feasibility Study within forty-five calendar days, the System Impact Study within ninety calendar days, and the Facilities Study within ninety calendar days (180 if the customer requests a +/- 10 percent cost estimate rather than the usual +/- 20 percent), after it receives the respective executed study agreement.⁷

⁶ See *In re Pub. Util. Comm’n of Or. Investigation into Interconnection of PURPA QFs with Nameplate Capacity Larger Than 20 Megawatts to a Pub. Util.’s Transmission or Distribution System*, Docket No. UM 1401, Order No. 10-132 App. A at Art. 6-8 (QF-LGIP) (Apr. 7, 2010).

⁷ *Id.* at §§ 6.3, 7.4, 8.3.

With the third and final Facilities Study, the transmission provider initially provides a draft report.⁸ The transmission provider and interconnection customer must meet within ten business days of providing the draft, to discuss the study.⁹ The interconnection customer may provide written comments within thirty calendar days of the date the draft report was provided.¹⁰ The transmission provider must then include those comments in the final report and issue the report within 15 business days, unless it reasonably extends that period to perform additional analyses in response to the comments or a notice of dispute has been submitted.¹¹

Over the course of this interconnection, PGE has made numerous and major changes in response to questions raised by Madras Solar, and, if PGE acts in good faith, Madras Solar expects that more changes will be coming.

Prior to the filing of the complaint, Madras Solar submitted its interconnection request on October 5, 2017.¹² PGE initially refused to engage with Madras Solar, claiming that it could not even accept power due to purported restrictions on the delivery point for Madras Solar.¹³ In a major reversal, PGE backed down from that position.¹⁴ PGE then twice extended its deadline to provide the Feasibility Study, and ultimately provided it nearly eight months after the interconnection request was submitted,¹⁵ on June

⁸ *Id.* at § 8.3.

⁹ *Id.* at § 8.4.

¹⁰ *Id.* at § 8.3.

¹¹ *Id.* at §§ 8.3, 13.5.2.

¹² PGE/200, Foster-Larson/4.

¹³ Madras Solar/200, Rogers/3.

¹⁴ *Id.* at 5.

¹⁵ PGE/200, Foster-Larson/6-7.

16, 2018.¹⁶ PGE then issued an amended Feasibility Study on October 2, 2018.¹⁷ On February 4, 2019, PGE provided the System Impact Study,¹⁸ which estimated \$343.7 *million* in upgrades.¹⁹ Madras Solar requested that PGE issue a revised System Impact Study on March 22, 2019.²⁰ The Complaint in this matter was filed April 22, 2019.

Since the filing of the Complaint, PGE issued a revised System Impact Study and a draft Facilities Study. The revised System Impact Study, issued on July 12, 2019, reduced the estimated network resource interconnection by over \$300 *million*.²¹ The magnitude of this change is hard to overestimate and pales in comparison to the remaining interconnection related issues. PGE provided a draft Facilities Study on December 5, 2019, but no testimony has been filed in this case yet on that study. On December 20, 2019, Madras Solar emailed an initial list of concerns with the study, and met with PGE to discuss.²² On January 8, 2020, Madras Solar provided a notice of dispute under the LGIP, which allows the parties more time to work out any disagreements and is required prior to filing a complaint or counterclaim on interconnection issues.²³ On January 15, 2020, PGE sent a formal response to the notice of dispute.²⁴ Madras Solar then provided dispute resolution comments to PGE on the

¹⁶ PGE/200, Foster-Larson/8.

¹⁷ *Id.*

¹⁸ *Id.* at 10.

¹⁹ Madras Solar/306, Rogers/16.

²⁰ PGE/200, Foster-Larson/13.

²¹ Madras Solar/300, Rogers/48.

²² Attachment A.

²³ Attachment B.

²⁴ Attachment C (As PGE unexpectedly provided this two days prior to filing this Motion for Clarification, Madras Solar is not responding to it in this motion;

draft Facilities Study on January 17, 2020.²⁵ As shown in these comments, there are still a number of issues related to the interconnection that have not yet been discussed in this case.

B. The Parties Should Follow the QF-LGIP Process for Informal Dispute Resolution

The QF-LGIP outlines a process for addressing concerns related to the interconnection, in the event either party has a dispute or asserts a claim arising out of or in connection with the QF-LGIP or QF-LGIA. This process has not yet been completed. It is a violation of the QF-LGIP for a party to formally file a complaint or assert claims prior to invoking the informal dispute resolution process identified in the QF-LGIP.²⁶

The dispute resolution procedures outlined in the QF-LGIP requires that:

1. The disputing party provide the other party with a written “notice of dispute”;
2. Each party must refer the dispute to designated senior representatives of each party for informal dispute resolution; and
3. If the designated senior representatives are unable to resolve the dispute informally within 30 calendar days, then the parties may agree to continue discussions, submit the dispute to arbitration, or if the parties do not agree, either party may exercise whatever rights it has in equity or law.²⁷

Therefore, the informal dispute resolution process is essentially a time-out whereby the parties are to act in good faith to negotiate the issues, and it would be a violation of the law for one party to stop good faith negotiations prior to its completion.

however, Madras Solar notes that PGE’s response has an interpretation of the factual history and law radically different than Madras Solar’s understanding.).
²⁵ Attachment D.

²⁶ See Docket No. UM 1401, Order No. 10-132 App. A at § 13.5.

²⁷ *Id.* at § 13.5.1.

Each party will designate a senior representative to negotiate over the next 30 days, and, if no resolution is reached and the parties decide to cease discussions, then the parties may agree to arbitration or take other appropriate action. If the parties agree to submit the dispute to arbitration before the Commission, the arbitration process has specific procedures for the filing of the petition, response, and for case processing.²⁸ The parties may also agree to have the dispute resolved by an outside arbitrator.²⁹ Should the parties not agree to arbitration, there may be a variety of other remedies available either before the Commission or another forum depending on what is at issue and where jurisdiction lies.

Here, Madras Solar took the first step in this process by providing PGE with an appropriate notice on January 8, 2020, attached as Attachment B. The parties have not yet worked through the informal process whereby each party designates a senior representative to negotiate for 30 days, and have not arrived at the point in the process where the parties may agree to arbitration or to pursue other legal remedies. To skip this process and simply pull the interconnection issues into this case assumes that the parties will not negotiate in good faith or that no progress will be made in the informal process.

The Commission should not assume that the established QF-LGIP process will prove unfruitful. In fact, if the case is properly clarified, PGE may decide to work with Madras Solar in good faith to resolve the remaining disputed issues. Therefore, until at least these events occur, the parties have not yet exhausted the procedures contained in

²⁸ See *id.* at § 13.5.2.

²⁹ See *id.* at § 13.5.3.

the QF-LGIP, and the Commission should not require that the parties skip those steps and move straight to resolving the interconnection issues in this case.

C. Madras Solar Does Not Consent to Litigate Interconnection Issues

The usual manner in which the scope of a case is determined is through the filing of a complaint, answer, and any applicable cross-claims or counter claims. Here, Madras Solar did not include interconnection issues in its complaint, due to the fact that Madras Solar sought a speedy determination of its PPA issues only, believed that requesting formal resolution of the (not yet-ripe) interconnection issues would overly complicate the case, and because those issues had not been fully developed at the time of filing (and still are not).

This Commission has previously taken a narrow view of what claims can be adjudicated. In *Sandy River Solar, LLC v. PGE*, the Commission found that some of Sandy River's arguments could not be resolved by the Commission on summary judgment, because Sandy River had not cited a particular statute or contractual authority in its complaint that would have allowed the Commission to rule in its favor.³⁰ The Commission reasoned that Sandy River had not cited a particular statute or contractual authority in its complaint and so the issue was not properly before the Commission.³¹ The Commission reached this conclusion despite the fact that PGE addressed the merits of Sandy River's arguments in briefing.³²

³⁰ *Sandy River Solar, LLC v. PGE*, Docket No. UM 1967, Order No. 19-218 at 1 (June 24, 2019).

³¹ *Id.* at 25.

³² *Id.* at 17-18.

Here, the Ruling could be read to reach a different result. Despite the fact that interconnection issues were not formally raised in the complaint or counter-claims, the ALJ found that at least some could be resolved in this case. While the issue in the *Sandy River* case was resolved on a motion for summary judgment and this case is in the midst of being a fully-litigated proceeding, the required contents for a claim are the same. A pleading that asserts a claim for relief must contain “[a] plain and concise statement of the ultimate facts constituting a claim for relief without unnecessary repetition,” and “[a] demand of the relief which the party claims.”³³ Here, no claim contains a plain and concise statement of the ultimate facts constituting a claim for relief, no claim contains the relief PGE seeks on the interconnection issues, and no claim includes citations to alternative statutory or contractual authority that would provide the relief PGE seeks.

Some issues, while not expressly raised by the pleadings, may be tried by express or implied consent by the parties, and therefore treated as though they were raised in the pleadings.³⁴ By this Motion for Clarification, Madras Solar informs the Commission, ALJ, and PGE that it does not consent to resolve any and all interconnection issues in this docket. Madras Solar only consents to resolving the limited issues related to the interconnection listed in section E, below, that relate to the disputed PPA terms (subset 1 above). However, Madras Solar understands that the ALJ may have intended for a broader scope of interconnection issues to be resolved in this docket and seeks clarification on that scope now.

³³ ORCP 18.

³⁴ See ORCP 23(B).

D. Clarification is Necessary Now in Order to Aid in Judicial Economy

Wrapping the entire universe of interconnection issues, generally, into this case would bypass the QF-LGIP dispute resolution process, which may resolve some or all of the disputed issues without requiring the parties (including PGE ratepayers) and the Commission to expend resources engaging in unnecessary litigation.

Clarification will also be needed in terms of state and federal jurisdiction. A number of the interconnection issues are likely subject to the Commission's jurisdiction, while other PGE actions are under FERC jurisdiction. At the conclusion of the LGIP process (if any disputes remain), Madras Solar intends to determine which PGE actions have violated or are inconsistent with laws, rules, and policies under state jurisdiction and which are under FERC jurisdiction. Given that Madras Solar is unclear whether there will be any disputed interconnection issues, Madras Solar has not yet conducted a formal analysis of which issues are appropriately under state jurisdiction and Madras Solar should not be required to prematurely complete that analysis prior to the completion of the LGIP process.

PGE's rebuttal testimony is due February 4, 2020. If all disputed interconnection issues are wrapped into this case, PGE is likely to include extensive and broad-ranging testimony regarding the disputed issues in its filing, including anything that would help PGE prove its amended counterclaims proposing that it properly performed Madras Solar's System Impact Re-Study and Facilities Study and that Madras Solar is obligated

to pay for the costs identified in the Facilities Study.³⁵ Madras Solar’s Surrebuttal Testimony, the last round of testimony in this case, is due March 27, 2020, which would provide Madras Solar with only seven weeks to conduct discovery and prepare testimony on interconnection issues that it never expected to adjudicate and does not wish to adjudicate at this time.

Even more relevant, Madras Solar provided its formal Comments on the Facilities Study on January 17, 2020 (today). While PGE is seeking resolution of all disputed issues regarding the Facilities Study, it is doubtful that PGE’s February 4, 2020, testimony will be able to comprehensively address all issues raised in these Facilities Study Comments—some of which are being raised for the first time, as they are the first formal comments regarding the Facilities Study. Thus, if issues related to the Facilities Study are resolved in this case, then Madras Solar’s Surrebuttal Testimony will be the only evidence in the record regarding these issues.

Interconnection issues related to PGE’s interconnection costs and studies include, for example, whether PGE has violated certain provisions of its open access transmission tariff (“OATT”) or the QF-LGIP. But for these violations, PGE’s interconnections costs and studies would be much different. The violations at issue include:

1. Whether any of the “grandfathered” transmission agreements provided for review by PGE actually limit the capacity of the Round Butte – Bethel 230 kV line to the output of PRB generation.³⁶

³⁵ See PGE’s Motion to Amend Answer and Counterclaim at Attachment 1, ¶¶ 177-178.

³⁶ Attachment D at § II.e.

2. Whether PGE acted properly regarding its Round Butte/Cove Interconnection and Operation Agreement. PGE's Round Butte/Cove Interconnection and Operation Agreement with PacifiCorp requires PGE to make 120 MW of energy and capacity available at that point of interconnection, yet PGE initially denied that it has any load in central Oregon. This information was originally withheld from Madras Solar and was used by PGE to help justify the TTC/ATC analysis. It also appears that PGE did not properly file the agreement with FERC. These issues would be subject to FERC jurisdiction over the OATT.³⁷
3. Whether PGE's TTC/ATC analysis is discriminatory. Under Oregon law, PGE's OATT, the QF-LGIP, and FERC Orders, PGE is not permitted to discriminate against an interconnection customer. It appears that PGE may have discriminated against Madras Solar by performing the TTC/ATC analysis as a part of the interconnection studies, when it has never previously done so. At least some of these claims could be within the OPUC's jurisdiction, but there is likely helpful FERC precedent on the issues since the OPUC's QF-LGIP is based on FERC's.³⁸
4. Whether it is appropriate for PGE to assign Madras certain network upgrades. In light of the dramatic decrease in interconnection costs in the System Impact Re-Study conducted by PGE, it appears that PGE initially

³⁷ *Id.* at § II.h.

³⁸ *Id.* at § II.g.

attempted to assign Madras unnecessary interconnection costs in violation of Oregon law and the QF-LGIP. Here again, at least some of these claims could be within the OPUC's jurisdiction, but there is likely helpful FERC precedent on the issues since the OPUC's QF-LGIP is based on FERC's.³⁹

5. Whether Madras Solar is entitled to any credit for network upgrades.

Under the QF-LGIP, a QF can receive credits for the cost of network upgrades if it can demonstrate that the upgrades provide quantifiable, system-wide benefits. Here, there is an issue regarding whether the Madras Solar project provides such benefits. This issue would be within the OPUC's initial jurisdiction and guided by FERC precedent; however, as discussed elsewhere in this motion, it is not be fully developed in the record.⁴⁰

In addition, Madras Solar has identified numerous technical issues in the draft Facilities Study, some of which overlap with the cost-related issues. Also, certain of these issues did not exist in either the Feasibility Study or the initial System Impact Study, and others did not exist until the draft Facilities Study, meaning that Madras Solar was not and could have been aware of all of them when filing its complaint or testimony in this proceeding. These include whether the draft Facilities Study (and the revised System Impact Study that informed it) correctly reports on technical issues such as:

³⁹ *Id.* at § II.a.

⁴⁰ *Id.* at § II.i.

1. Whether the costs for the “POI Substation” and “Transmission Line Modification” identified in the draft Facilities Study are reasonable and appropriate. These costs doubled from the Revised-SIS estimate and went up over 300% from the estimates contained in the Feasibility Study and initial SIS.⁴¹
2. Whether PGE properly identified and coordinated with Affected Systems, as is required in Sections 3.5 and 7.4 of the OATT and QF-LGIP. The Revised System Impact Study noted that the Confederated Tribes of Warm Springs, which co-owns the transmission line to which Madras Solar is proposing to interconnect, were impacted, and the Original System Impact study noted that PacifiCorp and BPA were affected. However, the draft Facilities Study has not identified any Affected Systems.⁴²
3. Whether PGE should submit a revised Facilities Study that includes all the required facilities, including both the transmission provider’s (i.e., PGE) interconnection facilities and the interconnection customer’s (i.e., Madras Solar) interconnection facilities. The Facilities Study did not include the required information regarding both the transmission provider and the interconnection customer interconnection facilities.⁴³
4. What network upgrades, if any, are appropriate, given PGE’s conclusions related to a lack of reliability violations. The System Impact Re-Study

⁴¹ *Id.* at § II.a.

⁴² *Id.* at § II.b.

⁴³ *Id.* at § II.c.

notes that “[n]o additional Network Upgrades have been identified as being necessary to satisfy the applicable NERC and WECC requirements,”⁴⁴ and PGE itself further confirmed that PGE did not identify any voltage, stability or thermal violations resulting from the interconnection of Madras Solar to PGE’s system. Yet PGE’s draft Facilities Study does not reflect these conclusions. At least some of these claims could be within the OPUC’s jurisdiction, but there is likely helpful FERC precedent on the issues since the OPUC’s QF-LGIP is based on FERC’s.⁴⁵

5. Whether the Round Butte – Bethel 230 kV line is unconstrained and what network upgrades, if any, are appropriate given the conclusions about the amount of power that can be imported over that line. Evidence shows that the line is unconstrained, both physically and contractually, yet PGE concludes that the line is contractually constrained, and its Facilities Study includes upgrades that would not be required “but for” this purported contractual constraint. At least some of these claims could be within the OPUC’s jurisdiction, but there is likely helpful FERC precedent on the issues since the OPUC’s QF-LGIP is based on FERC’s.⁴⁶
6. Whether PGE application of a TTC/ATC analysis was appropriate. PGE performed such an analysis as a part of Madras Solar’s interconnection

⁴⁴ Madras Solar/307, Rogers/16-17.

⁴⁵ Attachment D at § II.d.

⁴⁶ *Id.* at § II.e.

request, despite having never before done so for an interconnection study and despite the fact that applying such an analysis to an interconnection study is not supported by interconnection procedures in the QF-LGIP (or PGE's OATT). At least some of these claims could be within the OPUC's jurisdiction, but there is likely helpful FERC precedent on the issues since the OPUC's QF-LGIP is based on FERC's.⁴⁷

7. Whether PGE reached the appropriate TTC and ATC conclusions. Even assuming it was appropriate for PGE to perform such an analysis in an interconnection study, there is a question about whether PGE reached the correct conclusions and what network upgrades, if any, would be appropriate under the correct conclusion. Several factors indicate that PGE's analysis is not correct, including the fact that i) PGE had never previously needed to calculate the TTC for this line, ii) the addition of the Madras Solar project adds only a very small increase to the total flows, iii) PGE used unrealistic study modeling assumptions, and iv) the PGE-proposed series capacitor would increase the flow in excess of PGE's newly-determined TTC values. At least some of these claims could be within the OPUC's jurisdiction, but there is likely helpful FERC precedent on the issues since the OPUC's QF-LGIP is based on FERC's.⁴⁸

⁴⁷ *Id.* at § II.f.

⁴⁸ *Id.* at § II.g.

8. Whether PGE has any load or obligations to provide energy and capacity in central Oregon. PGE's Round Butte/Cove Interconnection and Operation Agreement with PacifiCorp requires PGE to make 120 MW of energy and capacity available at that point of interconnection, yet PGE denies that it has any load in central Oregon. This discrepancy would affect the technical analysis. At least some of these claims could be within the OPUC's jurisdiction, but there is likely helpful FERC precedent on the issues since the OPUC's QF-LGIP is based on FERC's.⁴⁹
9. Whether PGE's cost estimates and planned network upgrades have appropriate support. PGE's cost estimates for particular facilities has dramatically changed from study to study, raising questions about whether PGE has complied with its obligation to make a good faith effort to estimate costs within +/- 50%, and some of the proposed facilities appear to be more than what is required for the Madras Solar facility, raising questions about whether the costs of the excess facilities should be borne by PGE.⁵⁰
10. Why PGE delivered highly-overestimated RAS costs. The R-SIS concluded that Madras Solar would be required to participate in the RAS in the Round Butte so that no more than 200 MW of generation remains on-line in the event of a loss of two transmission lines.⁵¹ PGE reduced the

⁴⁹ *Id.* at § II.h.

⁵⁰ *Id.* at § II.a.

⁵¹ Madras Solar/307, Rogers/15.

RAS costs from the R-SIS to the draft Facilities Study from \$10 million to \$800,000 and has suggested that they will drop further.⁵²

Since Madras Solar did not have PGE's draft Facilities Study at the time Madras Solar submitted its reply testimony on November 5, 2019, there were interconnection issues that Madras Solar was not aware of at that time and could not have included in its testimony. Given that PGE has not responded to certain of Madras Solar's concerns on the draft Facilities Study (many of which were raised on December 20, 2019), Madras Solar cannot speculate at this point as to what PGE's justifications will be or if it will again change its position on core aspects of the interconnection studies. In order to appropriately build the administrative record, the Commission will need to add additional rounds of testimony and extend out the case schedule.

Should PGE file testimony on interconnection issues not previously raised, Madras Solar could, rather than respond, file a motion to strike those issues and keep the scope limited to issues already previously raised in this case. But such a briefing would simply result in additional unnecessary process. Therefore, the scope of issues related to interconnection in this case should be clarified now, before PGE submits its rebuttal testimony.

E. The Commission Should Address Only Interconnection Issues that Will Impact the Disputed PPA Terms

The issues related to the interconnection that are necessary for resolution here are only those that arose prior to the filing of this case and that directly impact the PPA

⁵² Attachment D at § II.a.

terms. Madras Solar is entitled to a speedy resolution of its PPA concerns, and this case should not be unduly delayed by broadening the scope. Therefore, the only interconnection-related issues necessary for resolution in this case are:

1. Whether PGE's interconnection delays, unnecessary upgrade requirements, and incorrect cost estimates were a major cause for Madras Solar's inability to obtain a final, executable PPA, and their impact on the applicable avoided cost price; and
2. Whether PGE was reasonably entitled to insist upon a milestone in the PPA that required Madras Solar to execute an interconnection agreement by September 1, 2020, in light of the interconnection issues and delays that had occurred by that time.

A core issue in this case is what avoided cost rate applies.⁵³ Part of this determination hinges upon when a legally enforceable obligation ("LEO") was formed. The Commission has determined that a LEO arises "once a QF signs the final draft of an executable contract provided by a utility to commit itself to sell power to the utility," but that a legally enforceable obligation "may be established earlier if a QF demonstrates delay or obstruction of progress towards a final draft of an executable contract, such as a failure by a utility to provide a QF with required information or documents on a timely basis."⁵⁴ Here, the issue is whether PGE's actions in the interconnection process contributed to any delay or obstruction of progress towards a final draft of an executable

⁵³ See Complaint at 22-24 (Complainant's Fourth and Fifth Claims for Relief).

⁵⁴ *Re Investigation Into QF Contracting and Pricing*, Docket No. UM 1610, Order No. 16-174 at 3 (May 13, 2016).

contract, and therefore impacted the PPA avoided cost price term at issue in this case. As such, any interconnection issues that weigh in favor of or against a finding that PGE's actions delayed or obstructed progress should be resolved in this case.

Second, the parties also dispute a term PGE proposed in the PPA that would require that the interconnection agreement be executed by a date certain and gives PGE the right to terminate the PPA if that milestone has not been met.⁵⁵ In light of the delays and difficulties Madras Solar has experienced thus far in the interconnection process, PGE's proposed PPA term is unreasonable. Therefore, to the extent that the Commission needs to consider interconnection-related issues in order to determine what PPA term is reasonable, those issues should be considered in this case.

F. While Madras Solar Objects to their Inclusion in this Proceeding, Some Issues Related to Interconnection Have Been Sufficiently Raised by the Parties to Be Addressed in This Case Without Additional Rounds of Testimony

Should the ALJ or Commission clarify the Ruling to require that this case also must resolve some subset of additional interconnection issues that do not affect the disputed PPA terms but that the parties have effectively raised, those issues (subset 2 above) should be limited to:

1. Whether any of the "grandfathered" transmission agreements provided for review by PGE actually limit the capacity of the Round Butte – Bethel 230 kV line to the output of PRB generation.

⁵⁵ Complaint at 16-17, ¶ 63.e.

2. What is the Commission's legal standard that a QF needs to achieve in order to establish that network interconnection upgrades result in quantifiable system-wide benefits.

Madras Solar believes that only these two issues could be resolved without dramatically expanding the scope of this docket and requiring more rounds of testimony.

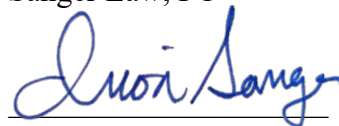
III. CONCLUSION

In order to aid in judicial economy and to protect the rights of the parties to engage in QF-LGIP dispute resolution procedures, Madras Solar hereby requests that the ALJ or Commission clarify the scope of interconnection issues that will be resolved in this case. The Commission should limit that scope to only issues that affect the disputed PPA terms or a limited subset of additional issues that have already been sufficiently raised in this case. To expand the scope significantly beyond would substantially prejudice Madras Solar.

Dated this 17th day of January 2020.

Respectfully submitted,

Sanger Law, PC



Irion A. Sanger

Marie P. Barlow

Sanger Law, PC

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Portland, OR 97215

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irion@sanger-law.com

Of Attorneys for Madras Solar

Attachment A

Ecoplexus December 20, 2019 Email to PGE

From: Nathan Rogers nrogers@ecoplexus.com
Subject: Agenda for today's Madras Solar meeting
Date: December 20, 2019 at 9:29 AM
To: Shaun Foster Shaun.Foster@pgn.com
Cc: Irion Sanger irion@sanger-law.com, Spencer Yang spencer.yang@bateswhite.com, Steve Knudsen sknudsen@threeboys.com, Scott Piscitello spiscitello@ecoplexus.com, Paul Esformes pesformes@ecoplexus.com, Cece Coleman Cece.Coleman@pgn.com, John Gorman johng@ecoplexus.com

NR

Shaun,

Good morning. Below is a proposed agenda for today's meeting:

1. Ensure common understanding of procedural milestones

- Ecoplexus may provide comments but must do so within 30 calendar days of receipt of the Draft Facilities Study (i.e., no later than January 8, 2020)
- PGE should deliver a Final Facilities Study no later than 15 calendar days after Madras Solar provides comments,
- PGE must tender a Draft LGIA no later than 30 calendar days after Madras Solar submits the above comments to PGE.
- PGE may respond to Madras Solar's comments in the form of an attachment to the Draft LGIA when the Draft LGIA is delivered Ecoplexus.
- What is PGE's understanding if these procedural milestones are not met?

2. Preview of Facilities Study comments

- The full injection of Madras Solar's output to PGE's system did not cause any voltage, stability, or thermal reliability violations under any of the required components of an interconnection System Impact Study (i.e., power flow analysis, short circuit analysis, transient stability analysis and voltage stability analysis).
 - The results of the PGE-conducted contingency analysis between Base Case (no Madras) and With Project Case (with Madras) were identical.
- The Round Butte - Bethel 230 kV line is neither physically nor contractually constrained.
 - Power flow analyses reveal that the line is 17% utilized under system peak conditions, which increases to 19% with Madras Solar and PRB generation simultaneously running at full output.
 - PGE's Market Based Rate Authority filing noted that PGE could import 200-300 MW of off-system power through Round Butte substation without incurring reliability issues.
 - There are no contractual constraints.
- TTC/ATC contained in the Revised SIS analysis is misplaced and unsupported by the OATT and QF-LGIP.
- Notwithstanding the fact that the TTC/ATC analysis is misplaced and unsupported by the OATT and/or QF-LGIP:
 - PGE had never previously calculated TTC for the Round Butte - Bethel 230 kV line, given that the line is always underutilized (less than 20% loaded).
 - Real time output of PRB generation varies significantly and often exceeds the purported TTC value, meaning that path TTC is irrelevant for reliable delivery of the PRB's generation.
 - Madras Solar adds only 8 MW (i.e., less than 2% line utilization, based on 419 MVA thermal rating) to the existing path flows.
 - Moreover, if PGE could import 200-300 MW of off-system power through the Round Butte substation, why would the TTC need to be increased to account for the mere 8 MW that Madras Solar adds to the existing path flows?
 - PGE's TTC calculation is based on unrealistic generation dispatch and power flow assumptions (i.e., PGE assumed on-system generation resources produce negative 85 MW during winter on-peak system conditions to maximize the path transfers). In other words, PGE stressed the system to the maximum possible degree (by adding phantom resources) in order to arrive at the purported TTC value and yet still could not arrive at a value that approached the thermal limits of the Round Butte - Bethel 230 kV line.
- Addition of the proposed series capacitor would increase flows on the Round Butte - Bethel 230 kV line in excess of the purported path TTC.
 - This excess power flow above purported TTC values (199 MW in the summer and 260 MW in the winter, which are unrealistic) still did not cause any reliability violations (as confirmed by PGE).
 - Why is a series capacitor needed to increase flows on an underutilized line, and why does the addition of the series capacitor result in flows above the purported TTC values?
- PGE's TTC analysis demonstrates that TTC is irrelevant (since the line is underutilized) and that the series capacitor is unnecessary (since there is no need to increase flows on an already-underutilized line), with the addition of the series capacitor *actually increasing flows on the line above the purported TTC value, while still not causing any reliability violations*, further demonstrating that TTC is irrelevant.
 - PGE originally omitted Madras Solar from the original "Series Cap" TTC case. PGE responded by saying, "As demonstrated in these cases, the omission of the Madras Project did not affect the SIS results," further

demonstrating that the series capacitor is unneeded.

- PGE's path-based NRIS analysis is contrary to OATT and QF-LGIP and obscures the fact that PGE has load in Central Oregon (e.g., the Round Butte/Cove Interconnection and Operation Agreement).
- POI Substation and Transmission Line Modification costs roughly doubled from SIS estimate and went up nearly 400% from Feasibility Study estimates.

3. Preview of comments related to OATT/QF-LGIP violations

I. Discriminatory TTC/ATC analysis

- PGE's application of TTC/ATC analysis is contrary to the OATT and QF-LGIP and all other previous interconnection studies performed by PGE (including those for its merchant function).

II. Direct assignment of unnecessary network upgrades

- PGE attempted to assign (without credits) ~\$340 million in network upgrades (i.e., upgrading of the Bethel - Round Butte 230 kV line to 500 kV) to Madras Solar.
 - PGE attempted to assign these upgrades despite the fact that Madras Solar did not cause any voltage, stability, or thermal reliability violations under any of the required components of an interconnection System Impact Study on the Round Butte - Bethel 230 kV line (i.e., power flow analysis, short circuit analysis, transient stability analysis and voltage stability analysis), and further despite the fact that the Round Butte - Bethel 230 kV is neither physically nor contractually constrained.
 - PGE only revised the SIS to remove the \$340 million in network upgrades after Madras Solar filed a complaint against PGE's merchant function with the Public Utility Commission of Oregon.
 - PGE has not offered or considered a pseudo-tie in lieu of the \$340 million (i.e., rebuilding of the Round Butte - Bethel line) or \$12 million (i.e., the series capacitor) in network upgrades in accordance with PGE's Business Practice dated May 1, 2018.
 - The Revised SIS and Facilities Study attempted to assign network upgrades (e.g., series capacitor and RAS) that may have already been planned for and for which system modifications may have already started to take place.
 - The Local Area Planning process undertaken by PGE in accordance with FERC Order 890/Order 1000 fails to acknowledge the existence of its Central Oregon transmission system, nor does it identify issues in the area or major upgrades needed (e.g., upgrading of the Round Butte - Bethel 230 kV line to 500 kV).
- PGE initially claimed that the AC Intertie Agreement with BPA limits its ability to grant transmission service or schedule power in the east-west direction, thus necessitating the rebuilding of the Round Butte - Bethel 230 kV line to 500 kV. This was proven to be untrue.
 - PGE then claimed that the purported existence of "historical, grandfathered, internal" transmission agreements (that do not actually exist) limited the TTC of the Round Butte - Bethel 230 kV line to the real time output of PRB, thus necessitating the series capacitor to increase the TTC.

III. Standards of Conduct

- PGE stated that FERC Standards of Conduct "do not apply" to QFs, despite attesting under oath that it upheld FERC Standards of Conduct in its interactions with Madras Solar.

IV. Additional violations

- PGE appears to have improperly reserved entire Round Butte to Bethel path transmission capacity for the exclusive use of its merchant function's PRB generation.
 - PGE's merchant function then appears to have used this improper firm transmission reservation to purchase power whenever it was economical.
 - PGE falsely claimed that it has no transmission system load in central Oregon, when in fact:
 - PGE has at least 120 MW of firm obligations in Central Oregon per Section 4.1 of the Round Butte/Cove Interconnection and Operation Agreement executed with PacifiCorp on July 8, 1993.
- PGE appears to be double-selling 120 MW of PRB generation, as PGE has the full 353 MW output of PRB listed as a DNR, while PacifiCorp has 120 MW of Pelton output (i.e., the Round Butte/Cove Interconnection and Operation Agreement) posted as a DNR on PacifiCorp's OASIS).
- PGE may be attempting to assign the costs of certain network upgrades to Madras Solar in order to defer a transmission rate case pending an asset exchange transaction with PacifiCorp.
- According to PGE's 2018 FERC Form 1, in 2018 PGE delivered an average of 487 MW from the PacifiCorp system to PGE load on non-firm transmission every hour of the year under the Round Butte/Cove Interconnection and Operation Agreement (and other exchange agreements?) at no cost to PGE Merchant.
- PGE appears to have executed non-OATT PTP reservations for approximately 300 MW of imports and exports to/from PacifiCorp's system, at no cost to PGE's merchant function, which appear to be designed to allow PGE's merchant function to schedule power to/from California and have it be "deemed delivered" (i.e., delivered to PGE without incurring a BPA wheeling charge) at Grizzly.

4. Potential paths to resolution

- PGE tenders a revised QF-Facilities Study that removes the requirement for a series capacitor and sets the combined POI Substation and Transmission Line Modification at an amount not-to-exceed the estimate contained in the Revised SIS.
- PGE does not tender a revised QF-Facilities Study, but agrees to fund the costs for the series capacitor and any costs for the combined POI Substation and Transmission Line Modification above and beyond the costs contained in Revised SIS in accordance with Section 11.3 of the QF-LGIA.

The comments listed above should in no way be considered exhaustive or final. Madras Solar reserves the right to amend, modify, or remove existing comments and add additional ones as it deems appropriate upon issuance of its formal Facilities Study comments no later than January 8, 2020.

Lastly, will you please update the calendar invite to include a call-in number?

Many thanks,

-Nathan

--

Nathan Rogers

Director of Project Development - Western Region

Ecoplexus

101 Second Street, Suite 1250

San Francisco, CA 94105

Office: (415) 626-1802 Ext. 108 Cell: (415) 745-0541

www.ecoplexus.com

Attachment B

Ecoplexus January 8, 2020 Notice of Dispute Re: Madras Solar

January 8, 2020

Cece Coleman
Assistant General Counsel
PGE Transmission Services
121 SW Salmon Street
Portland, OR 97204

RE: NOTICE OF DISPUTE REGARDING MADRAS SOLAR

Ms. Coleman:

Ecoplexus Inc. ("Ecoplexus") Ecoplexus hereby submits a formal Notice of Dispute ("Notice of Dispute") in accordance with Section 13.5 of the Oregon Qualifying Facility Large Generator Interconnection Procedures ("QF-LGIP") for Portland General Electric Transmission Services ("PGET") generation interconnection queue no. 17-068 ("Madras Solar") and invokes the dispute resolution process contemplated thereunder, officially tolling the interconnection process and associated timelines for Madras Solar under the QF-LGIP. This Notice of Dispute is being submitted in advance of formal comments regarding the Draft Facilities Studies currently being prepared by Ecoplexus in accordance with Section 11.1 of the QF-LGIP, which will be submitted to PGET not later than the close of business on Friday, January 10, 2020.

On December 20, 2019, Madras Solar identified a preliminary list of issues regarding the draft Facilities Study and the next procedural steps. At the December 20, 2019, Facilities Study meeting, Madras Solar sought to discuss PGET's views regarding the procedural next steps in the QF-LGIP. PGET refused to discuss these with Madras Solar during the meeting or afterward.

Ecoplexus' goal is to work with PGET to resolve the issues identified both throughout the course of the interconnection process for Madras Solar and at the December 20, 2019, Facilities Study meeting, as well as those that will be identified and further elucidated upon in the forthcoming comments regarding the Draft Facilities Study, prior to PGET issuing the Final Facilities Study for Madras Solar. Under the QF-LGIP, Ecoplexus believes that the parties can continue to work toward constructive resolution of Ecoplexus' concerns without PGET immediately moving toward issuance of the Final Facilities Study. However, out of an abundance of caution and a lack of clarity regarding PGE's views on the procedural process, Ecoplexus hereby invokes the dispute resolution procedures contemplated in Section 13.5 of the QF-LGIP, which clearly provide Ecoplexus and PGET with additional time to attempt to resolve Ecoplexus' concerns prior to PGET moving toward the Final Facilities Study.

Ecoplexus' invocation of the dispute resolution procedures contained in the QF-LGIP is not intended to mean that any irreconcilable differences have arisen. Instead, the purpose of invoking dispute resolution is to ensure that there is a formal "time out" and delay in moving toward the next step in the QF-LGIP sufficient to allow PGET and Ecoplexus to focus on resolving Ecoplexus' concerns with the draft Facilities Study.

Ecoplexus will provide further direction in its forthcoming comments regarding the Draft Facilities Study with respect to its expectations for informal resolution of the Madras Solar dispute.

Sincerely,



Paul Esformes
Corporate Counsel

cc: Irion Sanger, Sanger Law
Bob Fallon, Engleman Fallon Energy Law
Erik Stuebe, Ecoplexus
John Gorman, Ecoplexus
Scott Piscitello, Ecoplexus
Nathan Rogers, Ecoplexus
Shaun Foster, PGE
Donald Light, PGE

Attachment C

PGE January 15, 2020 Letter Re: Notice of Dispute



JORDAN SCHOONOVER
Direct (503) 290-3633
jordan@mrg-law.com

January 15, 2020

VIA EMAIL

Irion Sanger
Sanger Law PC
1041 SE 58th Place
Portland, OR 97215
irion@sanger-law.com

Re: Ecoplexus Notice of Dispute

Dear Mr. Sanger:

This letter responds to Ecoplexus's Notice of Dispute Regarding Madras Solar's interconnection (Notice of Dispute or Notice), which Portland General Electric Company (PGE) received on January 8, 2020. Ecoplexus's Notice does not explain the nature of the dispute, but claims that Madras Solar's interconnection timelines under the Public Utility Commission of Oregon's (Commission) Qualifying Facility Large Generator Interconnection Procedures (QF-LGIP) have been tolled by filing the Notice. Ecoplexus also indicates that it invoked the dispute resolution procedures to cause a "time out" in the interconnection process for the parties to resolve Ecoplexus's concerns regarding the draft Facilities Study, but that its Notice is not intended to mean that any irreconcilable differences have arisen.

PGE views the Notice of Dispute as redundant, given PGE's understanding that the validity of Madras Solar's interconnection studies is currently being litigated before the Commission in Docket UM 2009. Madras Solar's Reply Testimony in UM 2009 included voluminous and detailed testimony and exhibits critiquing the interconnection studies that had been completed (the most recent at that time was the System Impact Re-Study, or SIS). PGE filed a Motion to Strike this material as outside the scope of Madras Solar's complaint. In the alternative, PGE asked the Commission to treat Madras Solar's testimony as placing the interconnection disputes at issue and to decide these disputes in UM 2009.

The Administrative Law Judge (ALJ) issued a ruling denying PGE's Motion to Strike, but stated that the interconnection disputes were clearly "part of th[e] proceeding."¹ Shortly thereafter, you communicated Ecoplexus's view that the ALJ Ruling had *not* found that the interconnection studies were at issue and stated that Ecoplexus intends to file a request for clarification of the ALJ Ruling, asking the ALJ to clarify that the Commission will not be deciding the validity of the interconnection studies in UM 2009. In an effort to end the ongoing uncertainty regarding the

¹ ALJ Ruling (Dec. 9, 2019).

scope of the case and conform the pleadings to the issues disputed between the parties and addressed in their testimony, PGE moved to amend its counterclaim to place the interconnection dispute squarely at issue in UM 2009. Thus, PGE believes that dispute resolution is underway and expects to fully and formally litigate the interconnection issues in UM 2009.

PGE understands that Ecoplexus opposes PGE's Motion to Amend its counterclaim to seek resolution of the interconnection disputes, but Ecoplexus's Notice in the context of the interconnection study process confirms what has long been obvious from Ecoplexus's testimony and discovery requests in UM 2009—an irreconcilable dispute exists that must be resolved. Through the testimony of Ecoplexus witnesses Dr. Spencer Yang and Nathan Rogers, the parties' meetings, and Ecoplexus's data requests in UM 2009, Ecoplexus has repeatedly conveyed its fundamental disagreement with PGE's interconnection studies, which include a Network Resource Interconnection Service (NRIS) deliverability analysis and require Madras Solar to fund network upgrades to increase capacity on the Bethel-to-Round Butte 230 kV line sufficiently to allow all Madras Solar's output to be transmitted out of the Round Butte area. In its initial, informal comments on the Facilities Study, provided via email on December 20, 2019, Ecoplexus confirmed that its objections to these portions of the SIS—which had been detailed at great length in its Reply Testimony—extend equally to the Facilities Study, which is based on the same fundamental premise as the SIS.

The Notice of Dispute conveys Ecoplexus's intent "to work with PGET to resolve the issues identified . . . throughout the course of the interconnection process for Madras Solar . . ." However, PGE has been diligently working with Ecoplexus to clear up confusion and attempt to resolve Ecoplexus's questions and concerns for many months. Following issuance of the SIS, PGE met with Ecoplexus to answer questions and also responded to additional questions in writing. Since September 2019, PGE has responded to at least 50 data requests in UM 2009 related to interconnection issues. PGE offered to schedule an additional meeting to discuss transmission and contractual issues, but Ecoplexus cancelled that meeting at the last minute, so PGE provided detailed written information regarding these issues as data responses in UM 2009. PGE remains willing to respond to additional, properly served data requests related to interconnection issues.

Further, pursuant to QF-LGIP Article 8.4, PGE scheduled a meeting for 11 a.m. on December 20, 2019, to "discuss the results of the . . . Facilities Study." Ecoplexus's characterization of this meeting in its Notice of Dispute is incomplete and misleading, and therefore it is necessary for me to respond in some detail. At 9:30 a.m. on December 20, PGE received an email from Nathan Rogers with a proposed agenda for the meeting. Most of the agenda items were simply an outline of the issues raised in Dr. Yang's Reply Testimony regarding the SIS analyses, but it also included several new "additional violations," many of which lacked sufficient detail for PGE to understand them and had no clear relationship to Madras Solar's interconnection. The email also posed several questions about the remainder of the interconnection process under the QF-LGIP. PGE did not have an opportunity to review and discuss the proposed agenda items internally before the meeting began.

Ecoplexus began the meeting by explaining that it did not wish to discuss the merits of the interconnection studies and instead sought to reach a common understanding of the process going forward. In particular, Ecoplexus sought clarification regarding its rights under the QF-LGIP if PGE were to tender a draft Large Generator Interconnection Agreement (LGIA) that Madras Solar was unwilling to sign. Given that the stated purpose of the meeting under the QF-LGIP was to discuss the Facilities Study and that Ecoplexus had not provided PGE with sufficient notice that it sought to discuss procedural matters outside this scope, PGE was not prepared to have this

discussion during the meeting and so informed Ecoplexus. PGE explained that, while it was not prepared to provide a legal interpretation regarding Ecoplexus's rights during the meeting, PGE remained willing to work with Ecoplexus and to have additional conversations regarding procedural questions, and counsel for PGE, Don Light, encouraged you to reach out to him with questions or concerns. To the best of my knowledge, you have not done so. Thus, Ecoplexus's statement that "PGET refused to discuss these [procedural questions] with Madras Solar during the meeting or afterward" is simply false. Moreover, any implication that Ecoplexus sought to continue the conversation regarding procedural issues and was rebuffed by PGE is incorrect, because Ecoplexus did not contact PGE at all between the December-20 meeting and filing the Notice of Dispute on January 8.

In sum, contrary to Ecoplexus's insinuations, PGE remains ready to work with Ecoplexus to complete the interconnection process, discuss any questions regarding the Facilities Study, and reach a common understanding of procedural issues. However, in light of the substantial discussions and information exchange that have already occurred, Ecoplexus's stated position in testimony in UM 2009, and Ecoplexus's initial, informal Facilities Study comments that directly echo that testimony, PGE is not optimistic that additional conversation—via informal dispute resolution or otherwise—will result in a full resolution of the disputed interconnection issues. Instead, PGE believes that the parties have clearly reached an impasse regarding the network upgrades contained in the SIS, which are largely unchanged in the Facilities Study, and that Ecoplexus effectively skipped the informal dispute resolution phase by filing testimony that placed the SIS squarely at issue in UM 2009.

That said, PGE is prepared to schedule a meeting between senior representatives, "as promptly as practicable," consistent with QF-LGIP Article 13.5.1. In order to ensure that the appropriate representative(s) attend this meeting and have authorization to make the necessary decisions, PGE requires a clear statement regarding the nature of the dispute to which the Notice pertains and any supporting information or detail Ecoplexus can provide to assist PGE decision-makers in evaluating the dispute and preparing for the senior-representative meeting. **Please provide this information as soon as possible, but no later than Friday, January 17, 2020.** PGE will then promptly provide some dates and times during which the appropriate senior representative(s) are available to meet.

Finally, PGE objects to Madras Solar's suggestion that it can toll deadlines in the interconnection process by filing a dispute, while simultaneously moving forward in the interconnection process pending the outcome of the dispute resolution efforts. Ecoplexus states that its Notice of Dispute tolls the interconnection process, but also indicates that it plans to submit comments on the Facilities Study—indicating a desire to proceed with the interconnection process. PGE does not agree that filing a Notice of Dispute that lacks any detail regarding the nature of the dispute serves to pause the interconnection process and toll applicable deadlines—there is no explicit provision for tolling in the QF-LGIP. However, this issue need not be resolved at present, because in order to keep matters moving forward and out of respect for others in or who may later be in the queue, PGE is willing to accept and respond to Madras Solar's late comments.

Madras Solar's comments on the Facilities Study were due on January 8, 2020. The January-8 Notice of Dispute stated Madras Solar would provide comments by January 10, but Madras Solar did not do so and did not update PGE regarding whether or when it would provide comments on the Facilities Study. Therefore, I called you on January 13 to inquire whether Ecoplexus still planned to submit comments, and you indicated that comments would be forthcoming and would be provided by January 17. PGE is willing to accept Madras Solar's late

comments regarding the Facilities Study, **provided that such comments are received no later than January 17, 2020**. PGE will then issue the final Facilities Study within 15 business days from the date on which PGE receives Madras Solar's comments and tender a draft LGIA within 30 calendar days.

Going forward, Madras Solar must remain in compliance with all applicable deadlines under the QF-LGIP in order to retain its position in the queue. Of course, PGE will not remove Madras Solar from the queue so long as the parties are fully engaged in dispute resolution. However, in PGE's view, the informal dispute resolution process will be complete once the senior representatives meet, and formal dispute resolution efforts would no longer be ongoing if the Commission were to determine that the interconnection studies are not being litigated in UM 2009. Therefore, Madras Solar is advised to adhere to all deadlines.

In closing, I want to convey that PGE remains extremely perplexed by Ecoplexus's strategy—which appears to be aimed at *avoiding* an efficient resolution of all disputed issues by preventing the Commission from issuing a legitimate decision regarding issues within its jurisdiction. Meanwhile, responding to Madras Solar's voluminous interconnection-related testimony has been and continues to be extremely time- and resource-intensive. PGE has retained an expert witness and is devoting significant internal and external resources to preparing Rebuttal Testimony responding to all the issues raised in Madras Solar's Reply Testimony. PGE sincerely hopes that Ecoplexus will end the procedural gamesmanship so that both parties may focus their efforts on obtaining efficient Commission resolution of *all* disputed issues between them.

Please do not hesitate to contact me if you have any questions.

Sincerely yours,



Jordan R. Schoonover

cc: Donald Light, Lisa Rackner

Attachment D

**Ecoplexus January 17, 2020 Letter Re:
Informal Comments Pertaining to The Draft Facilities Study Report to Assist
In Dispute Resolution Under Section 13.5 of The QF-LGIP**

January 17, 2020

Shaun Foster
PGE Transmission Services
121 SW Salmon Street
Portland, OR 97204

**RE: INFORMAL COMMENTS PERTAINING TO THE DRAFT FACILITIES STUDY REPORT TO
ASSIST IN DISPUTE RESOLUTION UNDER SECTION 13.5 OF THE QF-LGIP**

Mr. Foster:

Madras PV1, LLC ("Madras Solar") submits the following informal comments pertaining to the Draft Facilities Study Report provided by Portland General Electric Company Transmission Services ("PGET") on December 5, 2019. These comments are intended to assist in resolving the current interconnection-related dispute between Madras Solar and PGET invoked per the formal Notice of Dispute ("Notice of Dispute") provided by Madras Solar to PGET in accordance with Section 13.5 of the Oregon Qualifying Facility Large Generator Interconnection Procedures ("QF-LGIP") on January 8, 2020. As a result of invoking the dispute and providing a procedural "time out" for the parties to attempt to informally resolve the outstanding issues pertaining to the Draft Facilities Study Report, Madras Solar understands that it is under no obligation to provide formal comments in accordance with Section 8.3 of the QF-LGIP until such time as the parties have completed the informal dispute resolution process and PGET provides a Revised Draft Facilities Study, and Madras Solar reserves the right to submit formal comments in accordance Section 8.3 of the QF-LGIP at such time.

These comments will endeavor to discuss technical issues and deficiencies observed with the Original Feasibility Study, the Revised Feasibility Study, the Original System Impact Study ("O-SIS"), the Revised System Impact Study ("R-SIS"), and the Draft Facilities Study. Attached to these comments as **Appendix 1** is a discussion of potential violations of the Federal Power Act ("FPA"), which would include PGET's Open Access Transmission Tariff ("OATT") (including Attachment O: Standard Large Generator Interconnection Procedures), that have been observed during the interconnection process for Madras Solar. These issues may be reviewed by the Federal Energy Regulatory Commission ("FERC") Office of Enforcement at the appropriate time.

The requested resolution for the issues and technical deficiencies identified herein include a issuance of a Second Revised System Impact Study (“Second R-SIS”) that removes the requirement for the series capacitor, followed by issuance of a Revised Draft Facilities Study that incorporates the conclusions from the Second R-SIS and reduces the costs for the POI Substation and Transmission Line Modification to those contained in O-SIS, in addition to any other specific, limited remedies further discussed herein.

The list of issues identified in this letter should not be considered exhaustive, and Madras Solar may identify additional concerns in the future.

I. Summary of Issues

For the benefit of the reader, Madras Solar has provided a bullet point summary of each of the issues identified in the following sections:

- a. Inflated Cost Estimates and Assignment of Previously-Planned Network Upgrades
- b. Failure to Identify and Coordinate with Affected Systems
- c. Failure to Include Required Facilities in the Draft Facilities Study Report
- d. No Reliability Violations
- e. Round Butte – Bethel 230 kV Line is Unconstrained
- f. Inappropriate Application of a TTC/ATC Analysis
- g. Flawed TTC/ATC Conclusions
- h. Failure to Acknowledge Existence of Central Oregon load
- i. Failure to Provide Guidance with Respect to Demonstration of Quantifiable System-Wide Benefits

II. Technical Issues and Deficiencies Related to the Draft Facilities Study and Previous Interconnection Studies

There are numerous technical issues and flaws observed in the Original Feasibility Study, the O-SIS, the R-SIS, and the Draft Facilities Study. This section will endeavor to outline those technical issues and deficiencies that have been identified to date.

a. Inflated Cost Estimates and Assignment of Previously-Planned Network Upgrades

Pursuant to the terms of the Interconnection System Impact Study Agreement executed between PGET and Madras Solar on September 11, 2019, PGET was obligated to make a good faith effort to estimate the costs of any required network upgrades within an accuracy of plus or minus 50 percent. Madras Solar observed that the combined costs for the “POI Substation” and “Transmission Line Modification” doubled between the R-SIS

estimate and the Draft Facilities Study, and went up over 300% from the estimates contained in the Feasibility Study and the O-SIS. PGE was consistent across both of these first two studies in identifying the design of the POI Tap Station and associated cost, whether for Energy Resource Interconnection Service (“ERIS”) or Network Resource Interconnection Service (“NRIS”), with the Feasibility Study Report concluding that requirements for the POI Tap Station consisted of a “three position ring bus with disconnects” at an estimated cost of \$2.6 million for either ERIS or NRIS.¹ The conclusions contained in the O-SIS were nearly identical, noting that the POI Tap Station consisted of a “three position ring bus with disconnects and transmission line work,” again at an estimated cost of \$2.6 million for either ERIS or NRIS.² However, the requirements for the POI Tap Station contained in the R-SIS changed to include a “three-position ring bus with circuit breakers, disconnect switches, and bus and structures,” at a cost of \$6.2 million for both NRIS and ERIS, representing a 138% increase from the estimate in the O-SIS.

Based upon the cost estimate in the R-SIS, Madras Solar executed a Facilities Study Agreement with PGET. However, upon delivery of the Draft Facilities Study, Madras Solar noted that the cost for the basic interconnection facilities increased again – this time, to \$11.4 million, which was 337% percent higher than the estimate contained in the O-SIS and fully 83% higher than the cost estimate that formed the basis of the Facilities Study Agreement Executed between PGE and Madras Solar. In the Draft Facilities Study, what was previously a POI Tap Station became a “POI substation designed as a 3-position 230 kV ring bus that will sectionalize the Pelton-Round Butte 230 kV generation lead line and accept the interconnection customer’s generation lead line.” In reality, all that is required in terms of interconnection facilities for Madras Solar is a 3-position tap station with disconnects and transmission line modifications, as PGET determined in the O-SIS. Any enhancements or modifications to the design of the interconnection facilities intended for the operational benefit of PGE – such as the ability to sectionalize the Pelton Round Butte (“PRB”) facilities and convert the Pelton Generation lead line to a PGET-owned transmission line – are costs that must be borne by PGET, not Madras Solar.

In addition, the R-SIS concluded that Madras Solar would be required to participate in the local Round Butte Remedial Action Scheme (“RAS”), which allows generation connected to the Round Butte substation to be immediately tripped following the loss of two transmission lines in the area, “so that no more than 200 MW of generation remains on-line” in the event of such a contingency.³ The R-SIS estimated the cost of enabling Madras

¹ Interconnection Feasibility Study (amended), dated October 2, 2018.

² Interconnection System Impact Study, dated February 4, 2019.

³ Interconnection System Impact Re-Study, dated July 12, 2019, page 4.

Solar's participation in the RAS to be \$10 million, plus or minus 50%, while the Draft Facilities Study estimated the cost for RAS participation to be approximately \$800,000. The \$10 million R-SIS estimate for integrating Madras Solar into the existing RAS turned out to be overestimate of 1,150% from the corrected estimate in the Draft Facilities Study, and PGET has indicated that the costs for RAS participation are likely to be further reduced, potentially all the way down to zero.⁴ This means that the error in cost estimation may ultimately exceed 1,150% between the initial cost estimate contained in the R-SIS and the revised cost estimate contained in the Draft Facilities Study Report. PGET also noted, in a December 20, 2019, meeting with Madras Solar to review the Draft Facilities Study that, in the course of performing the Facilities Study, PGE determined that the earlier \$10 million estimated cost of RAS to Madras Solar had inadvertently included the cost of facilities that had either already been constructed, were under construction, or were planned to be built as part of the initial RAS.

Requested Remedy

As a remedy for these issues, Madras Solar requests that, upon issuance of a Revised Draft Facilities Study, PGET sets the combined POI Substation and Transmission Line Modification at an amount not to exceed the estimate contained in the O-SIS and sets the RAS costs at an amount approximating zero dollars, per the recent communication from PGET.

b. Failure to Identify and Coordinate with Affected Systems

In accordance with Sections 3.5 and 7.4 of the QF-LGIP, as well as the terms of the System Impact Study Agreement, PGET is obligated to both identify and coordinate with Affected Systems. PGET, in the O-SIS, identified the Bonneville Power Administration ("BPA") and PacifiCorp as Affected Systems, yet it failed to either "coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems with Affected System Operators" or "include such Affected System Operators in all meetings held with Interconnection Customer" as required under Section 3.5 of the QF-LGIP.⁵ The R-SIS did not identify whether there were any Affected Systems at all, despite noting that such was one of the objectives of the study.⁶

In addition, in some of the earliest communications related to the interconnection of Madras Solar, PGET noted that the PRB facility, of which the 230 kV lead line to which Madras Solar is proposing to interconnect is a part, is co-owned by the Confederated

⁴ Email from Shaun Foster of PGET to Nathan Rogers of Ecoplexus, dated January 8, 2020.

⁵ See Section 3.5 and Section 7.4 of the QF-LGIP.

⁶ See Fn. 3, page 3.

Tribes of Warm Springs (“CTWS”), and that PGE would be unable “to unilaterally enter into any interconnection agreements that involve jointly-owned facilities” and that any subsequent interconnection agreement for Madras Solar would “need to involve the CTWS in some manner.”⁷

Despite this clear admission of the affected nature of CTWS, the R-SIS noted the CTWS as being co-owners of PRB, but did not formally identify them as an Affected System and has neither coordinated any studies with the CTWS nor included them in subsequent meetings. (The O-SIS made no mention of CTWS at all.)

Requested Remedy

As a remedy for this failure, Madras Solar requests that, prior to issuance of a Revised Draft Facilities Study, PGET formally identifies the CTWS as an Affected System and proceeds to both coordinate any required studies with the CTWS and include the CTWS in future interconnection-related meetings with Madras Solar.

c. Failure to Include Required Facilities in the Draft Facilities Study

PGET failed to perform the Facilities Study in accordance with the QF-LGIP, in that the study did not include the required information concerning both the Transmission Provider’s Interconnection Facilities *and* Interconnection Customer Interconnection Facilities (“ICIF”).⁸

Requested Remedy

As a remedy for this failure, Madras Solar requests that PGET immediately deliver a supplement to the Draft Facilities Study contemplating both Transmission Provider Interconnection Facilities and ICIF, as well as Madras Solar’s responsibilities for each, which must be fully described and documented in the Final Facilities Study.

d. No Reliability Violations

PGET’s NRIS interconnection studies concluded that the full injection of Madras Solar’s output to PGET’s system would not cause any voltage, stability, or thermal reliability

⁷ Email from Shaun Foster of PGE to Jacob Pundyk of Ecoplexus, dated October 12, 2017.

⁸ Article 1 of both the QF-LGIP and QF-LGIA define “Interconnection Facilities” as being inclusive of both the Transmission Provider’s Interconnection Facilities and the Interconnection Customer’s Interconnection Facilities.

violations that would require additional network upgrades.⁹ The underlying reason is that Madras Solar is not located in a transmission-constrained area. PGE staff has admitted as much, and the results of PGET’s own contingency analyses revealed that there were no differences between the “Base Case” (i.e., without Madras Solar) and the “Study Case” (i.e., with Madras Solar), meaning that Madras Solar exerts only a *de minimis* effect on PGE’s system. Therefore, PGET is obligated to provide Madras Solar with a Final Facilities Study that reflects these conclusions and contemplates only the basic Interconnection Facilities and interconnection-related Network Upgrades needed to accommodate Madras Solar’s output (i.e., the Point of Interconnection (“POI”) Substation and Transmission Line Modification). Any action to the contrary would constitute undue discrimination towards Madras Solar.

Requested Remedy

Madras Solar requests immediate issuance of a Second R-SIS, followed by a Revised Draft Facilities Study, that removes the requirement for the series capacitor.

e. Round Butte – Bethel 230 kV Line is Unconstrained

PGET’s Round Butte - Bethel 230 kV line is neither physically nor contractually constrained. In fact, PGE’s Market Based Rate (“MBR”) filing with the FERC noted that PGET could import 200-300 MW of off-system power through the Round Butte substation without incurring reliability issues.¹⁰ PGE has repeatedly stated that, in order for the output of Madras Solar to be deliverable under NRIS, it must be delivered to PGET’s native load¹¹ (i.e., its load center in Portland and the Willamette Valley) and that the “Round Butte to PGE load” is the only available path to serve its native load.¹² If PGET can import 200-300 MW through the Round Butte substation – and then deliver it across the “only” available path to PGET’s loads, the Round Butte to PGE load path – then it stands to reason that an additional 65 MW from Madras Solar could be injected at the same point on PGE’s system without incurring reliability issues – particularly given that the output of Madras Solar would only add an additional 8 MW to the physically-unconstrained Round Butte to

⁹ See Fn. 3 at pages 17–18, which state that “[n]o additional Network Upgrades have been identified as being necessary to satisfy the applicable NERC and WECC requirements” as a result of the power flow analysis, short circuit analysis, transient stability analysis and voltage stability analysis.

¹⁰ Portland General Electric Company, “Revised Appendix D Power Flow Tie-Line Plots,” FERC Docket No. ER10-2249-002 (Dec. 11, 2013).

¹¹ See Fn. 1 at page 7.

¹² Madras Solar objects to PGE’s characterization of any kind of a “path-based” analysis for an NRIS interconnection study, and further notes that power flow data reveals that the majority of the output of Madras Solar is actually being absorbed by local PGE loads in Central Oregon.

PGE load path flow under 2020 heavy summer system peak condition, with Madras Solar and PRB generation simultaneously running at full applicable output (as PGE itself agrees).

In addition to the fact that the Round Butte – Bethel 230 kV line is not physically constrained, as PGET has admitted, it is not contractually constrained either. While PGE has introduced various fictional narratives regarding how certain “grandfathered, historical, internal” transmission agreements purportedly limit the contractual capacity of the line in question to the output of the PRB hydro facility, and has produced a number of “grandfathered” agreements for review, PGE has been unable to identify which of those agreements actually limit the capacity of the Round Butte-Bethel line to PRB output.

Requested Remedy

Madras Solar requests immediate issuance of a Second R-SIS, followed by a Revised Draft Facilities Study, that removes the requirement for the series capacitor.

f. Inappropriate Application of a TTC/ATC Analysis

PGET has never previously conducted a Total Transfer Capability (“TTC”)/Available Transfer Capability (“ATC”) analysis in any of its interconnection studies. PGET nonetheless contends that it was uniquely required to perform a path-specific TTC/ATC analysis for the Madras Solar R-SIS, claiming as justification that the Bethel-Round Butte 230 kV line is contractually limited by certain “grandfathered” transmission agreements that purportedly restrict the capacity of the line to the output of PRB; therefore, in PGET’s view, the TTC must be increased to accommodate the output of Madras Solar. Not only has PGET been unable to substantiate the existence of any historical agreements that actually limit the power flow of the Round Butte – Bethel line, this type of path-based analysis is contrary to definitions of the path-agnostic NRIS study contained in PGET’s OATT and the QF-LGIP.¹³ PGET’s application of a TTC/ATC analysis is further undermined by the fact that i) a TTC/ATC analysis is unsupported by Attachment O to PGE’s OATT, the QF-LGIP, or FERC Order 2003¹⁴; ii) a path-specific TTC/ATC analysis is inappropriate within the context a path-agnostic NRIS study; iii) no other Transmission Providers require a TTC/ATC analysis as part of an NRIS study; and iv) PGE itself has never performed a TTC/ATC analysis for any previous NRIS interconnection requests, including those

¹³ See Section 3.2.2.2 of PGE’s *Pro Forma* Open Access Transmission Tariff and Section 3.2.1.2 of the QF-LGIP.

¹⁴ The concepts of TTC and ATC only apply to firm PTP transmission service under Part II and Attachment C of PGET’s OATT and not to the Interconnection SIS process under Attachment O of PGE’s OATT and the QF-LGIP.

performed for PGE Merchant (“PGEM”). These factors lead to the conclusion that PGE’s application of a TTC/ATC analysis constitutes undue discrimination against Madras Solar.

Requested Remedy

As a remedy for this improper application of a TTC/ATC analysis, Madras Solar requests a Second R-SIS, followed by a Revised Draft Facilities Study, that removes the TTC/ATC analysis and any reference to such concepts.

g. Flawed TTC/ATC Conclusions

Notwithstanding the fact that the TTC/ATC analysis is misplaced, unsupported by any applicable interconnection rules or policies, inappropriate within the context of an NRIS study, and constitutes undue discrimination, the results of the TTC/ATC analysis are also flawed and illogical. First, PGET had never previously calculated TTC for the Round Butte - Bethel 230 kV line. This is likely due the fact that the line is significantly underutilized relative to the line’s thermal limit, (i.e., the line is not physically constrained, which PGE acknowledges). In addition, real time output of PRB generation, which PGET asserts fully utilizes the line at issue, varies significantly and often exceeds the purported TTC value. Both of these facts demonstrate that path TTC is irrelevant for reliable delivery of PRB generation; otherwise, PGE would have previously found it necessary to calculate the line’s TTC at some point over the approximately 50 years the line has been in service. Furthermore, PGET agrees that Madras Solar adds only 8 MW (i.e., less than 2% line utilization, based on 419 MVA thermal rating) to the existing path flows.¹⁵ If TTC is irrelevant for PRB generation, and Madras Solar only increases line utilization by approximately 2%, then TTC should be irrelevant for the reliable delivery of Madras Solar generation as well. Any conclusion to the contrary constitutes undue discrimination against Madras Solar in favor of PGEM generation.

Secondly, if PGET could import 200-300 MW of off-system power through the Round Butte substation (as discussed above) without requiring any upgrades to increase the TTC, then the on-system Madras Solar should not be required to increase the TTC in order to account for the mere 8 MW that Madras Solar adds to the existing path flows on the Round Butte – Bethel line.

Moreover, PGET’s TTC values (i.e., 199 MW in the summer and 260 MW in the winter) are based on unrealistic generation dispatch and power flow modeling inputs, including an

¹⁵ PGE’s Revised SIS at page 13, which states that “[t]he addition of the 65 MW proposed interconnection increases the flow on the Round Butte to PGE load path by only 8 MW in both the summer and winter seasons.”

assumption that PGEM's on-system generation resources *produce negative 85 MW during winter on-peak system conditions*.¹⁶ It is highly unlikely that PGE would dispatch the totality of its on-system resources to consume power and rely entirely on imports to serve its customer during the winter peak season.

Finally, the addition of the PGET-proposed series capacitor, alone and without Madras Solar's output, would increase the resulting Round Butte – Bethel 230 kV line power flow in excess of the PGE's newly determined TTC values (about 35% above the TTC).¹⁷ Yet even this excess power flow on the Round Butte – Bethel 230 kV line *still* did not cause any reliability violations. This further demonstrates that the PGET's estimated path TTC values are irrelevant for reliable delivery of the Madras Solar.

Requested Remedy

Given the fact that PGET's application of a TTC/ATC analysis is discriminatory, inappropriate, misplaced, and unsupported by any applicable interconnection rules, regulations, or policies, as a remedy for the flawed TTC/ATC conclusions, Madras Solar requests a Second R-SIS, followed by a Revised Draft Facilities Study, that removes TTC/ATC analysis and any reference to such concepts.

h. Failure to Acknowledge the Existence of Central Oregon Load

PGET has repeatedly informed Madras Solar that it has no load in Central Oregon and that the output of Madras Solar would need delivered to its native load in Portland and the Willamette Valley over the Round Butte to PGE load path, which it claims is constrained due to "grandfathered" agreements that reserve the entire capacity of the line for PRB generation.¹⁸ In the course of scrutinizing the various "grandfathered" agreements, Madras Solar learned of the existence of at least 132 MW of firm transmission obligations Central Oregon. PGET has at 120 MW of firm transmission system load obligations in Central Oregon per the PacifiCorp Exchange Agreement ("PacifiCorp Exchange Agreement") contained in the Round Butte/Cove Interconnection and Operation Agreement, dated July 8, 1993,¹⁹ and a 12 MW Long-Term Firm Point-to-Point OATT transmission reservation whereby PGET is obligated to accept power from PacifiCorp at PGE's Round Butte Substation and deliver the power to PacifiCorp at BPA's Redmond Substation over the Round Butte – Redmond Path.²⁰ In accordance with the definition of

¹⁶ Madras Solar/400, Yang/52, lines 10-13.

¹⁷ Madras Solar/400, Yang/55, line 5 – Yang/56, line 13.

¹⁸ Madras Solar/300, Rogers/52, lines 2-9.

¹⁹ See Section 4.1 of the Round Butte/Cove Interconnection and Operation Agreement (July 8, 1993).

²⁰ See page 328.1, Line 1 of PGE's 2018 FERC Form 1.

“Transmission System Load” under Section 34.3 of PGE’s OATT, PGET must consider the full reserved capacity of all point-to-point (“PTP”) reservations and their contractual Points of Receipt (“POR”), without regard to whether power is actually flowing on the reservation.²¹

Madras Solar understands that, “but for” the denial of existence of Central Oregon load, the interconnection study process for Madras Solar may have returned significantly different results. It also appears that PGE may not have properly filed the PacifiCorp Exchange Agreement with FERC.

Requested Remedy

Madras Solar requests that PGET acknowledge the existence of all of its Central Oregon load in conjunction with performing any additional analysis performed in support of the Second R-SIS.

i. Failure to Provide Guidance with Respect to Demonstration of Quantifiable System-Wide Benefits

Section 11.4 of PGET’s *pro forma* LGIA requires that the interconnection customer be credited for the cost of any network upgrades advanced by the interconnection customer, in accordance with well-established FERC policies. However, Madras Solar understands that PGET does not intend to provide credits for the cost of any network upgrades advanced by Madras Solar, given that Section 11.4 of the *pro forma* LGIA does not appear in the corresponding QF-LGIA adopted by the Oregon Public Utility Commission (“OPUC”) in Order 10-132. While Madras Solar is not currently disputing Oregon’s cost allocation rules, Madras Solar is aware, however, that Order 10-132 does allow for an interconnection customer taking service in accordance with the QF-LGIP to receive credits for the cost of network upgrades if it can demonstrate the network upgrades provide “quantifiable, system-wide benefits.”²²

It is evident that the proposed installation of a series capacitor to increase TTC and ATC clearly constitutes a transmission system expansion benefiting all users, as a result of the integrated nature of the grid. In particular, the increase in TTC and ATC of the Round Butte – Bethel 230 kV line benefits PGE by increasing PGEM’s capability to import lower cost

²¹ Section 34.3 of PGE’s OATT states as follows (with emphasis added): “The Transmission Provider’s monthly Transmission System load is the Transmission Provider’s Monthly Transmission System Peak minus the coincident peak usage of all Firm Point-To-Point Transmission Service customers pursuant to Part II of this Tariff *plus the Reserved Capacity of all Firm Point-To-Point Transmission Service customers.*”

²² OPUC Order 10-132.

power through the Round Butte substation. FERC has long held that the integrated grid is a cohesive network that the expansion of which provides system-wide benefits to all users of the grid.²³ Specifically, FERC has found that it is just and reasonable for the Interconnection Customer not to pay for Network Upgrades when interconnecting to a non-independent Transmission Providers such as PGET, due to the strong incentives for a non-independent Transmission Provider to discriminate against independent generators in quantifying system-wide benefits associated with Network Upgrades.²⁴

In addition, Madras Solar believes that part of PGET's motivation for requiring the installation of a series capacitor at Round Butte is to force more power to flow westward off of the 500 kV system, thus allowing significantly more power to be "deemed delivered" at BPA's Grizzly substation in accordance with the AC Intertie Agreement.

Requested Remedy

Madras Solar requests information from PGET regarding how much additional power it believes a series capacitor would allow to be "deemed delivered" at Grizzly, along with an estimate of the additional savings that would accrue to PGEM by allowing it to import such additional power without incurring a BPA wheel. Madras Solar further requests that PGET explain what it believes the term "quantifiable, system-wide benefits" means, what type of upgrades would constitute quantifiable, system-wide benefits, and how Madras Solar can demonstrate that any required upgrades above and beyond Interconnection Network Upgrades (i.e., any Transmission Network Upgrades) provide quantifiable, system-wide benefits.

Notwithstanding the above request pertaining to information related to quantifiable system-wide benefits, Madras Solar recognizes that the series capacitor is not a legitimately required Network Upgrade, for the reasons explained in detail in these comments. As noted previously, Madras Solar is not disputing the OPUC's cost allocation policies adopted in accordance with Order 10-132; however, Madras Solar recognizes that such policies would most likely fail formal scrutiny at FERC.

²³ See, e.g., *Appalachian Power Co.*, 63 FERC ¶ 61,151 at pages 3-4 (1993); *Consumers Energy Company*, 96 FERC ¶ 61, 132 at pages 12-13 (2001); *Illinois Power Company*, 103 FERC ¶ 61, 032 at page 3 (2003).

²⁴ For example, FERC has held that: "Most improvements to the Transmission System, including Network Upgrades, benefit all transmission customers, but the determination of who benefits from such Network Upgrades is often made by a non-independent transmission provider, who is an interested party. In such cases, the Commission has found that it is just and reasonable for the Interconnection Customer to pay for Interconnection Facilities but not for Network Upgrades." See FERC Order No. 2003, P 21. Order No. 2003 amends Order No. 888's *pro forma* tariff to help remedy remaining undue discrimination under the open access required by Order No. 888.

III. Dispute Resolution

As discussed in the introductory paragraph of this correspondence, on January 8, 2020, Madras Solar provided PGET with a Notice of Dispute in accordance with Section 13.5 of the QF-LGIP and formally invoked the dispute resolution procedures contained therein. Madras Solar received a letter from PGE outside counsel, Jordan Schoonover, dated January 15, 2020, in which it disagreed that the invocation of the dispute resolution procedures in the QF-LGIP tolled the interconnection process and provided what appears to be a threat to terminate Madras Solar's interconnection if the Administrative Law Judge ("ALJ") in the UM 2009 proceeding does not grant PGE's petition to have the interconnection issues resolved in the same proceeding.²⁵

PGE knew that Madras Solar intended to provide these comments today, only two days after Ms. Schoonover's letter, and Madras Solar is not responding to the numerous inaccurate statements of law and fact at this time. While responding to the various claims made in Ms. Schoonover's letter or addressing the fact that PGE is apparently prepared to violate Section 13.5 of the QF-LGIP by removing Madras Solar from the generation interconnection queue prior to resolution of its dispute is outside the scope of these comments, Madras Solar offers the following path to an informal resolution of this dispute: PGET shall perform a Second R-SIS that removes the requirement for the series capacitor and any reference to the concepts of TTC or ATC, followed by issuing a Revised Draft Facilities Study that incorporates both the results of the Second R-SIS and sets the combined POI Substation and Transmission Line Modification at an amount not to exceed the estimate contained in the Revised SIS. PGET must also perform all other specific remedies requested herein with respect to coordination with the CTWS as an Affected System and inclusion of the ICIF in the Revised Draft Facilities Study.

Madras Solar would alternatively accept a Revised Draft Facilities Study that retains the series capacitor, provided that i) PGET agrees to fund the cost thereof and any costs for the combined POI Substation and Transmission Line Modification above and beyond the costs contained in R-SIS in accordance with Section 11.3 of the QF-LGIA, and ii) that PGET further agrees to indemnify Madras Solar from any costs or adverse consequences to Madras Solar's PPA resulting from delays in the construction and completion of Interconnection Facilities and Interconnection Network Upgrades needed for Madras

²⁵ Specifically, Ms. Schoonover stated "Of course, PGE will not remove Madras Solar from the queue so long as the parties are fully engaged in dispute resolution. However, in PGE's view, the informal dispute resolution process will be complete once the senior representatives meet, and formal dispute resolution efforts would no longer be ongoing if the Commission were to determine that the interconnection studies are not being litigated in UM 2009." PGE's threat to remove Madras Solar from the interconnection queue is illegal and, if PGE does not agree to Madras Solar's proposed process to resolving any disputes, Madras Solar will respond in the future.

Solar's interconnection that result from PGE's election to build unrelated Network Upgrades as part of Madras Solar's interconnection. Madras Solar may also be willing to consider accepting a Revised Draft Facilities Study that retains the requirement for a series capacitor, provided that i) PGET agrees to refund 100% of the costs thereof and any costs for the combined POI Substation and Transmission Line Modification above and beyond those contained in R-SIS, and ii) further provided that PGET indemnifies Madras Solar as described above.

In either case, Madras Solar will then provide formal comments regarding the Revised Draft Facilities Study in accordance with Section 8.3 of the QF-LGIP and continue with the remainder of the interconnection process in accordance with the QF-LGIP, culminating with the execution of a QF-LGIA.

Madras Solar requests that PGET inform Madras Solar of its decision to comply with the resolution and other remedies prescribed herein within thirty (30) days of the date of this correspondence, in accordance with Section 13.5.1 of the QF-LGIP. During that period, designated senior representatives of Madras Solar are available to meet with PGET to discuss the dispute.

Madras Solar looks forward to working collaboratively with PGET to issue the Revised Draft Facilities Study and informally resolve the dispute invoked under Section 13.5 of the QF-LGIP.

Sincerely,

A handwritten signature in black ink, appearing to be "N. Rogers", written over a horizontal line.

Nathan Rogers
Director of Project Development

cc: John Gorman, Ecoplexus
Erik Stuebe, Ecoplexus
Scott Piscitello, Ecoplexus
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Appendix 1. Potential Violations of the OATT and the Federal Power Act

Madras Solar has observed a variety of potential violations of PGET’s OATT and the Federal Power Act (“FPA”) throughout the course of the interconnection process for Madras Solar, which “but for” these violations and the continued effectuation of them, the interconnection costs for Madras Solar would be less, as PGET may have elected not to pursue certain discriminatory actions towards Madras Solar. An overview of each of these potential violations is discussed in this section, and Madras Solar reserves the right to expand upon these claims or identify additional ones in the future.

a. Misrepresentation and Deceptive Practices Related to PGET’s Transmission System in Central Oregon

1. *Misrepresentation of Capacity on the Round Butte – Bethel 230 kV line*

PGET has repeatedly told Madras Solar, in writing, that there is no capacity available on the Round Butte – Bethel 230 kV line with which to deliver power into the PGET load, stating that all capacity on the line has been reserved for PGEM’s PRB generation by various “existing, historical, internal” (or otherwise “grandfathered”) transmission agreements.²⁶ Even prior to this, PGEM actually informed Madras Solar (as it likely did any other independent developers inquiring about interconnecting in the area) of a posting on PGET’s OASIS page noting that there is no capacity between Round Butte and the PGE System.²⁷ PGE has been unable to identify where or how any of the various “grandfathered” agreements it has provided for review actually limit the capacity of the Round Butte – Bethel line to the output of PRB. Despite the fact that PGE has been unable to substantiate its claim that the Round Butte – Bethel line is contractually constrained, and has admitted that the line is not physically constrained, PGET informed Madras Solar that it would require significant amount of Network Upgrades to accommodate its NRIS interconnection request – including, at one point, a claim that it would need to reconductor the line to 500 kV at a cost of approximately \$300 million. PGET did not admit this error and reverse this requirement until Madras Solar filed the PPA complaint in UM 2009.

²⁶ See (among others) Fn. 3 at page 5.

²⁷ PGE’s OASIS posted path diagram contains the following statement: “The points PGE at Round Butte and PGE at (System) are physically constrained from each other and have no capacity available between them from east to west due to internal system grandfathered transmission rights for Round Butte and Pelton generation . . .”

Such false claims appear to be examples of deception on the part of PGET. Deception is not only a recognized form of anticompetitive conduct,²⁸ but may also violate FERC's prohibitions on energy market manipulation²⁹ and the setting aside of transmission capacity for the benefit of PGEM in violation of PGET's OATT.³⁰

2. Denial of Central Oregon Load

PGET has repeatedly denied that it has any transmission system load in Central Oregon; thus, it has insisted that the output of Madras Solar be delivered to its native load in the Willamette Valley over the Round Butte to PGE load path, which it claims is constrained due to "grandfathered" agreements that reserve the entire capacity of the line for PRB generation.³¹ In the course of scrutinizing the various "grandfathered" agreements, while being unable to confirm the existence of any agreements that actually limit the capacity of the Round Butte – Bethel line, Madras Solar learned that PGET, in fact, has at least 132 MW of firm transmission obligations Central Oregon. Moreover, power flow analyses reveal that the majority of the output of Madras Solar is actually being absorbed by local PGE loads in Central Oregon.

First, PGET has 120 MW of firm transmission system load obligation in Central Oregon per the PacifiCorp Exchange Agreement.³² Secondly, as revealed in PGE's 2018 FERC Form 1 and confirmed by PGE, PGE identifies a 12 MW Long-Term Firm Point-to-Point OATT transmission reservation whereby PGET is obligated to accept power from PacifiCorp at PGE's Round Butte Substation and deliver the power to PacifiCorp at BPA's Redmond Substation over the Round Butte – Redmond Path.³³ PGE itself confirmed "transmission system load" means "Transmission System Load" as such term is defined in Section 34.3 of PGE's OATT. Therefore, when identifying PGET's transmission system loads, PGET must consider the full reserved capacity of all PTP reservations and their contractual PORs, without regard to whether power is actually flowing on the reservation.³⁴ Put differently,

²⁸ See, e.g., *United States v. Microsoft Corp.*, 253 F.3d 24, 76-77 (D.C. Cir. 2001) (finding a violation of Section 2 where Microsoft deceived software developers into developing software that would only work with its operating system).

²⁹ 16 U.S.C.A. § 824v (prohibition of energy market manipulation), (a) In general: It shall be unlawful for any entity (including an entity described in section 824(f) of this title), directly or indirectly, to use or employ, in connection with the purchase or sale of electric energy or the purchase or sale of transmission services subject to the jurisdiction of the Commission, any manipulative or deceptive device or contrivance (as those terms are used in section 78j(b) of Title 15), in contravention of such rules and regulations as the Commission may prescribe as necessary or appropriate in the public interest or for the protection of electric ratepayers.

³⁰ See Order No. 890-B, 123 FERC ¶ 61299 at P 235 (stating more generally the Commission's open access policies are designed to ensure "that excessive amounts of transmission capacity for network and native load uses are not set aside and therefore made unavailable to others seeking transmission service.").

³¹ Madras Solar/300, Rogers/52, lines 2-9.

³² See Section 4.1 of the Round Butte/Cove Interconnection and Operation Agreement (July 8, 1993).

³³ See page 328.1, Line 1 of PGE's 2018 FERC Form 1.

³⁴ See Fn. 21.

in terms of PTP service, transmission system load is based upon the amount of firm transmission reserved for PTP customers – not how much of those reservations such customers are actually using at any given point in time.

Here again, this behavior – apparently intentionally failing to acknowledge the existence of this 132 MW of firm transmission system load obligation in Central Oregon – likely constitutes anti-competitive behavior, may violate FERC’s prohibition of energy market manipulation, and potentially represents an attempt to set aside transmission capacity for the benefit of PGEM.

b. Non-OATT Transmission Reservations

PGEM appears to have executed off-OASIS (non-OATT) Long-Term Firm PTP reservations for approximately 300 MW of imports and 300 MW of exports to/from PacifiCorp’s system at no cost to either PGEM or PacifiCorp.³⁵

Figure 1. PGE Market Function Long-term PTP Transmission Contracts As of 2016.12.01

| Provider | Type | POR | POD | MW | EXPIRATION | Source | Sink | Reservation Type | Start Date or Renewal Date |
|----------|---------|------|------|------|--------------------|------------|------------|------------------|----------------------------|
| PGE | PTP LTF | PACW | PGE | 276 | Aggregated Monthly | Not Listed | Not Listed | NA | NA |
| PGE | PTP LTF | PACW | PGE | 200 | 1/1/2021 | Not Listed | Not Listed | Original | 1/1/2016 |
| PGE | PTP LTF | PACW | PGE | 100 | 1/1/2021 | Not Listed | Not Listed | Original | 1/1/2016 |
| PGE | PTP LTF | PACW | PGE | 118 | 1/1/2021 | Not Listed | Not Listed | Original | 1/1/2016 |
| PGE | PTP LTF | PACW | PGE | -112 | Recalled | Not Listed | Not Listed | Recall | 1/7/2016 |
| PGE | PTP LTF | PACW | PGE | -6 | Recalled | Not Listed | Not Listed | Recall | 1/7/2016 |
| PGE | PTP LTF | PACW | PGE | -24 | Recalled | Not Listed | Not Listed | Recall | 1/7/2016 |
| PGE | PTP LTF | PGE | PACW | 306 | Aggregated Monthly | Not Listed | Not Listed | NA | NA |
| PGE | PTP LTF | PACW | PACW | 200 | 1/1/2021 | Not Listed | Not Listed | Original | 1/1/2016 |
| PGE | PTP LTF | PGE | PACW | 100 | 1/1/2021 | Not Listed | Not Listed | Original | 1/1/2016 |
| PGE | PTP LTF | PGE | PACW | 148 | 1/1/2021 | Not Listed | Not Listed | Original | 1/1/2016 |
| PGE | PTP LTF | PGE | PACW | -142 | Recalled | Not Listed | Not Listed | Recall | 1/7/2016 |

As shown in Figure 1, 418 MW of the Long-Term Firm PTP reservations list PGET as the provider yet list PacifiCorp (i.e., PACW) as the Point of Receipt (“POR”), raising a question of how PGET can sell transmission rights on PacifiCorp’s system. Madras Solar notes that these apparent non-OATT PTP reservations executed have been relied upon by PGEM to support its participation in the Energy Imbalance Market (“EIM”).³⁶ This suggests that these non-OATT transmission reservations may be designed to provide PGEM with the firm transmission rights necessary for participation in the EIM while still allowing it to schedule power to/from California and have it “deemed delivered” at BPA’s Grizzly substation (i.e., delivered without incurring a BPA wheeling charge) in accordance with

³⁵ OPUC Docket No. LC 66, PGE response to Industrial Customers of Northwest Utilities DR No. 27, Attachment A-1, PGE Market Function Long-term PTP Transmission Contracts As of 2016.12.01

³⁶ OPUC Docket No. UM 1829 BLUE MARMOT V LLC VS PORTLAND GENERAL ELECTRIC COMPANY, SIMS – RODEHORST – SPORBORG/13 UM 1829 – Response Testimony of Brett Sims, Aaron Rodehorst and Pam Sporborg.

the AC Intertie Agreement or possibly an amended version thereof that provides PGEM with firm scheduling capabilities.

Whatever the purpose of these reservations may be, Madras Solar has reviewed PGE's and PacifiCorp's FERC Form 1 data and finds no evidence that these transactions represent bona fide OATT reservations for which the parties exchange payments. In fact, if these were bona fide OATT PTP transactions, then PGEM would be required to pay PacifiCorp over \$10 million/year at current PacifiCorp PTP rates. However, PGE's 2017 FERC Form 1 states that no megawatt hours were either received by or delivered to PacifiCorp, and that PGE paid only \$116,868 in total transmission charges to PacifiCorp.³⁷ PGE's 2018 FERC Form 1 similarly states that no megawatt hours were either received by or delivered to PacifiCorp, and that only \$86,883 in total transmission charges were paid to PacifiCorp.³⁸ PGE is prohibited under the FPA from willfully and knowingly reporting "any information relating to the price of electricity sold at wholesale or the availability of transmission capacity, which information the person or any other entity knew to be false at the time of the reporting, to a Federal agency with intent to fraudulently affect the data being compiled by the Federal agency."³⁹

c. Issues Pertaining to the Round Butte/Cove Interconnection Agreement

1. *Potential Violation of Order Approving Stipulation and Consent Agreement and Improper Reservation of Round Butte to PGE Load Path Capacity for Benefit of PGEM*

In the Order Approving Stipulation and Consent Agreement between FERC and PGE, dated June 4, 2010, FERC found that, beginning in January of 2002, PGET created and allowed PGEM to use non-public scheduling numbers 103 and 303 in place of OASIS reservation numbers to schedule the first leg of certain transactions.⁴⁰ FERC enforcement staff concluded that this practice of "setting aside transmission capacity that was not adequately supported by designated network resources" in violation of Sections 28.2 and 29.2 of PGE's OATT resulted in PGET providing "an undue preference to its wholesale

³⁷ FERC FINANCIAL REPORT FERC FORM No. 1: Annual Report of Major Electric Utilities, Licensees and Others and Supplemental Form 3-Q: Quarterly Financial Report. Year/Period of Report: End of 2017/Q4. Page 332.1. Expenses for Transmission of Electricity by Others.

³⁸ FERC FINANCIAL REPORT FERC FORM No. 1: Annual Report of Major Electric Utilities, Licensees and Others and Supplemental Form 3-Q: Quarterly Financial Report. Year/Period of Report: End of 2018/Q4. Page 332. Expenses for Transmission of Electricity by Others.

³⁹ 16 U.S. Code § 824u. Prohibition on filing false information.

⁴⁰ In re Portland General Electric Company, 131 FERC ¶ 61,224 (2010) .

merchant affiliate,” which violated section 205 of the FPA and then-section 358.5 (c) (5) of the Commission’s regulations.⁴¹

Madras Solar notes that on April 10, 2017, PGET added new non-public scheduling numbers 205 and 207 to the list of PGE Scheduling Identifiers. These scheduling identifiers limit both firm and non-firm imports into PGE at Round Butte to local generation sources only (i.e., PGEM generation), and that there is no capacity to “System PGE” from Round Butte.⁴² Each of these scheduling numbers feature a POR at Round Butte, and each features a megawatt value of 60 MW for a total of 120 MW – the same total as the amount of exchange power with PacifiCorp at Round Butte contemplated under the PacifiCorp Exchange Agreement. It appears that PGET may be allowing PGEM to use the recently created non-OASIS (i.e., non-public) scheduling number 205 and/or 207 to effect the first leg of transmission of such exchange power to PacifiCorp in violation of the 2010 Stipulation and Consent Agreement. It also appears that PGET may be allowing PGEM to schedule re-delivery of exchange power from PacifiCorp to PGET system loads using non-public scheduling number 114.

Madras Solar notes that there is no evidence in PGE’s Form 1 that substantiates that PGE ever delivers exchange power under an OATT transmission reservation to PacifiCorp at the Round Butte substation, and there is no evidence in PacifiCorp’s Form 1 that PacifiCorp returns exchange power to PGEM using an OATT reservation. PGET’s 2018 Form 714 shows that total OASIS schedules from PGET to PacifiCorp in 2018 averaged less than 50 MW on each hour,⁴³ and PacifiCorp’s 2018 Form 714 shows that PacifiCorp’s hourly OASIS schedules to PGET averaged only 79 MW.⁴⁴ At the same time, PGE’s Form 1 shows that, in 2018, PGET received 4,269,014 MWh of energy (for an average of 487 MW every hour of the year) from PacifiCorp using an “Other Long-Term Firm” (“OLF”) Reservation pursuant to an Exchange Agreement; yet, PacifiCorp’s Form 714 shows average hourly schedules from PACW into PGET of only 79 MW. PGE’s 2018 Form 1 and Form 714 indicate that PacifiCorp was credited with the firm delivery of an average of 487 MW on every hour of the year to PGEM from the PACW Balancing Authority Area (“BAA”), but, in reality, only 79 MW were scheduled on each hour. As noted above, willfully and knowingly reporting false information to a Federal agency is a violation of the FPA.⁴⁵

⁴¹ Ibid.

⁴² PGE Scheduling Identifiers Scheduling Identifiers Necessary for use in PGE’s Scheduling and Load/Resource Balancing System 12/1/2017.

⁴³ PGE 2018 Form 714. Page 6 shows that PGET scheduled 486,925 MWh into the PACW BAA which is 49.9 average MW (i.e., 486,925/8760=49.89).

⁴⁴ PacifiCorp 2018 Form 714. Page 6 shows that PacifiCorp scheduled 692,896 MWh for delivery into the PGE BAA in 2018, or 79 aMW (i.e., 692,896 /8760=79.09).

⁴⁵ 16 U.S. Code § 824u. Prohibition on filing false information.

2. Double-Selling of Pelton Round Butte Generation

Section 28.2 of PGE’s OATT states that the transmission provider (PGET), “on behalf of its native load customers, shall be required to designate resources and loads in the same manner as any network customer under PGE’s OATT.” In addition, Section 30.1 of PGET’s OATT prohibits a customer taking Network Integration Transmission Service (“NITS”) under Part III of the OATT (in this case PGEM) from designating as a Network Resource any portion of capacity that has been committed for sale to a non-designated third party. The OATT further obligates PGET to refuse to accept a Network Resource designation unless the party requesting such designation provides a written attestation that “the Network Resources do not include any resources, or any portion thereof, that are committed for sale to non-designated third party load.”⁴⁶ PGET previously accepted the PGEM’s designation of Pelton as a Network Resource without requiring any such attestation by PGEM.

Madras Solar notes that PGEM also appears to be double-selling 120 MW of PRB generation associated with the PacifiCorp Exchange Agreement in violation of its OATT. PGET lists the full 353 MW output of PRB listed as a Designated Network Resource (“DNR”),⁴⁷ while PacifiCorp has 120 MW of Pelton output listed as a DNR on its OASIS page.⁴⁸ In addition to violating the OATT prohibition on the sale of any portion of a DNR to a third party, such behavior may also anti-competitive and in violation of FERC’s prohibition of energy market manipulation.

3. Failure to File with FERC

In addition, FERC has stated that, in situations where a public utility is transmitting power under a simultaneous exchange transaction, “the public utility must seek prior approval from the Commission if the transaction involves its affiliated transmission provider’s system.”⁴⁹ This is because such simultaneous exchange transactions, when they involve the marketing function of a transmission provider, “may appear to enable the marketing function, in effect, to provide service on its transmission provider’s system without the reservation of service on that system.”⁵⁰ Despite this clear requirement for a simultaneous exchange agreement such as the PacifiCorp Exchange Agreement to be filed with FERC, it appears that PGE has never done so.

⁴⁶ PGE OATT, Section 30.1.

⁴⁷ Current Designated Network Resources Reported to PGE Transmission, dated October 22, 2019.

⁴⁸ PacifiCorp Designated Network Resources, dated October 15, 2019.

⁴⁹ Puget Sound Energy, Inc., 138 FERC ¶ 61,131. Order on Rehearing. November 2, 2015. At 2.

⁵⁰ Id.

d. Potential FERC Standards of Conduct Violations

1. Standards of Conduct Violations Related to a Failure to Maintain a Separation of Merchant and Transmission Functions with Respect to Imbalance Energy

The law is clear that it is the responsibility of a Transmission Provider – not its merchant function – to provide various transmission services to generators, including generation imbalance service.⁵¹ However, PGET and PGEM appear to be failing to function separately from one another in violation of the FERC Standards of Conduct by attempting to require that Madras Solar pay for imbalance services through a PGEM PPA.⁵²

Under its PPA with PGEM, PGEM is requiring that Madras Solar be responsible for submitting a “shadow” schedule (i.e., essentially a forecast that resembles a formal scheduling request for the resource) by 5AM each day of the term, updated hourly for each hour of the term.⁵³ This “shadow” scheduling requirement is in addition to separate forecasting requirements under the PPA.⁵⁴ Deriving from this “shadow” scheduling requirement is a cost responsibility for imbalance energy resulting from deviations from the “shadow” schedule.⁵⁵

As a future on-system DNR of PGEM, any imbalances on the part of Madras Solar will be settled with PGET on a portfolio basis. More importantly, Generation Imbalance Service is a required ancillary service under a PGET’s OATT. Therefore, any attempt by PGEM to impose balancing responsibilities on Madras Solar is likely unduly discriminatory, in that the charge for imbalance services is based on a *simulated* scheduling of the resource, and a violation of FERC Standards of Conduct by failing to function separately from PGET.

⁵¹ 141 FERC P 61232 (F.E.R.C.), 2012 WL 6634677, Integration of Variable Energy Resources, Docket No. RM10-11-001, Order No. 764-A, Order on Rehearing and Clarification and Granting Motion for Extension of Time, at para. 81.

⁵² 92 FERC P 61143 (F.E.R.C.), 2000 WL 1211275 * Cherokee County Cogeneration Partners, L.P. V. Duke Energy Corporation, Duke Energy Corporation, Docket Nos. EL00-9-000 and -001, Docket No. ER99-2331-002 Order on Settlement Agreement (Issued August 1, 2000). Specifically, “In the Settlement Agreement, at 12, Duke recognizes ‘the benefit of more fully separating its generation and transmission functions relating to energy accounting and improving certain billing processes within Duke.’ Specifically, Duke states that, by July 1, 2000, it will convey responsibility for billing determinants to the Bulk Power Accounting and Risk Control Department (BPA/RC) or another clearly identified shared support function. This group will calculate, compile and generate bills for transmission service, including generation imbalance charges. According to the settlement, BPA/RC will prepare Duke ET’s bills for transmission and generation imbalance services using information and billing determinants obtained only from Duke ET, except that BPA/RC will obtain the incremental cost information needed to calculate generation imbalance charges from Duke Power’s power generation department. Further, other than the incremental cost information, the Duke Power merchant function and BPA/RC will not communicate regarding the calculation or compilation of any transmission or generation billing determinants or bills. In addition, the Duke Power merchant function is blocked from having computer or other access to generation imbalance data or calculations.”

⁵³ See Section 3.10 Scheduling Procedure of the draft PPA between PGEM and Madras Solar.

⁵⁴ See Section 3.2(a) Generation Forecast of the draft PPA between PGEM and Madras Solar.

⁵⁵ See Section 6.2 of the draft PPA between PGEM and Madras Solar.

2. *Standards of Conduct Violations Related to a Failure to Maintain a Separation of Merchant and Transmission Functions with Respect to Improper Delegation of Interconnection Cost Responsibilities to PGEM*

PGEM has proposed and is continuing to propose certain requirements pertaining to payment of interconnection costs in the PPA for Madras Solar as a condition of obtaining a declaration of commercial operation by PGEM. Madras Solar does not raise this issue in an attempt to reverse its commitment of paying for all legitimately required network upgrades per the OPUC's cost allocation policies; however PGET's apparent delegation of its responsibility for ensuring Madras Solar pays for the cost of its interconnection to PGEM through application of these requirements in the PPA, appears to be in violation of FERC Standards of Conduct concerning the separation of merchant and transmission functions. Presently, Section 2.4(e) of the PPA requires that the Transmission Provider(s) must confirm that "that (a) the Project has successfully achieved interconnected operations using Network Resource Interconnection Service, and (b) Seller has paid all amounts due under the Interconnection Agreement, including, but not limited to required network upgrades."

PGET does not have the authority under the OATT to delegate transmission cost assignment and cost allocation authorities reserved under law to PGEM. The LGIA requires that all contractual language regarding costs and cost allocation is documented in the LGIA, and PGET's apparent delegation of the implementation of those policies to PGEM appears to be in violation of FERC Standards of Conduct.

e. Discriminatory Application of a TTC Analysis in an NRIS Study

As discussed extensively in the body of these comments, PGE's application of TTC/ATC analysis is unsupported by the OATT, QF-LGIP, or relevant FERC orders, and the conclusions of the analysis are flawed, illogical, and discriminatory in favor of PGEM generation. Moreover, PGE has never previously performed a TTC/ATC analysis when conducting an interconnection study, including any of those performed for its merchant function. This fact further suggests that PGET's decision to apply, for the first time, a TTC/ATC analysis to an interconnection study – in contradiction of established interconnection rules, policies, and guidelines, and in relation to a transmission line that PGET itself has admitted is not in any way physically constrained – constitutes unduly discriminatory treatment.

f. Assignment of Unnecessary Network Upgrades and Failure to Adhere to Local Area Planning Requirements under Order 890 and 1000

PGET initially attempted to assign approximately \$340 million in Network Upgrades (which largely consisted of upgrading of the Bethel - Round Butte 230 kV line to 500 kV) to Madras Solar.⁵⁶ PGET attempted to assign these upgrades despite the fact that Madras Solar did not cause any voltage, stability, or thermal reliability violations under any of the required components of an interconnection SIS (i.e., power flow analysis, short circuit analysis, transient stability analysis and voltage stability analysis), and further despite the fact that the Round Butte - Bethel 230 kV is neither physically nor contractually constrained.

The Local Area Planning process undertaken by PGET in accordance with FERC Order 890/Order 1000 fails to even acknowledge the existence of its Central Oregon transmission system, let alone identify issues in the area or major upgrades needed, such as the upgrading of the Round Butte - Bethel 230 kV line to 500 kV. Madras Solar notes that, on December 27, 2019, FERC formally rejected PGE's filing to merge Columbia Grid and NTTG Regional Planning Organizations in large part due to the failure by PGE and the parties to adequately address the local and regional planning processes required under Order 890 and Order 1000.

PGET first attempted to justify this exceptional demand for a single interconnection customer to fund multi-hundred million dollar, unnecessary Network Upgrades by claiming that the AC Intertie Agreement with BPA limits its ability to grant transmission service or schedule power in the east-west direction, thus necessitating the rebuilding of the Round Butte - Bethel 230 kV line to 500 kV. This was proven to be untrue. Madras Solar vigorously challenged PGET's claims, and PGET did eventually revise the O-SIS to remove the requirement that Madras Solar pay for \$340 million in Network Upgrades – but only after Madras Solar filed a complaint against PGEM function with the OPUC. PGET then claimed, and is continuing to claim, that certain "historical, grandfathered, internal" transmission agreements are what actually limit the TTC of the Round Butte - Bethel 230 kV line to the output of PRB and necessitate the installation of a \$12 million series capacitor. Yet PGE remains unable to point to any language within any of the grandfathered agreements that actually do what PGE claims.

In addition, PGET has not further offered or considered a pseudo-tie in lieu of the \$12 million series capacitor. PGET is obligated to offer a pseudo-tie for "resources interconnected to PGE BAA in a remote pocket" in accordance with PGE's Business Practice dated May 1, 2018.⁵⁷ Also, as discussed in the body of these comments, PGET

⁵⁶ See Fn. 2.

⁵⁷ Portland General Electric Transmission & Reliability Services Business Practice: Requirements for Dynamically Transferred Resources into the PGE Balancing Authority via a Pseudo-Tie, effective May 1, 2018.

initially attempted to assign \$10 million for a RAS that has already been planned for and for which system modifications have already started to take place.