March 19, 2019

Ms. Kavita Kale Michigan Public Service Commission 7109 W. Saginaw Hwy. P. O. Box 30221 Lansing, MI 48909 Via E-filing

RE: MPSC Case No. U-20500

Dear Ms. Kale:

The following is attached for paperless electronic filing:

sPower Development Company, LLC's Complaint Against Consumers Energy Company with Attachments A through N

Affidavit of Makarand Nagle

Proof of Service

Sincerely,

Christopher M. Bzdok Chris@envlaw.com

xc: Parties to Case No. U-20500 Clients

STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the Matter of the Complaint of sPower)	
Development Company, LLC against)	Case No. U-20500
Consumers Energy Company for violations)	
of the Public Utility Regulatory Policies Act)	
of 1978 and related Commission orders.)	

FORMAL COMPLAINT OF SPOWER DEVELOPMENT COMPANY, LLC AGAINST CONSUMERS ENERGY COMPANY

sPower Development Company, LLC ("sPower") by and through its counsel, Olson, Bzdok & Howard, P.C., and pursuant to MCL 460.58, and to Rules 439 and 441¹ of the Rules of Practice and Procedure before the Michigan Public Service Commission ("Commission"), files this Formal Complaint regarding violations by Consumers Energy Company ("Consumers") of the Public Utility Regulatory Policies Act of 1978 ("PURPA"), PURPA's implementing regulations promulgated by the Federal Energy Regulatory Commission ("FERC"), and this Commission's orders in Case No. U-18090. Consumers has refused to comply with the Commission's clear directive to enter into contracts with the first 150 MW of qualifying facilities ("QFs") in its interconnection queue, including QFs owned by sPower, at the avoided energy and avoided capacity cost rates that the Commission established in Case No. U-18090. sPower requests that the Commission reaffirm its February 22, 2018 and October 5, 2018 Orders in Case No. U-18090 and order Consumers to promptly enter into avoided cost contracts with sPower for each of sPower's QFs with queue positions in the first 150 MW of Consumers' interconnection queue.

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¹ R 792.10439.

I. Parties

- 1. Complainant sPower is a leading independent power producer ("IPP") that owns and/or operates more than 1,400 MW of utility and distributed electrical generation systems across the US. sPower focuses on utility-scale renewable energy projects, including solar, wind, and other technologies, including qualifying facilities ("QFs") under PURPA. sPower, through affiliates, is the owner of six solar projects that are under development in Consumers' service territory. Each of these six projects is a QF pursuant to 16 USC §§ 796 and 824a-3, and 18 CFR § 292.101(b)(1). Each project has been certified as a QF pursuant to 18 CFR 292.203(a) in FERC dockets QF19-85, QF19-86, QF19-87, QF19-239, QF19-240, and QF19-241. For convenience, sPower refers to these six QF projects as MIC 1, MIC 2, MIC 3, MIC 4, MIC 5, and MIC 6 (collectively, "MIC 1 through 6.")
- 2. Respondent Consumers is a public utility regulated by the Commission.

 Consumers' principal offices are located at One Energy Plaza, Jackson, MI 49201.

II. Jurisdiction

3. 16 USC § 824a-3(a) directs the FERC to promulgate regulations implementing PURPA, including PURPA's requirement that a utility purchase energy and capacity made available to it by QFs at the utility's avoided cost. This requirement is commonly known as PURPA's "must-buy obligation." 16 USC § 824a-3(f) directs state public utility regulatory commissions, such as this Commission, to implement FERC's regulations. The Commission "may comply with the statutory requirements [of PURPA] by issuing regulations, by resolving disputes on a case-by-case basis, or by taking any other action reasonably designed to give effect to FERC's

rules."² The Commission has implemented PURPA's must-buy obligation with respect to Consumers through its orders in Case No. U-18090.

4. The Commission has also recognized that it has jurisdiction with respect to its jurisdictional utilities' ongoing compliance with PURPA, stating, "Jurisdiction would be a strange concept if it permitted the Commission to review and approve the power purchase agreements, but prohibited the Commission from subsequently considering the performance under the power purchase agreements." Therefore, pursuant to its affirmative obligation to implement PURPA, its regulatory authority over Consumers, and its jurisdiction to oversee Consumers' compliance with PURPA and the Commission's own orders, the Commission has jurisdiction to hear this complaint and provide the relief that sPower requests.

III. Statement of Facts

Case No. U-18090, relevant Commission orders, and related proceedings.

- 5. On May 3, 2016, the Commission issued an order opening several dockets, including Case No. U-18090, to update the method and avoided cost calculation for each of the Commission's jurisdictional utilities, including Consumers, for the purpose of ensuring compliance with PURPA.
- 6. On February 22, 2018, the Commission issued an order in Case No. U-18090 addressing several motions and petitions for rehearing ("February 22 Order"). Among the Commission's decision points, the Commission found "it appropriate to limit payment of the full avoided capacity cost to the first 150 MWs of new QF capacity in the queue." The Commission

² FERC v. Mississippi, 456 U.S. 742, 751 (U.S. 1982).

³ In re application of Consumers Energy Company for approval of a power supply cost recovery plan and for authorization of monthly power supply cost recovery factors for calendar year 2004, Opinion and Order, Case No. U-13917, February 28, 2005, p. 14.

⁴ Case No. U-18090, February 22 Order, p. 13.

also ordered, "The company shall notify each QF in the queue of its queue position relative to the first 150 MWs and file its queue list with the Staff under seal." 5

- 7. In a subsequent order in Case No. U-18090, issued on October 5, 2018 ("October 5 Order"), the Commission later clarified and confirmed that the first 150 MW of QFs should be determined based on Consumers' interconnection queue.⁶ The October 5 Order also lifted the Commission's previous stay of Consumers' avoided cost rates and approved the final avoided cost rates that, pursuant to PURPA's must-buy obligation, Consumers would be required to pay QFs to purchase QF energy and capacity.⁷ The October 5 Order also stated that "Consumers Energy Company shall file executed contracts with qualifying facilities in this docket for Commission approval."⁸
- 8. Each of sPower's QFs under development in Consumers' service territory, MIC 1 through 6, are within the first 150 MW of Consumers' interconnection queue. Consumers confirmed this fact with sPower by notifying sPower via email on October 25, 2018. In the same email, Consumers referred several times to the Standard Offer agreement that the Commission approved in Case No. U-18090 and attached the Standard Offer agreement to the email. 10
- 9. In reliance on the Commission's orders and Consumers' statements to sPower that sPower's QFs were within the first 150 MW of its interconnection queue, sPower continued to develop MIC 1 through 6. These development activities included providing Consumers with study agreements for MIC 4 and MIC 6 in order to continue on to the Distribution Study stage. Additionally, sPower performed preliminary analyses and studies to further refine each QF

⁵ *Id*.

⁶ Case No. U-18090, October 5 Order, p. 8.

⁷ *Id*. at 42.

⁸ *Id* at 44.

⁹ October 25, 2018 email from Consumers Energy to Mak Nagle of sPower, Attachment A.

¹⁰ *Id*.

projects' design and production characteristics, identify potential land use permit restrictions, and resolve final project boundary and general arrangement details. Also, in reliance on the Commission's orders and Consumers' statements to sPower, sPower made both reputational and financial commitments to the current landowners of the proposed project sites.

- 10. On October 26, 2018, Geronimo Energy, who is not actually a party in Case No. U-18090, filed an Application to Present Additional Evidence and Motion for Stay. This action was opposed by Staff and all other parties to Case No. U-18090 with the exception of Consumers Energy. Consumers filed a Response in Support of Geronimo Energy's Request for Stay and a Response in Opposition to Geronimo Energy's Application to File Additional Evidence. It is unknown why the Commission has still not made a decision on post-judgment motions by a non-party five months after they were filed.
- 11. On October 26, 2018 non-party Geronimo Energy also filed an appeal of the Commission's October 5 Order in Case No. U-18090 to the Michigan Court of Appeals along with a motion for partial stay of those orders. The Court of Appeals denied Geronimo's motion for stay.¹¹
- 12. As of the date of filing of this Complaint, neither the Commission nor the Michigan Court of Appeals have stayed any part of the February 22 or October 5 Orders directing Consumers to enter into contracts with the first 150 MW of QFs in the Company's interconnection queue.
- 13. On December 3, 2018, Consumers Energy sent a letter to sPower ("Pause Letter"). 12 In the Pause Letter, Consumers acknowledged that the Commission had directed the Company to enter into PPAs with the projects within the first 150 MW of the interconnection

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¹¹ In re Establishing Avoided Cost Calculation for Consumers Energy, unpublished order of the Court of Appeals, entered November 6, 2018 (Docket No. 345995).

¹² Letter dated December 3, 2018 from Keith Troyer of Consumers Energy, Attachment B.

queue. However, relying on the pleadings filed in Case No. U-18090 by non-party Geronimo Energy before the Commission and Court of Appeals, Consumers asserted that it was "in all parties' best interest to pause the process and await a ruling from the MPSC and/or the courts as to the proper determination of the projects within the 150 MW queue." Consumers' Pause Letter concluded, "[W]e are unable to offer you an agreement at this time." ¹⁴

- 14. Consumers' unilateral decision to "pause the process" and not offer sPower an agreement for any of MIC 1 through 6 was not authorized by any Commission decision or administrative rule.
- 15. Consumers' unilateral decision to "pause the process" and not offer sPower an agreement for any of MIC 1 through 6 was not authorized by any FERC decision or administrative rule.
- 16. Consumers' unilateral suspension of actions required of the Company by PURPA and Commission's orders had the same effect as if the Commission had granted the request for stay that Consumers made in response to non-party Geronimo Energy's motion for stay in Case No. U-18090 thereby unlawfully supplanting the Commission's prerogative and authority to decide the request for stay.
- 17. On February 4, 2019, in Case No. U-20469, Consumers filed an application requesting that the Commission rescind the avoided cost rates that Commission established in Case No. U-18090. ¹⁵ In its application in that case, Consumers asks the Commission to relieve it of the obligations that the Commission's October 5 Order and PURPA impose on it. ¹⁶ As of the date of

¹⁴ Id.

¹³ *Id*.

¹⁵ Application of Consumers Energy Company Requesting an Order Rescinding Avoided Cost Rates, Case No. U-20469.

¹⁶ *Id.* at 21, \P B.

filing of this Complaint, the Commission has not scheduled a prehearing conference or taken any other action in Case No. U-20469.

sPower's attempt to resolve its concerns with Consumers.

18. On February 12, 2019, through counsel, sPower sent a letter to Consumers counsel regarding MIC 1 through 6. This letter is attached to this complaint as Attachment C.

19. sPower's letter to Consumers requested that Consumers promptly enter into power purchase agreements (PPAs) with sPower for MIC 1 through 6 as it is required to do pursuant to PURPA's must-buy obligation and the Commission's orders in Case No. U-18090.¹⁷ sPower's letter notified Consumers that sPower is of the opinion that Consumers has acted unlawfully by not complying with the Commission's orders and that sPower would consider appropriate legal remedies if Consumers did not promptly take meaningful steps to comply with the Commission's orders.¹⁸ The remainder of sPower's letter outlined the steps necessary for Consumers to take in order to enter into PPAs with sPower, consistent with PURPA's must-buy requirement and the Commission's orders.

20. Specifically, sPower's letter requested that, in order to enter into PPAs with MIC 1 through 6, Consumers promptly complete the interconnection process for MIC 1 through 6. ¹⁹ As detailed in sPower's letter to Consumers, sPower filed Generation Interconnection Applications with Consumers on April 3, 2017 for each of the QFs listed above, each of which are Category 5 projects. ²⁰ Consumers notified sPower that its Interconnection Application for MIC 2 was complete on January 12, 2018. ²¹ Consumers notified sPower that its Interconnection Applications

¹⁷ Attachment C, pp. 1-2.

¹⁸ *Id*. at 2.

¹⁹ *Id*.

²⁰ *Id*.

²¹ *Id*.

for MIC 4 and 6 were complete on April 3, 2018.²² Consumers has not yet notified sPower that its Interconnection Applications are complete for MIC 1, MIC 3, or MIC 5 despite sPower having provided Consumers with all required information with respect to these QFs.²³ Accordingly, sPower requested that Consumers deem its Interconnection Applications complete for MIC 1, 3, and 5 within 14 days of receipt of its letter.²⁴

21. As further detailed in sPower's letter to Consumers, sPower filed Engineering Review Agreements with Consumers on February 22, 2018 for MIC 2 and on April 12, 2018 for MIC 4 and 6.25 Despite the requirement found in the Commission's Rule 20(6)(d)5 that Consumers complete engineering reviews within 45 days for Category 5 projects, sPower has only received a completed engineering review for one of its six projects, MIC 2.26 Because the engineering studies for MIC 4 and 6 are long overdue, sPower requested that Consumers complete them within 14 days of Consumers' receipt of sPower's letter so that sPower could authorize Distribution System Studies for these QFs.²⁷ sPower further stated that when these engineering studies are complete and when the engineering studies that sPower plans to authorize for MIC 1, 3, and 5 are complete, sPower expects that Consumers will complete Distribution System Studies for each project within 60 working days after sPower authorizes and pays for such studies, as required by PSC Rule 20(8)(d).²⁸

22. As further detailed in sPower's letter to Consumers, on October 29, 2018, sPower authorized Consumers to begin a Distribution System Study for the one project for which an

²³ *Id*.

²² *Id*.

²⁴ *Id*.

²⁵ *Id*.

²⁷ *Id.* (citing Mich Admin Code, R 460.620(8)(d)).

²⁸ Attachment C, pp. 2-3.

engineering review had been completed, MIC 2.²⁹ Pursuant to Commission Rule 20(8)(d),³⁰ this Distribution System Study should have been completed by January 28, 2019.³¹ Accordingly, sPower's letter requested that Consumers complete the Distribution System Study for MIC 2 within 14 days of receipt of sPower's letter.³²

23. sPower's letter further requested that Consumers promptly resume PPA negotiations with sPower.³³ As sPower stated, the most recent communication that sPower received from Consumers regarding PPA negotiations was via email to Mak Nagle from Keith Troyer on January 16, 2019.³⁴ In that email, Mr. Troyer stated that the information Consumers was providing pertaining to each project's contract capacity target, earnest money deposit, and early termination security amount (all of which sPower had requested) was "a projection and not a final determination."³⁵ Mr. Troyer further stated, "Due to the fact that all of your projects are over the 2 MW threshold for the Standard Offer, we will need to work on an updated agreement for your projects. We will be reviewing your proposed edits with our Legal team and providing feedback to you."³⁶

24. sPower's letter stated sPower's opinion that Consumers was not warranted in providing sPower with "a projection and not a final determination" of information that is critical to the PPA negotiation process.³⁷ As sPower's letter stated, Consumers has been aware of the Commission's order to begin interconnecting and contracting with QFs in the first 150 MW of its

²⁹ *Id*.

³⁰ Mich Admin Code, R 460.620(8)(d).

³¹ Attachment C, p. 3.

³² *Id*.

 $^{^{33}}$ Id

³⁴ Email from energypurchase@cmsenergy.com and signed by Keith Troyer of Consumers Energy to Mak Nagle (mnagle@spower.com) and Katie Heath (katie.heath@spower.com) on January 16, 2019. Attached as Attachment D.

³⁵ *Id*.

³⁶ *Id*.

³⁷ Attachment C, p. 3.

interconnection queue, which includes each of sPower's QFs, since October 5, 2018 – over four months prior to the date of sPower's letter.³⁸ Accordingly, sPower requested that, within 14 days of receiving its letter, Consumers either confirm that the information it provided in its January 16, 2019 email is final and that sPower may rely on it, or provide sPower with final information that is not subject to further modification.³⁹

sPower's letter further stated sPower's opinion that Consumers was not warranted in first notifying sPower that it would "need to work on an updated agreement for [sPower's] projects" four months after the PSC's October 5, 2018 Order. As sPower's letter stated, if Consumers believed that modifications to its approved Standard Offer Agreement are warranted, it should have notified sPower of this belief months ago. Accordingly, sPower requested that, within 14 days of receiving its letter, Consumers provide sPower with any proposed redlines to the Standard Offer agreement, including Consumers' justification for why it believes the proposed modifications are necessary based on the size of sPower's QFs.

26. sPower's letter also notified Consumers that if it did not take each of the steps outlined in sPower's letter within the timeframes requested, sPower would conclude that Consumers did not intend to comply with the Commission's orders and that sPower would be forced to take appropriate actions.⁴³

27. Finally, sPower's letter concluded by notifying Consumers that it expected Consumers to conclude negotiations with sPower with respect to each of its QFs within 60 days of receiving sPower's letter.⁴⁴

³⁹ *Id*.

 $^{^{38}}$ *Id*.

⁴⁰ *Id*.

⁴¹ *Id*.

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⁴² *Id*.

⁴³ *Id*. ⁴⁴ *Id*. at 4.

Consumers' refusal to comply with Commission orders and negotiate with sPower.

28. On February 26, 2019, Consumers responded to sPower's letter. Consumers' response is attached to this complaint as Attachment E.

29. In its response, Consumers' stated that it "cannot agree to PPAs based on the avoided cost rates set forth in Case No. U-18090." Consumers' stated rationale for its refusal to enter into PPAs with sPower is its belief that it "is not obligated under PURPA to contract with sPower at such rates."

30. Consumers also argued in its response that, even if it believed that it were obligated to enter into PPAs with sPower at the rates the Commission established in Case No. U-18090, it would not be required to do so because it believes that MIC 1, MIC 2, MIC 4, and MIC 6 are larger than 20 MW in size.⁴⁷ To support its assertion, Consumers' response cited the FERC's order in *Consumers Energy Company*, 139 FERC ¶ 61,069, 61,473 (2012), in which the FERC relieved Consumers of the obligation "to enter into new contracts or obligations to purchase energy or capacity from QFs with a net capacity larger than 20 MW."⁴⁸

31. Regarding the interconnection process, Consumers stated that engineering reviews for MIC 4 and MIC 6 were complete.⁴⁹ Consumers released these engineering reviews to sPower on the same day as it provided its response to sPower's letter, February 26, 2019. Consumers further stated that it estimated it would release a complete distribution system study for MIC 2 by March 29, 2019.⁵⁰ Consumers further stated that it estimated that it would provide sPower with a

⁴⁵ Attachment E, p. 1.

⁴⁶ *Id*.

⁴⁷ *Id*.

⁴⁸ *Id*.

⁴⁹ *Id*. at 2.

⁵⁰ *Id*.

determination of the completeness of sPower's interconnection applications for MIC 1, MIC 2, and MIC 3 by March 7, 2019.⁵¹

32. As of the date of the filing of this complaint, Consumers has not notified sPower that its interconnection applications for MIC 1, MIC 3, and MIC 5 were complete.

sPower's actions subsequent to receiving Consumers' response and prior to filing this complaint.

33. After receiving Consumers' response, on March 6, 2019, sPower emailed Consumers' interconnection team regarding the net capacity of MIC 1, MIC 2, MIC 4, and MIC 6. As indicated in sPower's email, sPower added an asterisk to its Interconnection Applications for MIC 1, MIC 4, and MIC 6, which stated "Output from project at POI [point of interconnection] will never exceed 20 MW due to plant controller." With respect to MIC 2, sPower added an asterisk to its Interconnection Application stating, "Output from project at POI [point of interconnection] will never exceed 15 MW due to plant controller." In other words, sPower's March 6, 2019 email and accompanying modified Interconnection Applications clarified for Consumers that the net capacity ratings of MIC 1, MIC 2, MIC 4, and MIC 6 do not exceed – and in fact never exceeded – 20 MW each.

IV. Count 1: Violation of Commission Orders

- 34. The facts described above in paragraphs 5 through 30 demonstrate that Consumers has violated the Commission's February 22 Order and October 5 Order in Case No. U-18090.
- 35. As stated above in paragraphs 6 and 7, the Commission's February 22 Order and October 5 Order clearly directed Consumers to enter into contracts with the first 150 MW of QFs

⁵¹ *Id*.

⁵² Attachment F.

⁵³ Attachments G, H, and I, p. 3.

⁵⁴ Attachment J, p. 3.

in its interconnection queue at the avoided energy cost rates and full avoided capacity cost rate that the Commission established in Case No. U-18090.⁵⁵ Each of sPower's QFs, MIC 1 through 6, are within the first 150 MW of Consumers' interconnection queue.⁵⁶ The Commission's February 22 Order and October 5 Order therefore require Consumers to enter into contracts with sPower for each of its QFs at the full energy and avoided cost rates. As demonstrated by the Pause Letter and the Consumers' response to sPower's demand letter, Consumers flatly refuses to comply with the Commission's directives.

- 36. The Commission's October 5 Order was the Commission's final order in Case No. U-18090. The Commission has neither stayed nor revoked any part of the October 5 Order. Consumers has no justification for refusing to comply with the Commission's orders.
- 37. Consumers' stated rationales for refusing to comply with the Commission's orders amount to nothing more than a preference on the part of Consumers not to enter into contracts with sPower's QFs at the avoided cost rates the Commission established in Case No. U-18090. It is the Commission's duty under federal law to implement PURPA's must-buy obligation and the Commission has done so with respect to Consumers through its orders in Case No. U-18090. Consumers has no legal right to second-guess the Commission's PURPA implementation and defy the Commission's orders.
- 38. PURPA and the FERC's implementing regulations apply at all times. Regardless of Consumers' opinion about the ripeness of the rates established in Case No. U-18090, Consumers cannot unilaterally suspend PURPA's must-buy obligation by declining to enter into QF contracts

⁵⁵ See ¶¶ 6-7, above. See also Case No. U-18090, February 22 Order, p. 13 and October 5 Order, p. 8 ("New QF contracts should be offered on a first-come, first-served basis to certified QFs (excluding QF interconnection requests for participation in the distributed generation program) based upon the date the interconnection application was received.").

 $^{^{56}}$ ¶ 8, above.

⁵⁷ ¶¶ 3-4, 16 USC § 824a-3(f).

with sPower. The FERC has long recognized that contracted avoided cost rates may diverge from a utility's actual avoided costs at the time of delivery without raising PURPA compliance concerns.⁵⁸ Accordingly, Consumers' belief that the avoided cost rates the Commission established in Case No. U-18090 may be stale does not justify Consumers' refusal to enter into contracts with sPower, as the Commission ordered it to do.

39. Consumers' attempts to use the Commission's observations about the length of time it took to complete Case No. U-18090 to undermine the Commission's directives in that proceeding are also unavailing.⁵⁹ In the very next sentence of the October 5 Order in Case No. U-18090 that Consumers relies on to claim that the avoided cost rates are stale, the Commission stated, "The Commission is addressing this concern by adopting a temporary limit on the amount of capacity sold at the higher approved avoided cost." (i.e., 150 MW).⁶⁰ Consumers' apparent preference that the Commission had reached a different conclusion based on these observations is irrelevant. Despite – and in fact because of – the Commission's observations that Consumers recites in its response, the Commission's October 5 Order reaffirmed its order to Consumers to enter into contracts with the first 150 MW of QFs in its interconnection queue. No subsequent action of the Commission has relieved Consumers from that directive.

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⁵⁸ 18 CFR § 292.304(d) (providing QFs with the option to choose to sell energy and capacity at an avoided cost rate on an "as available" basis or pursuant to a contract or legally enforceable obligation. If a QF chooses a contract or a legally enforceable obligation, the QF may choose to have the avoided cost rate calculated for the term of the contract at the time it enters into the contract.); FERC Order 69, 45 Fed. Reg. 12,214, 12,224 (Feb. 25, 1980) (recognizing that a forecasted avoided cost rate would inevitably vary from a utility's actual avoided costs at the time the energy was delivered, but finding that "in the long run, 'overestimations' and 'underestimations' of avoided costs will balance out.")

⁵⁹ Attachment E, p. 1 (citing the Commission's October 5 Order, pp. 42-43, in which the Commission observed "during the pendency of [Case No. U-18090] the energy landscape changed so rapidly that the primary evidence related to the avoided cost of power relied upon by the Commission in making its determinations is woefully out of date").

⁶⁰ October 5 Order in Case No. U-18090, p. 43.

- 40. By ordering Consumers to enter into contracts with QFs "based upon the date the interconnection application was received," the Commission found that each QF in the first 150 MW of Consumers' interconnection queue had established a legally enforceable obligation ("LEO") with Consumers for purposes of Case No. U-18090. Because each of sPower's QFs is within the first 150 MW of Consumers' interconnection queue, sPower has obtained a LEO with respect to each of its QFs with Consumers. Without justification, Consumers now attempts to disregard sPower's LEOs by refusing to enter into contracts with sPower.
- 41. sPower recognizes that the Commission has now opened Case No. U-20344 to explore options for among other things potential definitions of an LEO and new interconnection rules. Power further recognizes that the Commission's October 5 Order also affirmed "its prior determinations that PURPA issues should be integrated with IRP proceedings" moving forward. However, neither the Commission's intended rulemaking on LEO formation nor its stated intent to address PURPA issues in IRP proceedings moving forward impact the LEOs that the Commission has already established and recognized for QFs in the first 150 MW of Consumers' interconnection queue in its October 5 Order, including sPower's.
- 42. Specifically, when discussing the issue of how a LEO is created, in its October 5 Order the Commission explicitly stated, "This interim process utilizing the interconnection queue for offering QF contracts is a temporary measure." In other words, the Commission decided to use Consumers' interconnection queue at least for now to determine that the first 150 MW of QFs in that queue have established LEOs. Regardless of any future rules or policies the

⁶¹ Order dated November 8, 2018 in Case No. U-20344. For background, see also October 5 Order in Case No. U-18090, p. 43; Case No. U-20095, October 5, 2018 Order, p. 11.

⁶² *Id*.

⁶³ *Id*. at 8.

Commission may adopt for establishing LEOs, it has already found that the first 150 MW of QFs in Consumers' interconnection queue, which includes sPower's QFs, have established LEOs.

- 43. Later in its October 5 Order, the Commission similarly stated, "[t]he 150 MW need determination is a temporary stopgap measure intended to allow Consumers and QFs to enter into agreements while the IRP proceeding is pending." Again, regardless of any future actions the Commission may take with respect to QFs that do not have interconnection queue positions within the first 150 MW (either in regard to LEO formation, avoided cost rates, or both), the Commission's October 5 Order *already established LEOs* for QFs in the first 150 MW. sPower now asks the Commission to enforce sPower's LEOs that the Commission established for QFs in the first 150 MW of the interconnection queue. sPower takes no position through this complaint on any actions the Commission may take in the future regarding how LEOs should be established for QFs with later queue positions.
- 44. Simply put, the Commission has already recognized that sPower has obtained LEOs for each of its QFs, MIC 1 through 6. Any future rulemaking or other action the Commission takes regarding the establishment of LEOs for QFs that are not in the first 150 MW of Consumers' interconnection queue will not disturb the LEOs the Commission has already recognized. Consistent with the Commission's orders in Case No. U-18090, Consumers must now honor sPower's LEOs by entering into contracts with sPower at the full avoided cost rates the Commission established for QFs in the first 150 MW of the queue.
- 45. sPower is also aware that Consumers initiated a new proceeding, Case No. U-20469, when it filed an application "requesting an order rescinding the avoided cost rates established in Case No. U-18090." sPower filed a Petition for Leave to Intervene in that proceeding

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⁶⁴ *Id*. at 17.

on February 22, 2019 and plans to participate if the Commission sets it for hearing. However, given that Consumers' application in Case No. U-20469 simply asks the Commission to relieve it of the obligations the Commission imposed on it in Case No. U-18090, sPower encourages the Commission to reject the application as the collateral attack that it is. Moreover, for the reasons discussed above, the Commission should not relieve Consumers of the LEOs that the Commission has already found exist with respect to the QFs in the first 150 MW of the interconnection queue. The Commission should also not disturb the full avoided cost rates that it found would apply to contracts with QFs in the first 150 MW.

- 46. As stated above, subsequent to the Commission's October 5 Order, sPower reasonably and detrimentally relied on the Commission's directive to Consumers to enter into contracts with the first 150 MW of QFs in Consumers' interconnection queue, which includes each of sPower's QFs, MIC 1 through 6.65 sPower reasonably expected that Consumers would comply with the Commission's clear directives and would not seek to overturn a final decision of the Commission or launch collateral attacks on it. sPower would suffer significant harm if the Commission were to reverse course on the clear directives in its February 22 and October 5 Orders with respect to the first 150 MW of QFs.
- 47. Finally, Consumers is incorrect in its response that it is not required by PURPA and the Commission's orders to enter into contracts with respect to MIC 1, MIC 2, MIC 4, and MIC 6 on the basis of the capacity rating of those QFs. 66 As stated above, Consumers' response cited the FERC's order in *Consumers Energy Company*, 139 FERC ¶ 61,069, 61,473 (2012), in which the FERC relieved Consumers of the obligation "to enter into new contracts or obligations to purchase

 $^{^{65}}$ ¶ 9, above.

⁶⁶ Attachment E, pp. 1-2.

energy or capacity from QFs with a *net* capacity larger than 20 MW."⁶⁷ Consumers' assertion that MIC 1, MIC 2, MIC 4, and MIC 6 "are above 20 MWs [sic] in size" seems to be based on a confusion between net capacity and gross capacity.⁶⁸ As indicated by the language of FERC's order in *Consumers Energy Company* just cited, only a QF's net capacity rating is relevant to determining whether PURPA's must-buy obligation applies. The fact that MIC 1, MIC 2, MIC 4, and MIC 6 are slightly larger than 20 MW in gross capacity does not relieve Consumers of its obligation to enter into contracts with sPower with respect to these QFs.⁶⁹

48. Any generation resource's output experiences losses in its nameplate or gross capacity rating behind its point of interconnection with the utility. As discussed above, sPower recently clarified its Interconnection Applications for each of its QFs, including MIC 1, MIC 2, MIC 4, and MIC 6, to notify Consumers that sPower will use a plant controller to limit the net output of each QF at the point of interconnection with Consumers' system. MIC 1, MIC 4, and MIC 6 are each 26 MW in gross capacity and the plant controller used for each QF will ensure that output never exceeds 20 MW at the point of interconnection. MIC 2 is 20.07 MW in gross capacity and the plant controller used for MIC 2 will ensure that output never exceeds 15 MW at the point of interconnection.

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 $^{^{67}}$ ¶ 30, above (citing *Id*.) (italics added).

⁶⁸ Attachment E, p. 1.

⁶⁹ 18 CFR § 292.309(a)-(j) implements 16 USC 824a-3(m) pertaining to the termination of PURPA's must-buy requirement for certain QFs. When the FERC adopted these rules, it stated "A QF, when it seeks certification, states what size it is. The size it is required to state is its 'net capacity' which is its gross capacity, less station power. In the case of Commission-certified facilities, the Commission certifies the QF at its net capacity; self-certified facilities self-certify at net capacity. The Commission has been consistent over the years in requiring QFs to state their net capacity in the Form 556 which is the basis of both applications for Commission certification, and notices of self-certification. A QF's Commission certified (or self-certified) *net* capacity would determine whether the QF qualifies for the 'small size' rebuttable presumption in this Final Rule." New PURPA Section 210(m) Regulations Applicable to Small Power Production and Cogeneration Facilities, 117 FERC P61,078, 61411, FN 41 (FERC, October 20, 2006) (italics added).

⁷⁰ ¶ 33.

⁷¹ See p. 3 of Attachments G, H, and I.

⁷² See Attachment J, p. 3.

49. Each FERC Form 556 certifying sPower's QFs as QFs also demonstrates that the net capacity of each QF will not exceed 20 MW. Specifically, in each FERC Form 556 certifying MIC 1, MIC 4, and MIC 6 as QFs, the maximum net power production capacity of MIC 1, MIC 4, and MIC 6 is stated as 20 MW for each QF.⁷³ In the case of MIC 2, the maximum net power production capacity is stated as 15 MW.⁷⁴

V. Count 2: Violation of Interconnection Rules

50. The facts described above in paragraphs 5 through 29 further demonstrate that Consumers has violated several of the Commission's rules governing Consumers' interconnection procedures.

51. Specifically, Consumers has failed to deem sPower's interconnection applications complete for MIC 1, MIC 3, and MIC 5.⁷⁵ sPower submitted these applications on April 3, 2017.⁷⁶ The Commission's Rule 20(4) requires Consumers to notify an interconnection applicant, such as sPower, whether the application is complete or, if the application is incomplete, advise the applicant of the application's deficiency within 10 working days.⁷⁷ Consumers has therefore violated Rule 20(4).

52. Consumers has also failed to complete the Distribution System Study that sPower authorized for MIC 2.⁷⁸ sPower authorized Consumers to begin a Distribution System Study for MIC 2 on October 29, 2018.⁷⁹ Pursuant to Commission Rule 20(8)(d),⁸⁰ this Distribution System Study should have been completed by January 28, 2019.⁸¹ sPower has still not received the

⁷³ See p. 9, line 7g of Attachments K, L, and M.

⁷⁴ See Attachment N, p. 9, line 7g.

 $^{^{75}}$ ¶ 20, above.

⁷⁶ *Id*.

⁷⁷ Mich Admin Code, R 460.620(4).

 $^{^{78}}$ ¶ 22, above.

⁷⁹ Id.

⁸⁰ Mich Admin Code, R 460.620(8)(d).

 $^{^{81}}$ ¶ 22, above.

Distribution System Study for MIC 2 as of the date of filing this complaint. Consumers has therefore also violated Rule 20(8)(d).

VI. Count 3: Violation of PURPA Must-Buy Obligation

- 53. Because the Commission's February 22 Order and October 5 Order in Case No. U-18090 implement PURPA's must-buy obligation with respect to Consumers and Consumers has refused to comply with those orders, Consumers has also violated the requirements of PURPA. Specifically, by refusing to enter into avoided cost contracts with sPower for MIC 1 through 6, Consumers has violated 16 USC § 824a-3(a), (b), and (f), as well as 18 CFR § 292.303(a) and (c) and 18 CFR § 292.304(d).
- 54. As explained in paragraphs 3 and 4, above, pursuant to 16 USC § 824a-3(f), the Commission has both jurisdiction and a duty to implement and enforce the requirements of PURPA with respect to Consumers.

VII. Count 4: Equitable Estoppel and Judicial Estoppel

- 55. Consumers Energy has an application for approval of its Integrated Resource Plan (IRP) pending in Case No. U-20165.
- 56. Consumers' IRP case includes a number of requests by the Company related to PURPA, QFs, and PPAs.
- 57. In Case No. U-20165, Consumers Energy witnesses testified under oath that the IRP's Preferred Course of Action (PCA) would include the 150 MW of PURPA solar PPAs that the Commission directed Consumers to enter into in Case No. U-18090.⁸²

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⁸² Direct testimony of Thomas Clark in Case No. U-20165, 7 TR 904; Direct testimony of Keith Troyer in Case No. U-20165, 8 TR 1262.

58. In its appeal to the Commission in Case No. U-20165 of an Administrative Law Judge's decision to strike certain testimony and exhibits as duplicative of issues previously determined in Case No. U-18090, Consumers expressly committed to contracting for the 150 MW of PURPA solar PPAs as directed by the Commission in Case No. U-18090; and further expressly declared the treatment of the first 150 MW of its interconnection queue to be legally distinct and separate from issues in the IRP case concerning PURPA, QFs, and PPAs:

The Company's proposals, which make up its PCA, do not seek to re-litigate Case No. U-18090 as it applies to: (i) existing QFs with PURPA-based PPAs that expire prior to the conclusion of this IRP; (ii) the 150 MW that the Commission has required to be purchased from certain QFs at the full avoided cost rate; and (iii) any OF at or below 20 MW that wishes to accept compensation for capacity at the [MISO PRA] rate. The Commission's orders in Case No. U-18090 have indicated that the facilities that fall into these three categories should receive compensation based on the Case No. U-18090 avoided cost rates. Therefore, there is a clear demarcation between what the Commission has approved in Case No. U-18090 and what the Company has proposed here. What the Company's PURPA avoided cost and competitive bidding proposals seek to accomplish in this IRP is a change to the PURPA avoided cost structure on a going forward basis so that the Company's PCA may be implemented.⁸³

- 59. Consumers prevailed in the above-referenced appeal.
- 60. Consumers' actions as described above, including its unilateral cessation of PPA negotiations and refusal to enter PPAs with sPower, and its subsequent filings in other dockets seeking rescission or avoidance of the effect of the directive in Case No. U-18090, are in direct conflict with the positions the Company took and the representations it made in Case No. U-20165 to the prejudice of sPower.

⁸³ Consumers Energy's Application for Leave to Appeal, Case No. U-20165, September 17, 2018, p 4 (italics added).

61. The Commission should declare that Consumers is estopped from taking positions inconsistent with its sworn testimony and legal pleadings in Case No. U-20165.

VII. **Request for Relief**

Pursuant to Rule 441(e), sPower hereby requests a contested case proceeding regarding this matter. Given the long delays already experienced as a result of Consumers' extra-legal actions described above, and the growing hardships imposed on sPower and project stakeholders as a result, sPower requests an expedited schedule for adjudicating this complaint.

Further, for all of the reasons stated herein, sPower respectfully requests that the Commission provide the following relief:

- Α. Order Consumers to enter into contracts to purchase energy and capacity from sPower's QFs, MIC 1, MIC 2, MIC 3, MIC 4, MIC 5, and MIC 6.
- В. Consistent with the Commission's February 22 Order and October 5 Order in Case No. U-18090, order Consumers to compensate sPower for the energy and capacity provided by MIC 1, MIC 2, MIC 3, MIC 4, MIC 5, and MIC 6 at the avoided energy rates and full avoided capacity cost rate the Commission established in Case No. U-18090.
- C. Order Consumers to comply with the timelines and other requirements of the Commission's interconnection rule, Rule 20, with respect to each of sPower's QFs. 84
- D. Order Consumers to enter into the contracts described in A., above, within 14 days of the Commission's final decision in this matter.
 - E. Provide any other relief that the Commission deems just and necessary.

⁸⁴ Mich Admin Code, R 460.620

Respectfully submitted this 19th day of March, 2019,

OLSON, BZDOK & HOWARD, P.C. Counsel for sPower Development Company, LLC

By: _____

Christopher M. Bzdok (P53094) 420 E. Front St.

Traverse City, MI 49686

Phone: 231/946-0044; Fax: 231/946-4807

Email: chris@envlaw.com

From: PO Box: EnergyPurchase

 To:
 Mak Nagle

 Cc:
 IC Team

Subject: PURPA Project(s) Agreement

Date: Thursday, October 25, 2018 2:35:56 PM Attachments: 2018-10-12 PURPA STD OFFER V1.5.pdf

PURPA - Contract Offer Guide.docx Standard Offer Communication.docx

The following email contains a provisional offer for a long-term contract for the output of your company's electric generator. If you are interested in signing a long-term agreement, please reply to this email no later than November 8, 2018 indicating your interest. If no response is received by this date, your offer may be rescinded.

Thank you for your interest in a Public Utility Regulatory Policies Act of 1978 ("PURPA") Power Purchase Agreement; the Standard Offer Agreement is attached for your review. If you would like to read the Michigan Public Service Commission's ("MPSC") Orders regarding these agreements, the orders are posted on the MPSC's website in MPSC Case No. U-18090. The docket gives information about the pricing options and terms that are available to Qualifying Facilities.

The MPSC has determined that the first 150 MW in the Company's queue are eligible to receive compensation for delivered capacity based on either the full avoided cost rate or a market based capacity rate. The MPSC has the final authority to determine which projects exist within the first 150 MW of the queue. Based on Consumers Energy Company's interpretation of the October 5, 2018 Order in Case No. U-18090, we believe that your following project(s) (see below) are within the first 150MW:

Project List: 1) MIC 1 Solar - sPower Development Company, LLC

2) MIC 2 Solar - sPower Development Company, LLC 3) MIC 3 Solar - sPower Development Company, LLC 4) MIC 4 Solar - sPower Development Company, LLC 5) MIC 5 Solar - sPower Development Company, LLC 6) MIC 1 Solar - sPower Development Company, LLC

In the event that another entity claims to have the right to the full capacity rate offered to you, Consumers Energy will inform you of such claim, and will work with the Staff and/or Commission to further refine and clarify the queue. All projects that are within the 150MW allotment are eligible for either the full avoided cost rate or a market based capacity rate; please make your selection by indicating in the appropriate box in Part 1.

Please review the entire Standard Offer Agreement and Standard Offer Guide before returning Part 1 of the Standard Offer Agreement and the Milestone Schedule on the back of the Guide. Part 1 of the Agreement should be completed with the appropriate Seller information; however the signature block should not be signed at this time.

Once submitted, we will review your system information for completeness and eligibility. We will contact you for any clarifications or for more information as needed. Your submittal of Part 1 is not a

U-20500 - March 19, 2019 Complaint by sPower Development Company, LLC Attachment A

legally binding obligation to sell energy or capacity to us. It is simply the first step in drafting the Agreement. Please review the attached Standard Offer Guide for more information about how the process works.

The Standard Offer Agreement contains various payment options for the Seller. Due to the specific characteristics of each individual generator, we are not in the position to provide direction as to which payment option would be the most economic for any project.

Please submit all project information	to energypurchase@cmsenergy.com.
---------------------------------------	----------------------------------

Thank you

Consumers Energy



A CMS Energy Company

The following contains an **UPDATE** on the provisional offer for a long-term contract for the output of your company's electric generator(s) that was provided to you in late October 2018.

Please read the below in regards to Consumers Energy Company's ("Consumers Energy" or the "Company") Public Utility Regulatory Policies Act of 1978 ("PURPA") purchasing process under Michigan Public Service Commission ("MPSC") Case No. U-18090.

The MPSC's October 5, 2018 order in Case No. U-18090 concerns, among other things, the purchasing processes applicable to PURPA Qualifying Facilities that fall within or outside of the first 150 MW of the Company's interconnection queue. The MPSC has final authority to determine which projects are within the first 150 MW of the queue.

On October 26, 2018, Geronimo Energy filed an Application to Present Additional Evidence and a Motion for Partial Stay with the MPSC. Geronimo's filings directly concern the MPSC's prior determination regarding the 150 MW of capacity referred to above. If you would like to review the filings, they are posted on the MPSC's website in the docket for Case No. U-18090. In addition, Geronimo has filed a related appeal with the Michigan Court of Appeals and requested that the Court of Appeals stay the MPSC's order in Case No. U-18090. The Court of Appeals rejected Geronimo's request, for now, pending the MPSC's ruling on Geronimo's October 26 filing with the MPSC.

Based on the unknown outcome of either Geronimo's October 26, 2018 filing in Case No. U-18090 or its pending appeal, Consumers Energy believes it to be in all parties' best interest to pause the process and await a ruling from the MPSC and/or the courts as to the proper determination of the projects within the 150 MW queue. We look forward to working with you after this issue is resolved. But, for the reasons explained in this update, we are unable to offer you an agreement at this time.

As more information or a ruling becomes available, we will continue to communicate with you regarding the Company's PURPA purchasing process.

Respectfully,

Keith Troyer, P.E.

Transactions and Wholesale Settlements

February 12, 2019

Robert W. Beach Consumers Energy One Energy Plaza Jackson, MI 49201 Via 1st Class Mail and Email: Robert.Beach@cmsenergy.com

RE: Request to Complete Interconnection Process and Enter into Power Purchase Agreements with MIC 1-6 Qualifying Facility Solar Projects

Dear Mr. Beach,

On behalf of our client sPower Development Company, LLC (sPower), we are writing to request that Consumers Energy (Consumers) promptly enter into power purchase agreements (PPAs) with sPower for the following qualifying facilities (QFs) that sPower owns and is currently developing in Consumers' service territory:

- MIC 1 Solar (Reference Number CE17050)
- MIC 2 Solar (Reference Number CE17051)
- MIC 3 Solar (Reference Number CE17052)
- MIC 4 Solar (Reference Number CE17053)
- MIC 5 Solar (Reference Number CE17054)
- MIC 6 Solar (Reference Number CE17055)

As you are aware, the federal Public Utility Regulatory Policies Act of 1978 (PURPA) requires a utility, such as Consumers, to purchase QF capacity and energy at the utility's avoided cost. Furthermore, in Michigan Public Service Commission (PSC) Case No. U-18090, the PSC ordered Consumers to begin interconnecting and contracting with QFs at the avoided cost rates that the PSC had established in that proceeding and found "it appropriate to limit payment of the full avoided capacity cost to the first 150 MWs of new QF capacity in the queue." In that same proceeding, on October 5, 2018, the PSC clarified that its reference to the first 150 MW of new QF capacity in the queue referred to Consumers' interconnection queue and reaffirmed its earlier order that Consumers interconnect and contract with these QFs. Consumers has previously confirmed to sPower via email that each of the six QFs listed above are in the first 150 MW of Consumers' interconnection queue. It is therefore our opinion that sPower has a legal right to enter into PPAs with Consumers for each of its QFs pursuant to sPower's PURPA rights and the PSC's orders and sPower intends to enforce that legal right. sPower expects that Consumers will

¹ 16 USC § 824a-3(a)(2); 18 CFR § 292.303.

² Case No. U-18090, February 22, 2018 Order, p. 13.

³ Case No. U-18090, October 5, 2018 Order, p. 8.

⁴ Email from energypurchase@cmsenergy.com to Mak Nagle (mnagle@spower.com) and sPower's IC Team (IC@spower.com) on October 25, 2018.

Robert W. Beach Consumers Energy February 12, 2019 Page 2

comply with the PSC's orders in Case No. U-18090 and promptly enter into PPAs with sPower for each of the QFs listed above.

We are aware that on October 31, 2018, Geronimo Energy filed an Application to Present Additional Evidence Under MCL 462.26(6) in Case No. U-18090 and that on November 16, 2018, Consumers filed a Response in Support of Geronimo Energy's Request for Stay and Response in Opposition to Geronimo Energy's Application to Present Additional Evidence. Related responses and other pleadings have also recently been filed in Case No. U-18090. We are also aware that Consumers recently, on February 4, 2019, filed a Request to Withdraw Its Standard Offer Tariff in Case No. U-18090. However, the PSC has not issued any orders subsequent to its October 5, 2018 Order in that proceeding. Accordingly, it is our opinion that the PSC's February 22, 2018 and October 5, 2018 Orders are still in effect. The mere filing of pleadings asking the PSC to stay, revoke, or otherwise modify these orders did not modify the legal effect of these orders. It is therefore also our opinion that Consumers has acted unlawfully by not complying with the PSC's orders. Please consider this letter our notice to Consumers that we believe Consumers has acted unlawfully and contrary to the PSC's orders. If Consumers does not promptly take meaningful steps to comply with the PSC's orders, as described below, we will begin considering appropriate legal remedies.

In order to comply with the PSC's orders, Consumers must promptly complete the interconnection process for sPower's QFs and enter into PPAs with sPower for its QFs as soon as possible.

sPower filed Generation Interconnection Applications with Consumers on April 3, 2017 for each of the QFs listed above, each of which are Category 5 projects. Consumers notified sPower that its Interconnection Application for MIC 2 was complete on January 12, 2018. Consumers notified sPower that its Interconnection Applications for MIC 4 and 6 were complete on April 3, 2018. Consumers has not yet notified sPower that its Interconnection Applications are complete for MIC 1, MIC 3, or MIC 5. sPower has provided Consumers with all required information with respect to these QFs. Accordingly, sPower requests that Consumers deem its Interconnection Applications complete for MIC 1, 3, and 5 within 14 days of receipt of this letter.

sPower filed Engineering Review Agreements with Consumers on February 22, 2018 for MIC 2 and on April 12, 2018 for MIC 4 and 6. Despite the requirement found in the PSC's Rule 20(6)(d)⁵ that Consumers complete engineering reviews within 45 days for Category 5 projects, sPower has only received a completed engineering review for one of its six projects, MIC 2. The engineering studies for MIC 4 and 6 are long overdue. sPower expects that Consumers complete them promptly so that sPower can authorize Distribution System Studies for these QFs. Specifically, sPower requests that Consumers complete the outstanding engineering studies for MIC 4 and MIC 6 within 14 days of receipt of this letter. When these engineering studies and when the engineering studies that sPower plans to authorize for MIC 1, 3, and 5 are complete, sPower further expects that Consumers will complete Distribution System Studies for each project within

⁵ Mich Admin Code, R 460.620(6)(d).

Robert W. Beach Consumers Energy February 12, 2019 Page 3

60 working days after sPower authorizes and pays for such studies, as required by PSC Rule 20(8)(d).⁶

On October 29, 2018, sPower authorized Consumers to begin a Distribution System Study for the one project for which an engineering review had been completed, MIC 2. Pursuant to PSC Rule 20(8)(d),⁷ this Distribution System Study should have been completed by January 28, 2019. sPower expects this Distribution System Study to be completed promptly. Specifically, sPower requests that Consumers complete the Distribution System Study for MIC 2 within 14 days of receipt of this letter.

The most recent communication that sPower received from Consumers regarding PPA negotiations was via email to Mak Nagle from Keith Troyer on January 16, 2019. In that email, Mr. Troyer stated that the information Consumers was providing pertaining to each project's contract capacity target, earnest money deposit, and early termination security amount (all of which sPower had requested) was "a projection and not a final determination." Mr. Troyer further stated, "Due to the fact that all of your projects are over the 2 MW threshold for the Standard Offer, we will need to work on an updated agreement for your projects. We will be reviewing your proposed edits with our Legal team and providing feedback to you."

It is our opinion that Consumers was not warranted in providing sPower with "a projection and not a final determination" of information that is critical to the PPA negotiation process. Consumers has been aware of the PSC's order to begin interconnecting and contracting with QFs in the first 150 MW of its interconnection queue, which includes sPower's QFs, since October 5, 2018 – over four months ago. Accordingly, sPower expects that, within 14 days of receiving this letter, Consumers either confirm that the information it provided in its January 16, 2019 email is final and that sPower may rely on it, or provide sPower with final information that is not subject to further modification.

It is also our opinion that Consumers was not warranted in first notifying sPower that it would "need to work on an updated agreement for [sPower's] projects" four months after the PSC's October 5, 2018 Order. If Consumers believes that modifications to its approved Standard Offer agreement are warranted, it should have notified sPower of this belief months ago. Accordingly, sPower expects that, within 14 days of receiving this letter, Consumers provide sPower with any proposed redlines to the Standard Offer agreement, including Consumers' justification for why it believes the proposed modifications are necessary based on the size of sPower's QFs.

If Consumers does not take each of the steps outlined in this letter within the timeframes requested, sPower will conclude that Consumers does not intend to comply with the PSC's orders and will be forced to take appropriate actions.

⁶ Mich Admin Code, R 460.620(8)(d).

 $^{^{7}}$ Id.

⁸ Email from <u>energypurchase@cmsenergy.com</u> and signed by Keith Troyer to Mak Nagle (<u>mnagle@spower.com</u>) and Katie Heath (<u>katie.heath@spower.com</u>) on January 16, 2019.

Robert W. Beach Consumers Energy February 12, 2019 Page 4

Finally, sPower expects that Consumers conclude negotiations with sPower with respect to each of its QFs within 60 days of receiving this letter.

Please do not hesitate to contact us should you have any questions regarding the above requests. We would also be happy to discuss these requests in person or via telephone.

Very truly yours,

/s/ Scott F. Dunbar

Scott F. Dunbar Keyes & Fox LLP 1580 Lincoln St., Suite 880 Denver, CO 80305 949-525-6016 sdunbar@keyesfox.com

Christopher M. Bzdok (P53094) Olson, Bzdok & Howard, P.C.

420 E. Front St.

Traverse City, MI 49686

231-946-0044

chris@envlaw.com

xc: Counsel to sPower Development Company, LLC

Katie Heath

From: PO Box: EnergyPurchase <energypurchase@cmsenergy.com>

Sent: Wednesday, January 16, 2019 1:54 PM **To:** Mak Nagle; PO Box: EnergyPurchase

Cc: Katie Heath

Subject: RE: PURPA Project(s) Agreement

Attachments: sPower Calc Sheet.xlsx

Privileged and Confidential

Mak,

Attached is a spreadsheet that lays out the information that you requested. As we are still awaiting the ruling by the MPSC, the information in the spreadsheet is a projection and not a final determination.

Due to the fact that all of your projects are over the 2MW threshold for the Standard Offer, we will need to work on an updated agreement for your projects. We will be reviewing your proposed edits with our Legal team and providing feedback to you.

The next MPSC meeting is scheduled for this Friday, January 18, and at this time, no Agenda is available.

Thanks

Keith Troyer, P.E.

Transactions and Wholesale Settlements

From: Mak Nagle [mailto:mnagle@spower.com] **Sent:** Friday, January 11, 2019 10:19 AM

To: PO Box: EnergyPurchase

Cc: Katie Heath

Subject: FW: PURPA Project(s) Agreement

Email sent from outside of CMS/CE. Use caution before clicking links/attachments.

Hello Keith and Jarrod

Happy New Year and hope you had a relaxing break.

We would like to follow-up with your team regarding the attached letter sent on December 7th. As mentioned in the letter, sPower asks Consumers to resume negotiations of the PPA and provide the following commercial information at the earliest convenience:

- Contract capacity target
- Earnest Money deposit and
- Early Termination security amount

U-20500 - March 19, 2019 Complaint by sPower Development Company, LLC Attachment D

This information in particular is critical for our internal financing discussion, in which we must take into consideration various revenue streams and cost obligations per the standard offer agreement. Without having the clarity on this, it would be difficult for us to finalize the contract by Q1 2019 which is our target date to safe harbor for 100% ITC. While we understand that Consumers has concerns about the appeal and motion for partial stay filed by Geronimo Energy, neither the Court of Appeals nor the PSC have issued a stay of the PSC's October 5, 2018 Order, which directed Consumers to begin contracting with the first 150 MW of QFs in Consumers' interconnection queue. Accordingly, we believe this delay in our negotiations is unwarranted and is contrary to the PSC's October 5, 2018 Order.

As always, we remain available for a call or in-person meeting if you would like to discuss this further.

Thank you

Mak Nagle

W: 804.533.6032 M: 434.260.4693

From: Mak Nagle

Sent: Friday, December 7, 2018 1:16 PM

To: PO Box: EnergyPurchase <energypurchase@cmsenergy.com>

Cc: IC Team <IC@spower.com>; Nick Stoner <nick.stoner@spower.com>; Trupti Kalbag@spower.com>; Katie

Heath <katie.heath@spower.com> **Subject:** RE: PURPA Project(s) Agreement

Hello Keith

Please see attached sPower's response to your letter.

We are available next week if you would like to discuss this further or have any questions about our request.

Thank you and have a nice weekend

Sincerely,

Mak

Mak Nagle

W: 804.533.6032 M: 434.260.4693

Ref: https://spower.lightning.force.com/lightning/r/Opportunity/0064100000JiNe7AAF/view

From: PO Box: EnergyPurchase < energypurchase@cmsenergy.com >

Sent: Monday, December 3, 2018 4:39 PM

To: Mak Nagle < mnagle@spower.com >; PO Box: EnergyPurchase < energypurchase@cmsenergy.com >

Cc: IC Team <IC@spower.com>; Nick Stoner <nick.stoner@spower.com>; Trupti Kalbag@spower.com>; Katie

Heath < katie.heath@spower.com > Subject: RE: PURPA Project(s) Agreement

Mak,

Please see the attached document in regards to the PURPA 150 MW projects.

Respectfully,

Keith Troyer, P.E.

Transactions and Wholesale Settlements

Project List: 1) MIC 1 Solar - sPower Development Company, LLC

2) MIC 2 Solar - sPower Development Company, LLC

3) MIC 3 Solar - sPower Development Company, LLC

4) MIC 4 Solar - sPower Development Company, LLC

5) MIC 5 Solar - sPower Development Company, LLC

6) MIC 6 Solar - sPower Development Company, LLC



A CMS Energy Company

February 26, 2019

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CATHERINE M REYNOLDS Senior Vice President and General Counsel

(202) 778-3340

MELISSA M GLEESPEN Vice President, Corporate (202) 778-3355 Secretary and Chief Compliance Officer

LEGAL DEPARTMENT

SHAUN M JOHNSON Vice President and Deputy General Counsel

Bret A Totoraitis Kelly M Hall Eric V Luoma Assistant General Counsel Ashley L Bancroft Robert W Beach lan F. Burgess Don A D'Amato Robert A. Farr Gary A Gensch, Jr Emerson J. Hilton Gary L Kelterborn Mary Jo Lawrie Jason M Milstone Rhonda M Morris Deborah A Moss' Michael C. Rampe Scott J Sinkwitts Adam C Smith Theresa A G Staley Janae M Thayer Anne M Uitvlugt

Aaron L Vorce

Via First Class and Electronic Mail:

Scott F. Dunbar Keyes & Fox LLP 1580 Lincoln St., Suite 880 Denver, CO 80305

RE: Request to Complete Interconnection Process and Enter into Power Purchase Agreements with MIC 1-6 Qualifying Facility Solar Projects

Dear Messrs. Bzdok and Dunbar,

Consumers Energy Company ("Consumers Energy" or the "Company") has received your February 12, 2019 letter requesting Power Purchase Agreements ("PPAs") at the avoided cost rates set forth in Case No. U-18090, as well as certain interconnection study determinations, for sPower Development Company, LLC ("sPower") projects MIC 1 Solar, MIC 2 Solar, MIC 3 Solar, MIC 4 Solar, MIC 5 Solar, and MIC 6 Solar ("sPower Projects").

The Company cannot agree to PPAs based on the avoided cost rates set forth in Case No. U-18090 because those rates exceed the incremental cost to the Company of alternative electric energy, as contemplated by the Public Utility Regulatory Policies Act of 1978 ("PURPA"), and therefore do not reflect the Company's actual avoided costs. See 16 USC 824a-3(b). The Michigan Public Service Commission's ("MPSC" or "Commission") October 5, 2018 Order in Case No. U-18090 acknowledged that the rates set forth in that proceeding are "out of date" and "stale." The Commission explained that "during the pendency of [Case No. U-18090] the energy landscape changed so rapidly that the primary evidence related to the avoided cost of power relied upon by the Commission in making its determinations is woefully out of date" and that the "underlying decisions about costs, cost methodology, the size of eligible facilities, and the term length of the standard offer is now stale." MPSC Case No. U-18090, October 5, 2018 Order, pages 42-43. Since the rates set forth in Case No. U-18090 are out of date and stale, and do not represent the Company's actual avoided costs, the Company is not obligated under PURPA to contract with sPower at such rates.

The Company is also not obligated under PURPA to contract with certain sPower Projects because of the size of those facilities. Information provided by sPower during the interconnection application process establishes that MIC 1 Solar, MIC 2 Solar, MIC 4 Solar, and MIC 6 Solar are above 20 MWs in size. The Federal Energy Regulatory Commission ("FERC") relieved the Company of any obligation "to enter into new contracts or obligations to purchase energy or capacity from QFs with a net capacity larger than 20 MW." Consumers Energy Company, 139 FERC ¶ 61,069, 61,473 (2012). Therefore, even if the rates discussed in Case No. U-18090 did reflect the Company's actual avoided cost rates – which is not the case for the

reasons discussed above – the Company would still have no obligation to purchase energy or capacity from at least four of the six sPower Projects.

Your February 12, 2019 letter also asks Consumers Energy to make certain determinations regarding interconnection studies for the sPower Projects. As you are aware, the Company has been inundated with interconnection applications since 2017, and this unprecedented volume of applications has, in some cases, impacted our ability to process applications and perform corresponding studies. This has been complicated by additional recent issues affecting many interconnection applications, including the Company's discovery that many applications were not submitted with valid one-line diagrams sealed by a professional engineer registered in the state of Michigan, as required for certain projects by the Commission's Electric Interconnection and Net Metering Standards. See Mich Admin Code R 460.620(3).

In response to your letter, the Company has initiated a thorough review of the interconnection applications for the sPower Projects. That review is ongoing. Engineering reviews for MIC 4 Solar and MIC 6 Solar, however, are complete and are being released to sPower on the date of this letter.

Consumers Energy cannot release a complete distribution system study for MIC 2 Solar at this time, but we estimate that we can release a complete study by March 29, 2019. As you know, the Company processes and releases interconnection studies in the order agreements are made to perform those studies at each phase of the interconnection process. We are working diligently to perform distribution studies for many projects, and we cannot, in fairness to other applicants, re-order the current priority of distribution system studies simply to release a study for MIC 2 Solar by the deadline you have requested.

Finally, with respect to MIC 1 Solar, MIC 3 Solar, and MIC 5 Solar, the Company estimates that it will be able to provide you with a determination of the completeness of interconnection applications for those proposed projects by March 7, 2019. As with other phases of the interconnection process, Consumers Energy makes and releases application completeness determinations in the order of application receipt. We cannot, in fairness to other applicants, re-order the current priority of these determinations simply to make a determination for the sPower Projects by the deadline you have requested.

sPower originally submitted applications for MIC 1 Solar, MIC 3 Solar, and MIC 5 Solar in 2017, and the Company has since then made several requests for additional information regarding those projects. Most recently, Consumers Energy asked sPower for more information about MIC 1 Solar on December 7, 2018. Similarly, the Company asked for additional information about MIC 3 Solar on June 13, 2018, and about MIC 5 Solar on February 1, 2018. In response to those requests, the Company received additional information from sPower about all three projects on February 7, 2019. Although we will work expeditiously to make the completeness determinations you have requested, the Company notes that sPower did not provide revised applications for those projects for months – more than a year, for MIC 5 Solar - after Consumers Energy most recently informed you of a need for additional information.

Please contact me at your convenience if you have questions or wish to discuss this response to your February 12, 2019 letter regarding the sPower projects.

Sincerely,

Digitally signed by Robert W. Beach

Date: 2019.02.26 14:36:01

-05'00'

Robert W. Beach

CC: Christopher M. Bzdok, Olson, Bzdok & Howard, P.C., Counsel for sPower Development Company, LLC

3/12/2019

RE: sPower One-Line Drawings - sdunbar@keyesfox.com

Subject: RE: sPower One-Line Drawings



Daniel Wang <dwang@spower.com>

Wed, Mar 6, 11:11 PM (5 da

to NICHOLAS B. TENNEY, PO Box: Customer Generation, Katie Heath

You are viewing an attached message Keyes & Department of the authenticity of attached messages.

Hello Nick,

I added an asterisk with comment to page 3 of each Interconnection Request; thi clears up some confusion about the project size with respect to the maximum amount of power that will be sent to the POI at any given time.

Thank you,

Daniel Wang | Manager, Interconnection

O: 415.872.0764 M: 858.472.8533



www.sPower.com

This electronic message and any attachments hereto contain information which may be privileged, confidential or otherwise protected from disclosure. The information is inte the addressee only. If you are not the addressee, any disclosure, copy, distribution or use of the contents of the message or any attachments hereto is strictly prohibited. If y received this electronic message in error, please notify us immediately and permanently delete the original message and attachments.

From: NICHOLAS B. TENNEY [mailto: NICHOLAS.TENNEY@cmsenergy.com]

Sent: Thursday, February 7, 2019 7:43 AM **To:** Daniel Wang < dwang@spower.com>

Cc: PO Box: Customer Generation < customer.generation@cmsenergy.com >; Katie Heath < katie.heath@spower.co

Subject: RE: sPower One-Line Drawings

Good morning Daniel,

Thank you for providing the updated one-line diagrams! These have been forwarded for review, and, once review complete, we will let you know if they are acceptable.

Nick Tenney, P.E.

Infrastructure & Attachment Agreements

Consumers Energy, 1945 W. Parnall Rd, Jackson, MI

Tel: (517)788-0363



See Page 6 for sample Site Plan

Attached Specification for Equipment

Page # 11-12

See Page 7 for sample of Synchronous Generator Electrical One-Line Drawing See Page 8 for sample of Induction Generator Electrical One-Line Drawing

GENERATION INTERCONNECTION APPLICATION

Category 5
For All Projects with Aggregate Generator Output of
More Than 2 MW

ELECTRIC UTILITY CONTACT INFORMATION		FOR OFFICE USE ONLY		
0			Application Number	
Consumers Energy Interconnection Coordinator				
1945 West Parnall Road			Date and Time Application Received	
Jackson, MI	,			
(517)788-1				
Net Metering E-mail: net_mete		m		
3	3 2 3 3 3 3 3 3 3 3			
	CUSTOMER / ACCO			
Customer Name (Last, First, Middle)		Customer Mail		
sPower Development Company, LLC			1300 East, Suite 600, Salt Lake City, UT 84106	
Customer Phone Number			ail Address (Optional)	
(801)679-3500			, ,	
(801) 679-3300	INCTALLATION	ic@spowe		
О	INSTALLATION roject Developer/Sin	-		
Name	Phone Number	igie i oilit o	Fax Number	
Daniel Wang			()	
Address	(415)872-0764		()	
201 Mission St, Suite 540, San Franci	sco CA 94105			
E-Mail Address	300, 011 74103			
ic@spower.com				
Project Site Address				
42.130504°, -84.086949°				
	NERATION SYSTEM	SITE INFO	PRMATION	
Project Type (Base load, Peaking, Intermediate)		Energization D	ate for Project Interconnection Facilities	
Base load		December	1, 2020	
First Parallel Operation Date for Testing			ercial Operation Date	
December 15, 2020		December	31, 2020	
Estimated Project Cost		Operation Mod	peration Mode	
TBD		TBD		
Attached Customer's Proof of General Liability Insu	rance for a minimum of \$1	,000,000		
Page #9				
(Per MPSC Order in Case No. U-15787 – Custome	er must maintain a minimun	n of \$1,000,000	General Liability Insurance.)	
Attached Site Plan				
Page # 10				
Attached Electrical One-Line Drawing				
Page # <u>11-12</u>				
(Per MPSC Order in Case No. U-15787 – The One Michigan.)	e-Line Drawing must be sign	ned and sealed	by a licensed professional engineer, licensed in the State of	

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	Attachment G			
ISOLATING TRANSFORMER(S) BETWEEN GENERATOR(S) AND UTILITY				
Transformer Model Number TBD	Transformer Manufacturer TBD			
Rated kV and connection (delta, wye, wye-gnd) of each winding 600 V (Wye-Gnd) / 46 kV (Delta)	kVA of each winding (kW) $4,\!500~\mathrm{kVA}$			
BIL of each winding	Fixed taps available for each winding (kW)			
350 kV	±5 @ 5%			
Positive/Negative range for any LTC windings	%Z impedance on transformer self cooled rating (kW)			
-5%, -2.5%, 0, 2.5%, 5%	TBD			
Percent Excitation current at rated kV	Load Loss Watts at full load or X/R ratio (kW)			
0.25%	30 kW			
SYNCHRONOUS, INDUCTION AND INVERTER GENERATOR - BASED SYSTEMS				
(Must complete Page 3, Page 4 or Page 5 and attach Electrical One-Line Drawing				
The following information on these system components shall appear on the Electrical One-Line Drawing:				

- Breakers Rating, location and normal operating status (open or closed)
- Buses Operating voltage
- Capacitors Size of bank in Kvar
- Circuit Switchers Rating, location and normal operating status (open or closed)
- Current Transformers Overall ratio, connected ratio
- Fuses Normal operating status, rating (Amps), type
- Generators Capacity rating (kVA), location, type, method of grounding
- Grounding Resistors Size (ohms), current (Amps)
- Isolating Transformers Capacity rating (kVA), location, impedance, voltage ratings, primary and secondary connections and method of grounding
- Potential Transformers Ratio, connection
- Reactors Ohms/phase
- . Relays Types, quantity, IEEE device number, operator lines indicating the device initiated by the relays
- Switches Location and normal operating status (open or closed), type, rating
- Tagging Point Location, identification

Manufacturer	Model Name	Model Number	
		Woder Number	
Power Electronics	FS2225CU15		
CUSTOMER	AND PROJECT DEVELOPER/CONTR	ACTOR SIGNATURES AND	FEES
☐ Attached \$500 Interconn	ection Application Fee		
X Check #	Money Order #		
Sign and Return Completed	Application with Application Fee to E	lectric Utility Contact	
oign and Netarn Completed	Approace War Approace Tee to E	leotilo otility oomtaat	
To the best of my knowledge	e, all the information provided in this	application form is complet	e and correct.
Customer Signature:		Date	
	re (if applicable):		
Project Developer/Contractor Signatu	re (if applicable):	Date3/6/20)19
Note: Refer to the applicable "I	Michigan Electric Utility Generator Intercon	nection Requirements" for a de	etailed explanation of the
• •	ees, Timelines, and Technical Requirements	•	,

Form 1221 10-2009 Page 2 of 8

INVERTER GENERATORS				
GENERATOR INFORMATION				
System Type (Solar, Wind, Biomass, Methane Digester, etc)	Generation Nameplate Rating (kW or MVA)			
Solar PV	26,600 kW*			
AC Operation Voltage	Manufacturer			
600 V	Power Electronics			
Model (Name/Number)	Attached Grid Configuration			
FS2225CU15	Page #			

^{*}Output from project at POI will never exceed 20 MW due to plant controller

Form 1221 10-2009 Page 3 of 8

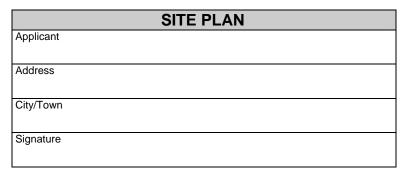
SYNCHRONOUS GENERATORS				
GENERATOR	INFORMATION			
Generator Nameplate Voltage	Generator Nameplate Watts or Volt-Amperes			
Generator Nameplate Power Factor (pf)	RPM			
TECHNICAL I	NFORMATION			
Minimum and Maximum Acceptable Terminal Voltage				
Direct Axis Reactance (saturated)				
Direct Axis Reactance (unsaturated)				
Quadrature Axis Reactance (unsaturated)				
Direct Axis Transient Reactance (saturated)				
Direct Axis Transient Reactance (unsaturated)				
Quadrature Axis Transient Reactance (unsaturated)				
Direct Axis Sub-Transient Reactance (saturated)				
Direct Axis Sub-Transient Reactance (unsaturated)				
Leakage Reactance				
Direct Axis Transient Open Circuit Time Constant				
Quadrature Axis Transient Open Circuit Time Constant				
Direct Axis Sub-Transient Open Circuit Time Constant				
Quadrature Axis Sub-Transient Open Circuit Time Constant				
·				
Open Circuit Saturation Curve				
Reactive Capability Curve Showing Overexcited and Underexcited Limits (Re	eactive Information if Non-Synchronous)			
Excitation System Block Diagram with Values for Gains and Time Constants	(Laplace Transforms)			
Short Circuit Current Contribution From Generator at the Point of Common C	Coupling			
Rotating Inertia of Overall Combination Generator, Prime Mover, Couplers at	nd Gear Drives			
Station Power Load When Generator is Off-Line, Watts, pf				
Station Power Load During Start-Up, Watts, pf				
Station Power Load During Operation, Watts, pf				

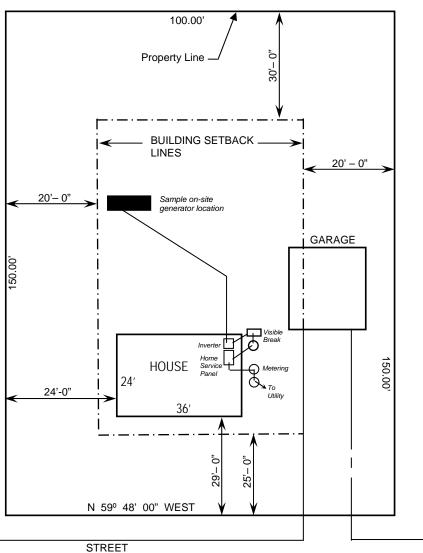
Form 1221 10-2009 Page 4 of 8

INDUCTION GENERATORS				
GENERATOR	INFORMATION			
Generator Nameplate Voltage	Generator Nameplate Watts or Volt-Amperes			
Generator Nameplate Power Factor (pf)	RPM			
TEOLINICAL	NEODIA TION			
	NFORMATION			
Synchronous Rotational Speed	Rotation Speed at Rated Power			
Slip at Rated Power				
Minimum and Maximum Acceptable Terminal Voltage				
Motoring Power (kW)				
Neutral Grounding Resistor (If Applicable)				
I2 2t or K (Heating Time Constant)				
Rotor Resistance				
Stator Resistance				
Stator Reactance				
Rotor Reactance				
Magnetizing Reactance				
Short Circuit Reactance				
Exciting Current				
Temperature Rise				
Frame Size				
Design Letter				
Reactive Power Required in Vars (No Load)				
Reactive Power Required in Vars (Full Load)				
Short Circuit Current Contribution from Generator at the Point of Common Co	pupling			
Rotating Inertia, H in Per Unit on kVA Base, of Overall Combination Generate	or, Prime Mover, Couplers and Gear Drives			
Station Power Load When Generator is Off-Line, Watts, pf				
Station Power Load During Start-Up, Watts, pf				
Station Power Load During Operation, Watts, pf				

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SAMPLE SITE PLAN - PROVIDED FOR REFERENCE ONLY





Weblink to State of Michigan / Plats:

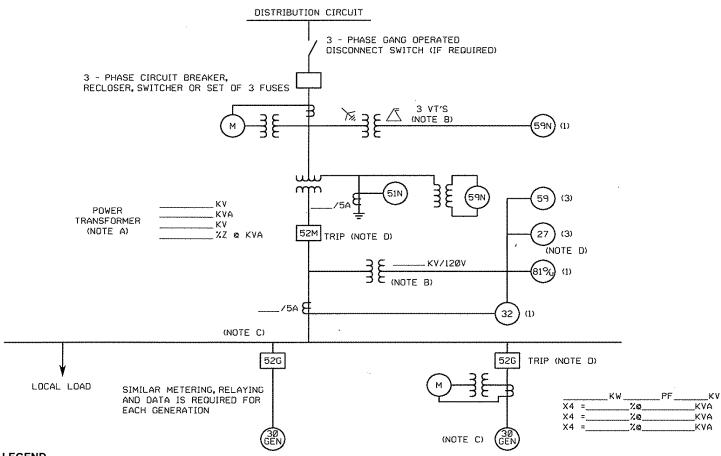
http://www.cis.state.mi.us/platmaps/sr_subs.asp

Note: Legible hand drawn site plans are acceptable

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SAMPLE ELECTRICAL ONE-LINE DRAWING – PROVIDED FOR REFERENCE ONLY TYPICAL ISOLATION AND FAULT PROTECTION FOR SYNCHRONOUS GENERATOR

ONE-LINE DRAWING		
Licensed PE/Contractor	PE/Contractor License Number	
PE/Contractor Address	PE/Contractor Signature	
DISTRIBUTION CIRCUIT		



LEGEND

- 27 Undervoltage
- 32 Reverse Power (Not Required for Flow-Back)
- 51N Neutral overcurrent (required for grounded secondary)
- 59
- Zero sequence overvoltage (assuming ungrounded secondary on power transformer) 59N
- 81o/u Over/Underfrequency

NOTES

- See technical requirements for permissible connection configurations and protection. Transformer connections proposed shall be shown on the one-line drawing by the Project Developer. Transformer connection and secondary grounding to be approved by Utility.
- Protection alternatives for the various acceptable transformer connections are shown. Only one protection alternative will ultimately be used, depending on the actual transformer winding connections. VT's for 59, 27, 81o/u and 32 are shown connected on the primary (Project side) of the power transformer, but may instead be connected on the secondary (Utility side). VT's are required on the secondary of the power transformer if a 59N is required for an ungrounded secondary connection. IEEE std 1547 requirements for voltage and frequency must be met at the PCC. IEEE Std. 1547 permits the VT's to be connected at the point of generator connection in certain cases.
- Main breaker protection, generator protection and synchronizing equipment are not shown.
- Trip of all 52G breakers or the 52M breaker is acceptable, depending upon whether the Project Developer wants to serve its own isolated load after loss of Utility service.

Form 1221 10-2009 Page 7 of 8

TRIP (NOTE D)

(NOTE C)

SAMPLE ELECTRICAL ONE-LINE DRAWING – PROVIDED FOR REFERENCE ONLY TYPICAL ISOLATION AND FAULT PROTECTION FOR INDUCTION GENERATOR

ONE-LINE DRAWING

Licensed PE/Contractor	PE/Contractor License Number
PE/Contractor Address	PE/Contractor Signature
DISTRIB	BUTION CIRCUIT
3 - PHASE CIRCUIT BREAKER, RECLOSER, SWITCHER OR SET OF 3 FUSES	
M-3E-	3 VT'S (NOTE B) (1)
POWER KV TRANSFORMER KV (NOTE A) ZZ @ KVA	51N 3 59 (3) 52M TRIP (NOTE D) (NOTE D) (NOTE D) (NOTE D)
/5 (NOTE C)	SA (NOTE B) 32 (1)

LEGEND

- 27 Undervoltage
- 32 Reverse Power (Not Required for Flow-Back)
- 51N Neutral overcurrent (required for grounded secondary)
- 59 Overvoltage
- 59N Zero sequence overvoltage (assuming ungrounded secondary on power transformer)

SIMILAR METERING, RELAYING AND DATA IS REQUIRED FOR

EACH GENERATION

81o/u Over/Underfrequency

LOCAL LOAD

NOTES

A) See technical requirements for permissible connection configurations and protection. Transformer connections proposed shall be shown on the one-line drawing by the Project Developer. Transformer connection and secondary grounding to be approved by Utility.

52G

- B) Protection alternatives for the various acceptable transformer connections are shown. Only one protection alternative will ultimately be used, depending on the actual transformer winding connections. VT's for 59, 27, 81o/u and 32 are shown connected on the primary (Project side) of the power transformer, but may instead be connected on the secondary (Utility side). VT's are required on the secondary of the power transformer if a 59N is required for an ungrounded secondary connection. IEEE std 1547 requirements for voltage and frequency must be met at the PCC. IEEE Std. 1547 permits the VT's to be connected at the point of generator connection in certain cases.
- C) Main breaker protection, generator protection and synchronizing equipment are not shown.
- D) Trip of all 52G breakers or the 52M breaker is acceptable, depending upon whether the Project Developer wants to serve its own isolated load after loss of Utility service.

Form 1221 10-2009 Page 8 of 8

U-20500 - March 19, 2019

Complaint by specific Development Company, LLC

WEVANS

DATE (MM/DD/YYYY)

09/04/2018

CERTIFICATE OF LIABILITY INSURANCE

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER. AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT Whitney Evans				
Krauter & Company - San Francisco 150 Spear Street, Suite 800	PHONE (A/C, No, Ext): (415) 944-3051 FAX (A/C, No): (415) 3	15) 384-6669			
San Francisco, CA 94105	E-MAIL ADDRESS: wevans@krautergroup.com				
	INSURER(S) AFFORDING COVERAGE	NAIC #			
	INSURER A: Arch Insurance Company	11150			
INSURED	INSURER B : Travelers Property Casualty Company of America 25674				
FTP Power LLC	INSURER C: Endurance American Insurance Company	10641			
Sustainable Power Group, LLC 2180 South 1300 East, Suite 600	INSURER D:				
Salt Lake City, UT 84106	INSURER E:				
	INSURER F:				

COVERAGES CERTIFICATE NUMBER: **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR	CLUSIONS AND CONDITIONS OF SUCH P	ADDL S		POLICY EFF	POLICY EXP		
LTR	TYPE OF INSURANCE	INSD W	WD POLICY NUMBER		(MM/DD/YYYY)	LIMIT	S
Α	X COMMERCIAL GENERAL LIABILITY					EACH OCCURRENCE	\$ 1,000,000
	CLAIMS-MADE X OCCUR		EPO1003601-02	09/01/2018	12/21/2019	DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ 100,000
						MED EXP (Any one person)	\$ 5,000
						PERSONAL & ADV INJURY	\$ 1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:					GENERAL AGGREGATE	\$ 6,000,000
	POLICY X PRO- JECT X LOC					PRODUCTS - COMP/OP AGG	\$ 2,000,000
	OTHER:					PROJ/LOC AGG	\$ 2,000,000
Α	AUTOMOBILE LIABILITY					COMBINED SINGLE LIMIT (Ea accident)	\$ 1,000,000
	X ANY AUTO		CAB0057384-04	09/01/2018	12/21/2019	BODILY INJURY (Per person)	\$
	OWNED SCHEDULED AUTOS ONLY					BODILY INJURY (Per accident)	\$
	HIRED AUTOS ONLY NON-OWNED AUTOS ONLY					PROPERTY DAMAGE (Per accident)	\$
							\$
Α	X UMBRELLA LIAB X OCCUR					EACH OCCURRENCE	\$ 10,000,000
	EXCESS LIAB CLAIMS-MADE		ULP0057153-04	09/01/2018	12/21/2019	AGGREGATE	\$ 10,000,000
	DED X RETENTION \$ 10,000						\$
В	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY					X PER OTH- STATUTE ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE Y/N OFFICER/MEMBER EXCLUDED?	N/A	UB-8J417632	12/20/2017	12/20/2018	E.L. EACH ACCIDENT	\$ 1,000,000
	(Mandatory in NH)					E.L. DISEASE - EA EMPLOYEE	
	If yes, describe under DESCRIPTION OF OPERATIONS below					E.L. DISEASE - POLICY LIMIT	
С	Excess Liability		EXC10007270903	09/01/2018	12/21/2019	Limit (\$10M xs \$10M)	10,000,000
	<u> </u>						

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
The Insurer may cancel these policies by mailing or delivering to the First Named Insured written notice of cancellation at least: 10 days before the effective date of cancellation, if they cancel for non payment of premium; or 30 days before the effective date of cancellation, if they cancel for any other reason.

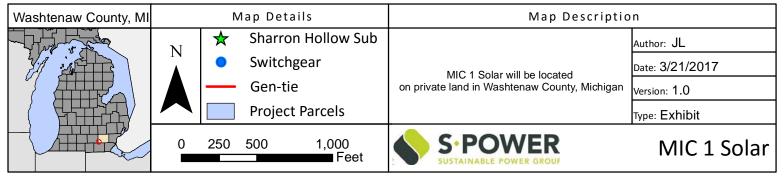
This certificate supersedes all previously issued certificates. All previously issued certificates are now void.

This Certificate is issued as Evidence of Insurance Only.

CERTIFICATE HOLDER	CANCELLATION
Evidence Only	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE

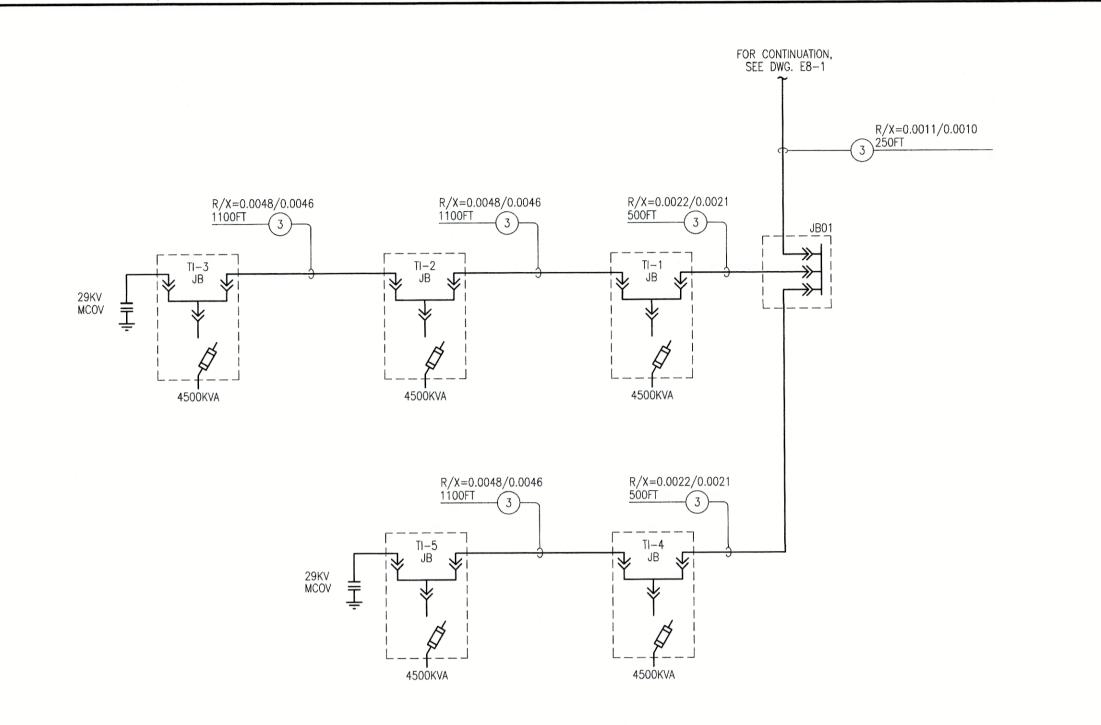
U-20500 - March 19, 2019





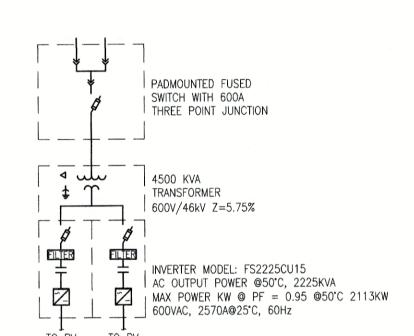
TO REQUIRED PROTECTION SHARON HALLOW SUBSTATION'S **NOTES FUNCTION** 46kV LINE (SEE NOTE 9) 1. SEE DWG E8-2 FOR INVERTER CONNECTION SINGLE-LINE. 25 SYNCH CHECK 27 UNDER VOLTAGE 2. PRELIMINARY PROTECTIVE RELAYING CONFIGURATION DISIGNED PER 32 DIRECTIONAL POWER UTILITY INTERCONNECTION REQUIREMENTS. 50/51 INST & TD OC 3. FINAL TRANSFORMER CONFIGURATION DEPENDENT ON UTILITY INTERCONNECTION REQUIREMENTS. 59 OVER VOLTAGE 67 DIRECTIONAL OC 4. REQUIREMENT FOR REACTIVE COMPENSATION TO BE DETERMINED DURING OVER/UNDER FREQ DETAILED DESIGN. 72kV 1200A 5. FEEDER PROTECTION INCLUDES OVER CURRENT. UTILITY METERING 6. THIS DISCONNECT SWITCH IS TO BE USED AS A LOCKABLE VISIBLE MEANS OF DISCONNECT. MODEM MODEM 7. THIS BREAKER IS TO BE USED AS THE ISOLATION DEVICE FOR THE HIGH METERING UNITS SIDE OF THE TRANSFORMER AND WILL BE USED FOR PROTECTIVE TAGGING. BACKUP 古 PRIMARY POTENTIAL: 3-1ø, 26,558V:115V, 230:1 8. THREE PHASE SHORT CIRCUIT CONTRIBUTION: 301 A ≤ 1 CYCLE CURRENT: 1200:5 B0.1-1.8 9. 46kV LINE APPROXIMATELY 0.11 MILES IN LENGTH BETWEEN POI AND OH/UG TRANSITION WITH IMPEDANCE AS FOLLOWS: R/X/B = 0.00179/0.003796/0.000013IMPEDANCE LISTED IS PER UNIT ON A 100 MVA BASE 72kV 1200A 10. ELECTRIC USE OF THE SITE DURING NON-GENERATING HOURS WILL BE NOTE 6 APPROXIMATELY 16kW. 29kV MCOV 3-1ø PT'S SYMBOL LEGEND SEE NOTE 2 26,558V:115V 230:1 SURGE ARRESTOR 1200:5A $\exists \vdash$ VOLTAGE OR POTENTIAL TRANSFORMER 1200A, 20KAIC (NOTE 7 & NOTE 8) POWER CIRCUIT BREAKER 1200:5A FUSE 1ø PT 26,558V:115V DISCONNECT SWITCH 230:1 CABLE TRANSFER TO UNDERGROUND 72kV 1200A --60--CURRENT-LIMITTING FUSE 26,558-120/240V 50KVA CURRENT TRANSFORMER STATION TRANSFER SWITCH AND AC DISTRIBUTION PANEL BUS 29kV MCOV CT SECONDARY WIRING OF MICH 1/16/20 SORVALA PT/VT SECONDARY WIRING ENGINEER NO. 57112 POFESSIONAL SF F NOT FOR CONSTRUCTION JOB NUMBER REV **DSGN** JAN 06/21/17 SPOWER THIS DRAWING WAS PREPARED BY POWER EMC 06/21/1 DRN ENGINEERS, INC. FOR A SPECIFIC PROJECT, TAKING INTO CONSIDERATION THE SPECIFIC POWER ENGINEERS 136890 MIC 1 SOLAR 20MW SOLAR GENERATION CKD MER 06/21/17 01/16/19 MNR FBU SS AND UNIQUE REQUIREMENTS OF THE PROJECT.

REUSE OF THIS DRAWING OR ANY INFORMATION UPDATED FOR PRELIMINARY STAMP DRAWING NUMBER B ADDED PROTECTION & UPDATED VOLTAGE 06/21/17 EMC JAN MER SCALE: NONE CONTAINED IN THIS DRAWING FOR ANY PURPOSE IS PROHIBITED UNLESS WRITTEN PERMISSION E8-2 INVERTER CONN. SINGLE LINE DIAGRAM E8 - 103/24/17 VMG JAN MER A ISSUED FOR APPLICATION SINGLE LINE DIAGRAM FROM BOTH POWER AND POWER'S CLIENT IS REFERENCE DRAWINGS DATE DRN DSGN CKD APPD REV **REVISIONS** FOR 22x34 DWG ONLY



<u>NOTES</u>

- 1. CABLE SIZE & LENGTH TO BE VERIFIED DURING FINAL DESIGN.
- 2. CABLE AMPACITIES WERE CALCULATED AT A CONDUCTOR TEMPERATURE OF 105°C.
- 3. 2225 KVA x 2 = 4450KVA 5 INVERTERS X 4450KVA = 22,250KVA



2X HEC-US PLUS FS2225CU15 INVERTER CONFIGURATION

	ID #	QTY	CABLE	GROUND	AMPACITY
	1	3	#1/0 AWG 1/C-AL	#4-CU	230
	2	3	#2/0 AWG 1/C-AL	#4-CU	260
	3	3	#4/0 AWG 1/C-AL	#2-CU	340
	4	3	#250 kcmil 1/C-AL	#2-CU	370
	5	3	#500 kcmil 1/C-AL	#2-CU	545
MIC	006	3	#750 kcmil 1/C-AL	#1/0-CU	680
	1999	3	#1000 kcmil 1/C-AL	#2/0-CU	795
$-\Delta v$	Anima &	900			

PRELIMINARY

NOT FOR CONSTRUCTION

2	THIS DRAWING WAS PREPARED BY POWER	T									DSGN	JAN	07/24/17	
J.	ENGINEERS, INC. FOR A SPECIFIC PROJECT,	D	UPDATED FOR PRELIMINARY STAMP	01/16/19	MNR	FBU	SS	SS			DRN	EMC	07/24/17	-
	Taking into consideration the specific AND UNIQUE REQUIREMENTS OF THE PROJECT.		UPDATE INVERTER TYPE	07/24/17	EMC	FBU	JAN				CKD	MER	07/24/17	
ш	REUSE OF THIS DRAWING OR ANY INFORMATION	В	UPDATED VOLTAGE	06/21/17	EMC	JAN	MER				SCALE:	N	IONE	191
	CONTAINED IN THIS DRAWING FOR ANY PURPOSE IS PROHIBITED UNLESS WRITTEN PERMISSION	A	ISSUED FOR APPLICATION	03/24/17	VMG	JAN	MER		E8-1	SINGLE LINE DIAGRAM	00/122.		0112	_
Ξ	FROM BOTH POWER AND POWER'S CLIENT IS	REV	REVISIONS	<u> </u>	DRN			APPD		REFERENCE DRAWINGS	FOR	22x34 DW	/G ONLY	
	GRANTED.	IVEV	KEVISIONS	DATE	DIXIX	DOON	OND	7.11.13						

20 MW TYPICAL INSTALLATION

POWER ENGINEERS	-
ENGINEERS	Г

57112

SPOWER	JOB NUMBER	REV
MIC 1 SOLAR	136890	
20MW SOLAR GENERATION INVERTER CONNECTION SINGLE LINE DIAGRAM	DRAWING NUME E8-2	IBER



GENERATION INTERCONNECTION APPLICATION

Category 5
For All Projects with Aggregate Generator Output of
More Than 2 MW

ELECTRIC UTILITY CONTA	ACT INFORMATION		FOR OFFICE USE ONLY
ELECTRIC CHEIT CONTA	ACT IN CRIMATION		Application Number
Consumers E	neray		Application Number
Interconnection C			Date and Time Application Received
1945 West Parnall Road (Date and Time Application Received
Jackson, MI 2			
(517)788-1	432		
Net Metering E-mail: net_mete	ering@cmsenergy.co	m	
	CUSTOMER / ACCO		
Customer Name (Last, First, Middle)		Customer Mail	
sPower Development Company, LLC			1300 East, Suite 600, Salt Lake City, UT 84106
Customer Phone Number			ail Address (Optional)
(801) 679-3500		ic@spowe	r.com
	INSTALLATION	_	
P	roject Developer/Si		
Name	Phone Number	<u> </u>	Fax Number
Daniel Wang	(415)872-0764		()
Address	113 7072 0701		
201 Mission St, Suite 540, San Franci	sco, CA 94105		
E-Mail Address	·		
ic@spower.com			
Project Site Address			
42.073559°, -84.340000°			
GE	NERATION SYSTE	M SITE INFO	DRMATION
Project Type (Base load, Peaking, Intermediate)		Energization D	Pate for Project Interconnection Facilities
Base load		December	1, 2020
First Parallel Operation Date for Testing		Project Comm	ercial Operation Date
December 15, 2020		December	•
Estimated Project Cost		Operation Mod	de
TBD		TBD	
Attached Customer's Proof of General Liability Insu	rance for a minimum of \$	1,000,000	
Page #9			
(Per MPSC Order in Case No. U-15787 – Custome	r must maintain a minimu	m of \$1 000 000	Congrel Lightlity Ingurance
Attached Site Plan	i musi mamiam a minimu	111 01 \$1,000,000	General Liability Insurance.)
Page # 10			
Attached Electrical One-Line Drawing			
Page # 11-12			
(Per MPSC Order in Case No. U-15787 – The One Michigan.)	-Line Drawing must be si	gned and sealed	by a licensed professional engineer, licensed in the State of

Attached Specification for Equipment

See Page 6 for sample Site Plan

See Page 7 for sample of Synchronous Generator Electrical One-Line Drawing See Page 8 for sample of Induction Generator Electrical One-Line Drawing

Page # 11-12

Form 1221 10-2009 Page 1 of 8

	Attachment H					
ISOLATING TRANSFORMER(S) BETWEEN GENERATOR(S) AND UTILITY						
Transformer Model Number	Transformer Manufacturer					
TBD	TBD					
Rated kV and connection (delta, wye, wye-gnd) of each winding	kVA of each winding (kW)					
600 V (Wye-Gnd) / 46 kV (Delta)	4,500 kVA					
BIL of each winding	Fixed taps available for each winding (kW)					
350 kV	±5 @ 5%					
Positive/Negative range for any LTC windings	%Z impedance on transformer self cooled rating (kW)					
-5%, -2.5%, 0, 2.5%, 5%	5.75%					
Percent Excitation current at rated kV	Load Loss Watts at full load or X/R ratio (kW)					
0.25%	30 kW					
SYNCHRONOUS, INDUCTION AND IN	NVERTER GENERATOR - BASED SYSTEMS					

(Must complete Page 3, Page 4 or Page 5 and attach Electrical One-Line Drawing

The following information on these system components shall appear on the Electrical One-Line Drawing:

- Breakers Rating, location and normal operating status (open or closed)
- **Buses Operating voltage**
- Capacitors Size of bank in Kvar
- Circuit Switchers Rating, location and normal operating status (open or closed)
- Current Transformers Overall ratio, connected ratio
- Fuses Normal operating status, rating (Amps), type
- Generators Capacity rating (kVA), location, type, method of grounding
- Grounding Resistors Size (ohms), current (Amps)
- Isolating Transformers Capacity rating (kVA), location, impedance, voltage ratings, primary and secondary connections and method of grounding
- Potential Transformers Ratio, connection
- Reactors Ohms/phase
- Relays Types, quantity, IEEE device number, operator lines indicating the device initiated by the relays
- Switches Location and normal operating status (open or closed), type, rating
- Tagging Point Location, identification

Manufacturer	Model Name	Model Number
Power Electronics	FS2225CU15	
CUSTOMER AND PRO	JECT DEVELOPER/CONTRACTOR SIG	NATURES AND FEES
☐ Attached \$500 Interconnection App	plication Fee	
X Check # Money Ord	der #	
Sign and Return Completed Application	on with Application Fee to Electric Utilit	ty Contact
To the best of my knowledge, all the ir	nformation provided in this application	form is complete and correct.
Customer Signature:	<u> </u>	Date
Project Developer/Contractor Signature (if applicab	le):	Date3/6/2019
Note: Refer to the applicable "Michigan El Interconnection Process, Fees, Timelir	ectric Utility Generator Interconnection Requ	irements" for a detailed explanation of the

Page 2 of 8 Form 1221 10-2009

INVERTER GENERATORS					
GENERATOR INFORMATION					
System Type (Solar, Wind, Biomass, Methane Digester, etc)	Generation Nameplate Rating (kW or MVA)				
Solar PV	26,600 kW*				
AC Operation Voltage	Manufacturer				
600 V	Power Electronics				
Model (Name/Number)	Attached Grid Configuration				
FS2225CU15	Page #				

^{*}Output from project at POI will never exceed 20 MW due to plant controller

Form 1221 10-2009 Page 3 of 8

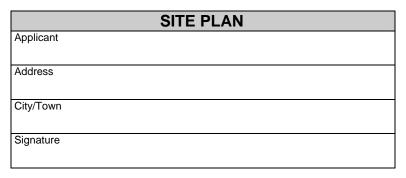
SYNCHRONOUS GENERATORS							
GENERATOR INFORMATION							
Generator Nameplate Voltage	Generator Nameplate Watts or Volt-Amperes						
Generator Nameplate Power Factor (pf)	RPM						
TECHNICAL I	NFORMATION						
Minimum and Maximum Acceptable Terminal Voltage							
Direct Axis Reactance (saturated)							
Direct Axis Reactance (unsaturated)							
Quadrature Axis Reactance (unsaturated)							
Direct Axis Transient Reactance (saturated)							
Direct Axis Transient Reactance (unsaturated)							
Quadrature Axis Transient Reactance (unsaturated)							
Direct Axis Sub-Transient Reactance (saturated)							
Direct Axis Sub-Transient Reactance (unsaturated)							
Leakage Reactance							
Direct Axis Transient Open Circuit Time Constant							
Quadrature Axis Transient Open Circuit Time Constant							
Direct Axis Sub-Transient Open Circuit Time Constant							
Quadrature Axis Sub-Transient Open Circuit Time Constant							
Open Circuit Saturation Curve							
Reactive Capability Curve Showing Overexcited and Underexcited Limits (Re	eactive Information if Non-Synchronous)						
Excitation System Block Diagram with Values for Gains and Time Constants	(Laplace Transforms)						
Short Circuit Current Contribution From Generator at the Point of Common C	Coupling						
Rotating Inertia of Overall Combination Generator, Prime Mover, Couplers at	nd Gear Drives						
Station Power Load When Generator is Off-Line, Watts, pf							
Station Power Load During Start-Up, Watts, pf							
Station Power Load During Operation, Watts, pf							

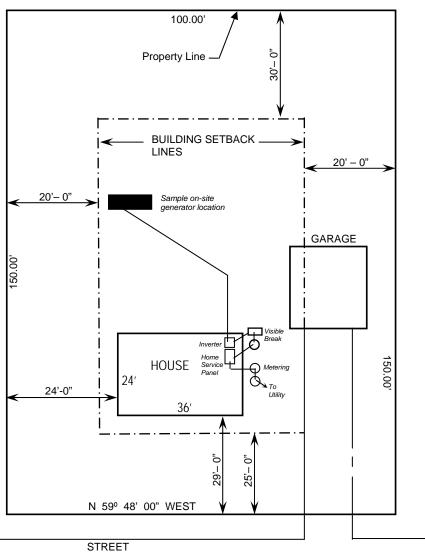
Form 1221 10-2009 Page 4 of 8

INDUCTION GENERATORS						
GENERATOR	INFORMATION					
Generator Nameplate Voltage	Generator Nameplate Watts or Volt-Amperes					
Generator Nameplate Power Factor (pf)	RPM					
TEOLINICAL	NEODIA TION					
	NFORMATION					
Synchronous Rotational Speed	Rotation Speed at Rated Power					
Slip at Rated Power						
Minimum and Maximum Acceptable Terminal Voltage						
Motoring Power (kW)						
Neutral Grounding Resistor (If Applicable)						
I2 2t or K (Heating Time Constant)						
Rotor Resistance						
Stator Resistance						
Stator Reactance						
Rotor Reactance						
Magnetizing Reactance						
Short Circuit Reactance						
Exciting Current						
Temperature Rise						
Frame Size						
Design Letter						
Reactive Power Required in Vars (No Load)						
Reactive Power Required in Vars (Full Load)						
Short Circuit Current Contribution from Generator at the Point of Common Co	pupling					
Rotating Inertia, H in Per Unit on kVA Base, of Overall Combination Generate	or, Prime Mover, Couplers and Gear Drives					
Station Power Load When Generator is Off-Line, Watts, pf						
Station Power Load During Start-Up, Watts, pf						
Station Power Load During Operation, Watts, pf						

Form 1221 10-2009 Page 5 of 8

SAMPLE SITE PLAN - PROVIDED FOR REFERENCE ONLY





Weblink to State of Michigan / Plats:

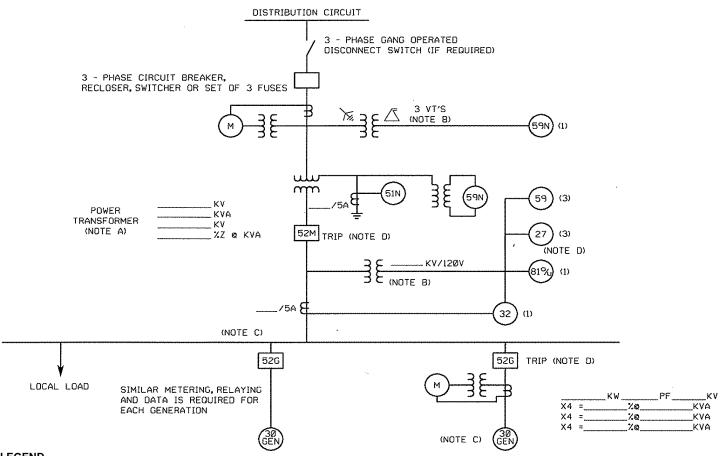
http://www.cis.state.mi.us/platmaps/sr_subs.asp

Note: Legible hand drawn site plans are acceptable

Form 1221 10-2009 Page 6 of 8

SAMPLE ELECTRICAL ONE-LINE DRAWING – PROVIDED FOR REFERENCE ONLY TYPICAL ISOLATION AND FAULT PROTECTION FOR SYNCHRONOUS GENERATOR

ONE-LINE DRAWING				
Licensed PE/Contractor PE/Contractor License Number				
PE/Contractor Address	PE/Contractor Signature			



LEGEND

- 27 Undervoltage
- 32 Reverse Power (Not Required for Flow-Back)
- 51N Neutral overcurrent (required for grounded secondary)
- 59 Overvoltage
- 59N Zero sequence overvoltage (assuming ungrounded secondary on power transformer)
- 81o/u Over/Underfrequency

NOTES

- A) See technical requirements for permissible connection configurations and protection. Transformer connections proposed shall be shown on the one-line drawing by the Project Developer. Transformer connection and secondary grounding to be approved by Utility.
- B) Protection alternatives for the various acceptable transformer connections are shown. Only one protection alternative will ultimately be used, depending on the actual transformer winding connections. VT's for 59, 27, 81o/u and 32 are shown connected on the primary (Project side) of the power transformer, but may instead be connected on the secondary (Utility side). VT's are required on the secondary of the power transformer if a 59N is required for an ungrounded secondary connection. IEEE std 1547 requirements for voltage and frequency must be met at the PCC. IEEE Std. 1547 permits the VT's to be connected at the point of generator connection in certain cases.
- C) Main breaker protection, generator protection and synchronizing equipment are not shown.
- D) Trip of all 52G breakers or the 52M breaker is acceptable, depending upon whether the Project Developer wants to serve its own isolated load after loss of Utility service.

Form 1221 10-2009 Page 7 of 8

TRIP (NOTE D)

(NOTE C)

SAMPLE ELECTRICAL ONE-LINE DRAWING – PROVIDED FOR REFERENCE ONLY TYPICAL ISOLATION AND FAULT PROTECTION FOR INDUCTION GENERATOR

ONE-LINE DRAWING

Licensed PE/Contractor	PE/Contractor License Number
PE/Contractor Address	PE/Contractor Signature
DISTRIB	UTION CIRCUIT
	3 - PHASE GANG OPERATED DISCONNECT SWITCH (IF REQUIRED)
3 - PHASE CIRCUIT BREAKER, RECLOSER, SWITCHER OR SET OF 3 FUSES	
M-3E-	3 VT'S (NOTE B) (1)
	(51N) 3 (59N) (59) (3)
POWER	75A = 51N 59 (3) 52M TRIP (NOTE D) (27) (3)
	(NOTE D) (NOTE D) (NOTE B)
/5	A (1)

LEGEND

- 27 Undervoltage
- 32 Reverse Power (Not Required for Flow-Back)
- 51N Neutral overcurrent (required for grounded secondary)
- 59 Overvoltage
- 59N Zero sequence overvoltage (assuming ungrounded secondary on power transformer)

SIMILAR METERING, RELAYING AND DATA IS REQUIRED FOR

EACH GENERATION

(NOTE C)

52G

81o/u Over/Underfrequency

LOCAL LOAD

NOTES

- A) See technical requirements for permissible connection configurations and protection. Transformer connections proposed shall be shown on the one-line drawing by the Project Developer. Transformer connection and secondary grounding to be approved by Utility.
- B) Protection alternatives for the various acceptable transformer connections are shown. Only one protection alternative will ultimately be used, depending on the actual transformer winding connections. VT's for 59, 27, 81o/u and 32 are shown connected on the primary (Project side) of the power transformer, but may instead be connected on the secondary (Utility side). VT's are required on the secondary of the power transformer if a 59N is required for an ungrounded secondary connection. IEEE std 1547 requirements for voltage and frequency must be met at the PCC. IEEE Std. 1547 permits the VT's to be connected at the point of generator connection in certain cases.
- C) Main breaker protection, generator protection and synchronizing equipment are not shown.
- D) Trip of all 52G breakers or the 52M breaker is acceptable, depending upon whether the Project Developer wants to serve its own isolated load after loss of Utility service.

Form 1221 10-2009 Page 8 of 8

U-20500 - March 19, 2019

Complaint by specific Development Company, LLC

WEVANS

DATE (MM/DD/YYYY)



CERTIFICATE OF LIABILITY INSURANCE

09/04/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER. AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

	CONTACT Whitney Evans NAME: PHONE (445) 044 2054	
Krauter & Company - San Francisco 150 Spear Street, Suite 800	PHONE (A/C, No, Ext): (415) 944-3051 FAX (A/C, No): (415) 3	384-6669
San Francisco, CA 94105	E-MAIL ADDRESS: wevans@krautergroup.com	
	INSURER(S) AFFORDING COVERAGE	NAIC #
	INSURER A: Arch Insurance Company	11150
INSURED	INSURER B: Travelers Property Casualty Company of America	25674
FTP Power LLC	INSURER C : Endurance American Insurance Company	10641
Sustainable Power Group, LLC 2180 South 1300 East, Suite 600	INSURER D:	
Salt Lake City, UT 84106	INSURER E:	
	INSURER F:	

COVERAGES **CERTIFICATE NUMBER: REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

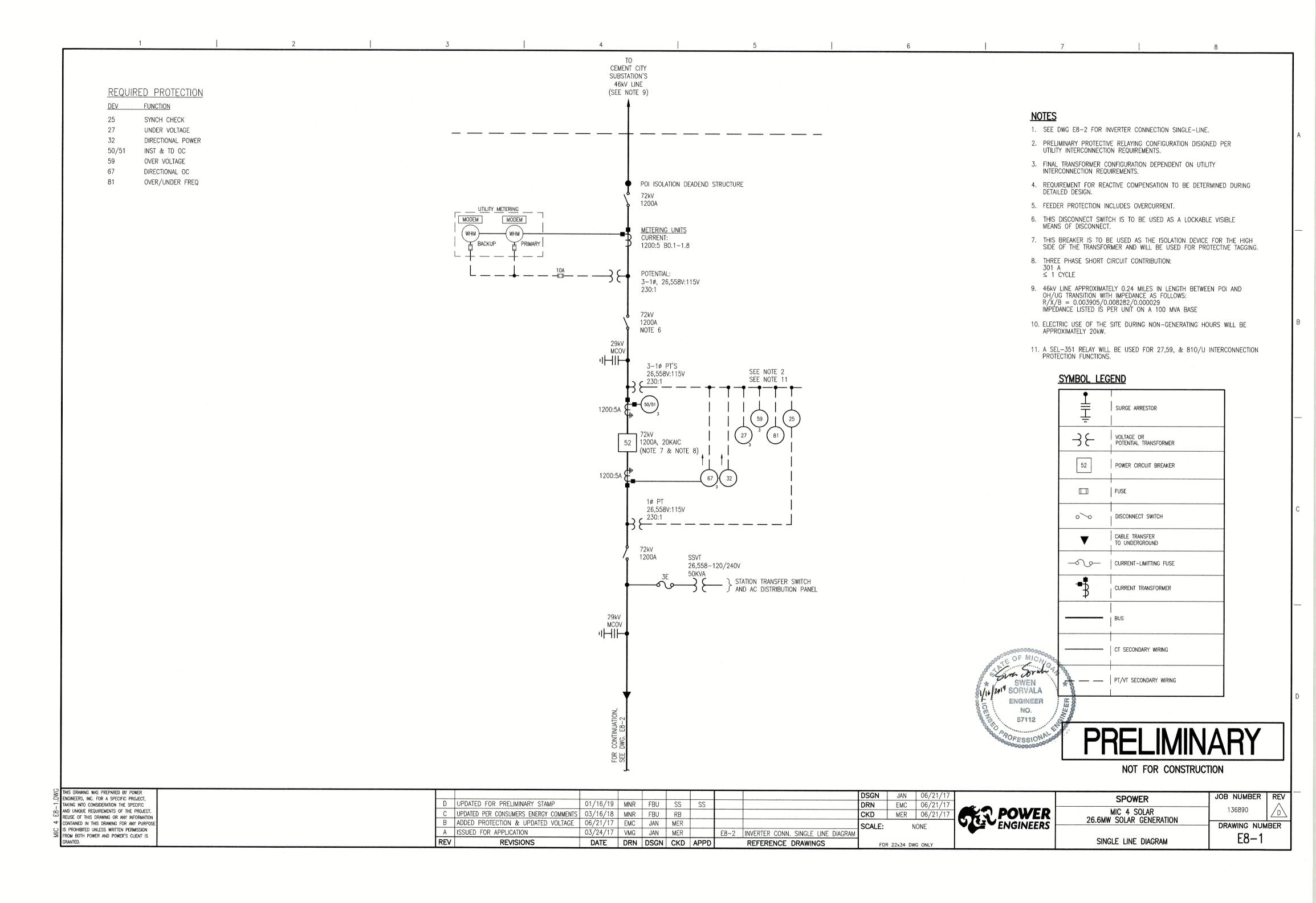
INSR LTR		TYPE OF INSURANCE	ADDL	SUBR WVD	POLICY NUMBER	POLICY EFF	POLICY EXP (MM/DD/YYYY)	LIMIT	s	
A	Х	COMMERCIAL GENERAL LIABILITY	INSU	WVD		(WIW/DD/TTTT)	(WIW/DD/TTTT)	EACH OCCURRENCE	\$	1,000,000
		CLAIMS-MADE X OCCUR			EPO1003601-02	09/01/2018	12/21/2019	DAMAGE TO RENTED PREMISES (Ea occurrence)	\$	100,000
		<u> </u>						MED EXP (Any one person)	\$	5,000
								PERSONAL & ADV INJURY	\$	1,000,000
	GEN	I'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	\$	6,000,000
		POLICY X PRO- JECT X LOC						PRODUCTS - COMP/OP AGG	\$	2,000,000
		OTHER:						PROJ/LOC AGG	\$	2,000,000
Α	AUT	OMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	\$	1,000,000
	X	ANY AUTO			CAB0057384-04	09/01/2018	12/21/2019	BODILY INJURY (Per person)	\$	
		OWNED SCHEDULED AUTOS ONLY						BODILY INJURY (Per accident)	\$	
		HIRED NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	\$	
									\$	
Α	X	UMBRELLA LIAB X OCCUR						EACH OCCURRENCE	\$	10,000,000
		EXCESS LIAB CLAIMS-MADE			ULP0057153-04	09/01/2018	12/21/2019	AGGREGATE	\$	10,000,000
		DED X RETENTION \$ 10,000)						\$	
В	WOF	KERS COMPENSATION EMPLOYERS' LIABILITY						X PER OTH-ER		
	ANY	PROPRIETOR/PARTNER/EXECUTIVE TO THE PROPRIETOR PARTNER PARTNER PROPRIETOR PARTNER PARTN	N/A		UB-8J417632	12/20/2017	12/20/2018	E.L. EACH ACCIDENT	\$	1,000,000
		CER/MEMBER EXCLUDED?	N/A					E.L. DISEASE - EA EMPLOYEE	\$	1,000,000
	If yes	s, describe under CRIPTION OF OPERATIONS below						E.L. DISEASE - POLICY LIMIT	\$	1,000,000
С	Exc	ess Liability			EXC10007270903	09/01/2018	12/21/2019	Limit (\$10M xs \$10M)		10,000,000

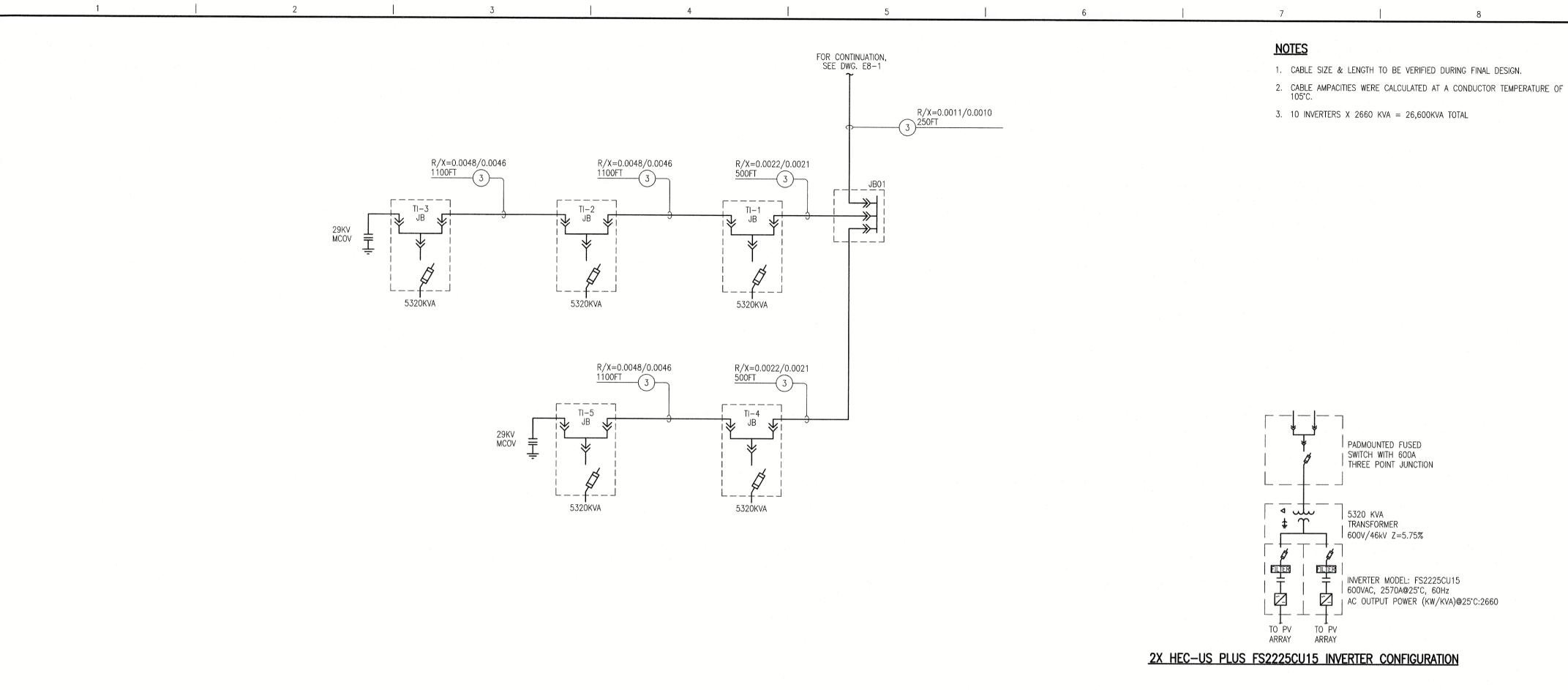
DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
The Insurer may cancel these policies by mailing or delivering to the First Named Insured written notice of cancellation at least: 10 days before the effective date of cancellation, if they cancel for non payment of premium; or 30 days before the effective date of cancellation, if they cancel for any other reason.

This certificate supersedes all previously issued certificates. All previously issued certificates are now void.

This Certificate is issued as Evidence of Insurance Only.

CERTIFICATE HOLDER	CANCELLATION
Evidence Only	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE





			CABLE DATA (SEE NO	TES 1&2)	
	ID #	QTY	CABLE	GROUND	AMPACITY
	1	3	#1/0 AWG 1/C-AL	#4-CU	230
	2	3	#2/0 AWG 1/C-AL	#4-CU	260
-0000000n-	3	3	#4/0 AWG 1/C-AL	#2-CU	340
OF MICHA	4	3	#250 kcmil 1/C-AL	#2-CU	370
Solmer South	255	3	#500 kcmil 1/C-AL	#2-CU	545
SWEN SWEN SWEN ENGINEER NO. 57112	6	3	#750 kcmil 1/C-AL	#1/0-CU	680
ENGINEER	7-88	3	#1000 kcmil 1/C-AL	#2/0-CU	795
No.	VE.				
\$ 0 57112 .·	6 8				

26.6 MW TYPICAL INSTALLATION

NOT FOR CONSTRUCTION

NG	THIS DRAWING WAS PREPARED BY POWER	
$\bar{\Box}$	ENGINEERS, INC. FOR A SPECIFIC PROJECT,	
','	TAKING INTO CONSIDERATION THE SPECIFIC	
œ	AND UNIQUE REQUIREMENTS OF THE PROJECT.	
ш	REUSE OF THIS DRAWING OR ANY INFORMATION	
4	CONTAINED IN THIS DRAWING FOR ANY PURPOSE	1
MIC	IS PROHIBITED UNLESS WRITTEN PERMISSION	1
\geq	FROM BOTH POWER AND POWER'S CLIENT IS	
	GRANTED	

				·					-			****
REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD		REFERENCE DRAWINGS	FOR	R 22x34 DW	G ONLY	
Α	ISSUED FOR APPLICATION	03/24/17	VMG	JAN	MER		E8-1	SINGLE LINE DIAGRAM			·	l
В	UPDATED VOLTAGE	06/21/17	EMC	JAN	MER				SCALE:	N	IONE	1
C	UPDATE INVERTER TYPE	07/24/17	EMC	FBU	JAN				CKD	MER	07/24/17	1
D	UPDATED PER CONSUMERS ENERGY COMMENTS	03/16/18	MNR	FBU	RB				DRN	EMC	07/24/17	
E	UPDATED FOR PRELIMINARY STAMP	01/16/19	MNR	FBU	SS	SS			DSGN	JAN	07/24/17	Г

POWER ENGINEERS	
-----------------	--

SPOWER	JOB NUMBER	REV
MIC 4 SOLAR 26.6MW SOLAR GENERATION	136890	E
INVERTER CONNECTION SINGLE LINE DIAGRAM	DRAWING NUME E8-2	IBER



See Page 6 for sample Site Plan

Attached Specification for Equipment

Page # 11-12

See Page 7 for sample of Synchronous Generator Electrical One-Line Drawing See Page 8 for sample of Induction Generator Electrical One-Line Drawing

GENERATION INTERCONNECTION APPLICATION

Category 5
For All Projects with Aggregate Generator Output of
More Than 2 MW

ELECTRIC UTILITY CONTA	ACT INFORMATION		FOR OFFICE USE ONLY		
			Application Number		
Consumers E					
Interconnection C			Date and Time Application Received		
1945 West Parnall Road (
Jackson, MI 4					
(517)788-1- Net Metering E-mail: net_mete		m			
Net Wetering E-mail. Het_mete	ening@cinsenergy.co	111			
	CUSTOMER / ACCO				
Customer Name (Last, First, Middle)		Customer Mail	ing Address		
sPower Development Company, LLC		2180 South	1300 East, Suite 600, Salt Lake City, UT 84106		
Customer Phone Number		Customer E-m	ail Address (Optional)		
(801) 679-3500		ic@spowe	r.com		
	INSTALLATION	INFORMAT	ION		
P	roject Developer/Si	ngle Point o	f Contact		
Name	Phone Number		Fax Number		
Daniel Wang	(415)872-0764		()		
Address			·		
201 Mission St, Suite 540, San Franci	sco, CA 94105				
E-Mail Address					
ic@spower.com					
Project Site Address					
42.469674°, -86.091799°					
	NERATION SYSTE				
Project Type (Base load, Peaking, Intermediate)		Energization D	ate for Project Interconnection Facilities		
Base load		December			
First Parallel Operation Date for Testing			ercial Operation Date		
December 15, 2020		December	*		
Estimated Project Cost		Operation Mod	de		
TBD		TBD			
Attached Customer's Proof of General Liability Insu	rance for a minimum of \$7	1,000,000			
Page # _ 9					
(Per MPSC Order in Case No. U-15787 – Customer must maintain a minimum of \$1,000,000 General Liability Insurance.)					
Attached Site Plan					
Page #10					
Attached Electrical One-Line Drawing					
Page # <u>11-12</u>					
(Per MPSC Order in Case No. U-15787 – The One Michigan.)	-Line Drawing must be sig	ned and sealed	by a licensed professional engineer, licensed in the State of		

Form 1221 10-2009 Page 1 of 8

	7 titaerinient i				
ISOLATING TRANSFORMER(S) BETWEEN GENERATOR(S) AND UTILITY					
Transformer Model Number	Transformer Manufacturer				
TBD	TBD				
Rated kV and connection (delta, wye, wye-gnd) of each winding	kVA of each winding (kW)				
600 V (Wye-Gnd) / 46 kV (Delta)	5,320 kVA				
BIL of each winding	Fixed taps available for each winding (kW)				
350 kV	±5 @ 5%				
Positive/Negative range for any LTC windings	%Z impedance on transformer self cooled rating (kW)				
-5%, -2.5%, 0, 2.5%, 5%	5.75%				
Percent Excitation current at rated kV	Load Loss Watts at full load or X/R ratio (kW)				
0.25%	30 kW				

SYNCHRONOUS, INDUCTION AND INVERTER GENERATOR - BASED SYSTEMS (Must complete Page 3, Page 4 or Page 5 and attach Electrical One-Line Drawing

The following information on these system components shall appear on the Electrical One-Line Drawing:

- Breakers Rating, location and normal operating status (open or closed)
- Buses Operating voltage
- Capacitors Size of bank in Kvar
- Circuit Switchers Rating, location and normal operating status (open or closed)
- Current Transformers Overall ratio, connected ratio
- Fuses Normal operating status, rating (Amps), type
- Generators Capacity rating (kVA), location, type, method of grounding
- Grounding Resistors Size (ohms), current (Amps)
- Isolating Transformers Capacity rating (kVA), location, impedance, voltage ratings, primary and secondary connections and method of grounding
- Potential Transformers Ratio, connection
- Reactors Ohms/phase
- . Relays Types, quantity, IEEE device number, operator lines indicating the device initiated by the relays
- Switches Location and normal operating status (open or closed), type, rating
- Tagging Point Location, identification

Manufacturer	Model Name	Model Number	
Power Electronics	FS2225CU15		
CUSTOME	R AND PROJECT DEVELOPER/CONT	RACTOR SIGNATURES AND FEES	
☐ Attached \$500 Intercor	nnection Application Fee		
X Check #	Money Order #		
Sign and Return Complete	ed Application with Application Fee to	Electric Utility Contact	
To the heat of my knowled	luo all the information provided in this		
To the best of my knowled	ge, all the information provided in this	s application form is complete and correct.	
		_	
Customer Signature:		Date	—
	19amel 26		
Project Developer/Contractor Signa	ature (if applicable):	Date 3/6/2019	
• •	·	onnection Requirements" for a detailed explanation of	the
Interconnection Process	, Fees, Timelines, and Technical Requiremer	nts.	

Form 1221 10-2009 Page 2 of 8

INVERTER GENERATORS				
GENERATOR INFORMATION				
System Type (Solar, Wind, Biomass, Methane Digester, etc)	Generation Nameplate Rating (kW or MVA)			
Solar PV	26,600 kW*			
AC Operation Voltage	Manufacturer			
600 V	Power Electronics			
Model (Name/Number)	Attached Grid Configuration			
FS2225CU15	Page #			

^{*}Output from project at POI will never exceed 20 MW due to plant controller

Form 1221 10-2009 Page 3 of 8

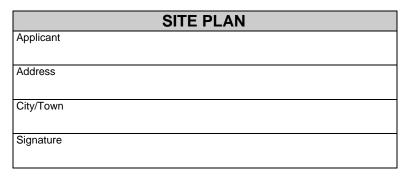
SYNCHRONOUS GENERATORS					
GENERATOR	INFORMATION				
Generator Nameplate Voltage	Generator Nameplate Watts or Volt-Amperes				
Generator Nameplate Power Factor (pf)	RPM				
TECHNICAL I	NFORMATION				
Minimum and Maximum Acceptable Terminal Voltage					
Direct Axis Reactance (saturated)					
Direct Axis Reactance (unsaturated)					
Quadrature Axis Reactance (unsaturated)					
Direct Axis Transient Reactance (saturated)					
Direct Axis Transient Reactance (unsaturated)					
Quadrature Axis Transient Reactance (unsaturated)					
Direct Axis Sub-Transient Reactance (saturated)					
Direct Axis Sub-Transient Reactance (unsaturated)	Direct Axis Sub-Transient Reactance (unsaturated)				
Leakage Reactance					
Direct Axis Transient Open Circuit Time Constant					
Quadrature Axis Transient Open Circuit Time Constant					
Direct Axis Sub-Transient Open Circuit Time Constant					
Quadrature Axis Sub-Transient Open Circuit Time Constant					
Open Circuit Saturation Curve					
Reactive Capability Curve Showing Overexcited and Underexcited Limits (Re	eactive Information if Non-Synchronous)				
Excitation System Block Diagram with Values for Gains and Time Constants	(Laplace Transforms)				
Short Circuit Current Contribution From Generator at the Point of Common C	Coupling				
Rotating Inertia of Overall Combination Generator, Prime Mover, Couplers at	nd Gear Drives				
Station Power Load When Generator is Off-Line, Watts, pf					
Station Power Load During Start-Up, Watts, pf					
Station Power Load During Operation, Watts, pf					

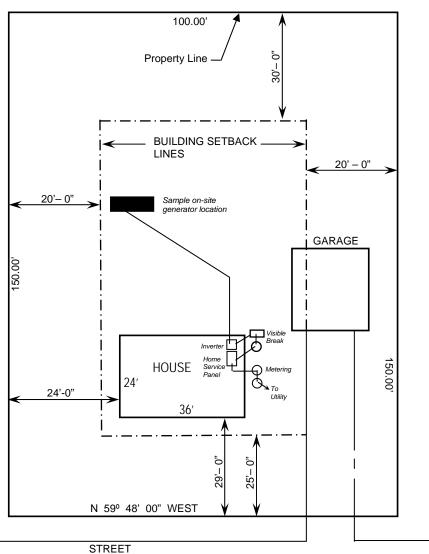
Form 1221 10-2009 Page 4 of 8

INDUCTION GENERATORS						
GENERATOR	INFORMATION					
Generator Nameplate Voltage	Generator Nameplate Watts or Volt-Amperes					
Generator Nameplate Power Factor (pf)	RPM					
TECHNICAL I	NFORMATION					
Synchronous Rotational Speed	Rotation Speed at Rated Power					
	· ·					
Slip at Rated Power						
Minimum and Maximum Acceptable Terminal Voltage						
Motoring Power (kW)						
Neutral Grounding Resistor (If Applicable)						
I2 2t or K (Heating Time Constant)						
Rotor Resistance						
Stator Resistance						
Stator Reactance						
Rotor Reactance						
Magnetizing Reactance						
Short Circuit Reactance						
Exciting Current						
Temperature Rise						
Frame Size						
Design Letter						
Reactive Power Required in Vars (No Load)						
Reactive Power Required in Vars (Full Load)						
Short Circuit Current Contribution from Generator at the Point of Common Coupling						
Rotating Inertia, H in Per Unit on kVA Base, of Overall Combination Generator, Prime Mover, Couplers and Gear Drives						
Station Power Load When Generator is Off-Line, Watts, pf						
Station Power Load During Start-Up, Watts, pf						
Station Power Load During Operation, Watts, pf						

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SAMPLE SITE PLAN - PROVIDED FOR REFERENCE ONLY





Weblink to State of Michigan / Plats:

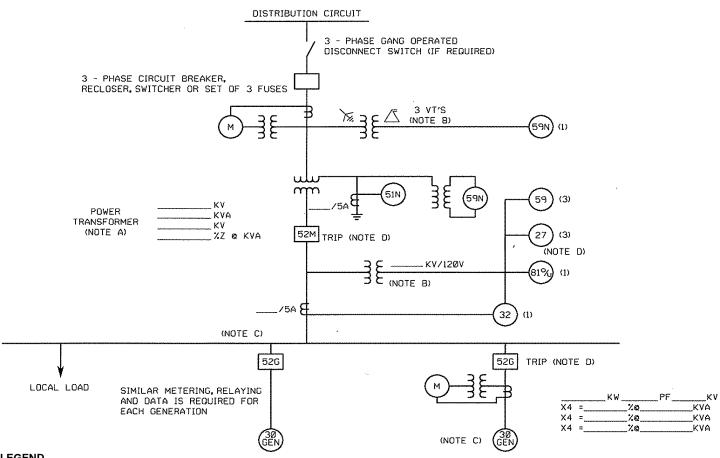
http://www.cis.state.mi.us/platmaps/sr_subs.asp

Note: Legible hand drawn site plans are acceptable

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SAMPLE ELECTRICAL ONE-LINE DRAWING – PROVIDED FOR REFERENCE ONLY TYPICAL ISOLATION AND FAULT PROTECTION FOR SYNCHRONOUS GENERATOR

ONE-LINE DRAWING				
Licensed PE/Contractor	PE/Contractor License Number			
PE/Contractor Address	PE/Contractor Signature			



LEGEND

- 27 Undervoltage
- 32 Reverse Power (Not Required for Flow-Back)
- 51N Neutral overcurrent (required for grounded secondary)
- 59
- Zero sequence overvoltage (assuming ungrounded secondary on power transformer) 59N
- 81o/u Over/Underfrequency

NOTES

- See technical requirements for permissible connection configurations and protection. Transformer connections proposed shall be shown on the one-line drawing by the Project Developer. Transformer connection and secondary grounding to be approved by Utility.
- Protection alternatives for the various acceptable transformer connections are shown. Only one protection alternative will ultimately be used, depending on the actual transformer winding connections. VT's for 59, 27, 81o/u and 32 are shown connected on the primary (Project side) of the power transformer, but may instead be connected on the secondary (Utility side). VT's are required on the secondary of the power transformer if a 59N is required for an ungrounded secondary connection. IEEE std 1547 requirements for voltage and frequency must be met at the PCC. IEEE Std. 1547 permits the VT's to be connected at the point of generator connection in certain cases.
- Main breaker protection, generator protection and synchronizing equipment are not shown.
- Trip of all 52G breakers or the 52M breaker is acceptable, depending upon whether the Project Developer wants to serve its own isolated load after loss of Utility service.

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NOTE D

TRIP (NOTE D)

32

(NOTE C)

SAMPLE ELECTRICAL ONE-LINE DRAWING – PROVIDED FOR REFERENCE ONLY TYPICAL ISOLATION AND FAULT PROTECTION FOR INDUCTION GENERATOR

ONE-LINE DRAWING

Licensed PE/Contractor	PE/Contractor License Number
PE/Contractor Address	PE/Contractor Signature
DISTRIE 3 - PHASE CIRCUIT BREAKER, RECLOSER, SWITCHER OR SET OF 3 FUSES	3 - PHASE GANG OPERATED DISCONNECT SWITCH (IF REQUIRED) 3 - PHASE GANG OPERATED (NOTE B) (NOTE B) (1)
POWER KV TRANSFORMER KV (NOTE A) 77.0 KVA	75A = 51N

LEGEND

- 27 Undervoltage
- 32 Reverse Power (Not Required for Flow-Back)
- 51N Neutral overcurrent (required for grounded secondary)
- 59 Overvoltage
- 59N Zero sequence overvoltage (assuming ungrounded secondary on power transformer)

SIMILAR METERING, RELAYING AND DATA IS REQUIRED FOR

EACH GENERATION

(NOTE C)

52G

81o/u Over/Underfrequency

LOCAL LOAD

NOTES

- A) See technical requirements for permissible connection configurations and protection. Transformer connections proposed shall be shown on the one-line drawing by the Project Developer. Transformer connection and secondary grounding to be approved by Utility.
- B) Protection alternatives for the various acceptable transformer connections are shown. Only one protection alternative will ultimately be used, depending on the actual transformer winding connections. VT's for 59, 27, 81o/u and 32 are shown connected on the primary (Project side) of the power transformer, but may instead be connected on the secondary (Utility side). VT's are required on the secondary of the power transformer if a 59N is required for an ungrounded secondary connection. IEEE std 1547 requirements for voltage and frequency must be met at the PCC. IEEE Std. 1547 permits the VT's to be connected at the point of generator connection in certain cases.
- C) Main breaker protection, generator protection and synchronizing equipment are not shown.
- D) Trip of all 52G breakers or the 52M breaker is acceptable, depending upon whether the Project Developer wants to serve its own isolated load after loss of Utility service.

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U-20500 - March 19, 2019

Complaint by specific Development Company, LLC

WEVANS

Attachment I



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 09/04/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER. AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on

this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).					
PRODUCER	CONTACT Whitney Evans				
Krauter & Company - San Francisco 150 Spear Street, Suite 800	PHONE (A/C, No, Ext): (415) 944-3051 FAX (A/C, No): (415) 3				
San Francisco, CA 94105	E-MAIL ADDRESS: wevans@krautergroup.com				
	INSURER(S) AFFORDING COVERAGE	NAIC #			
	INSURER A: Arch Insurance Company	11150			
INSURED	INSURER B : Travelers Property Casualty Company of America				
FTP Power LLC	INSURER C: Endurance American Insurance Company	10641			
Sustainable Power Group, LLC 2180 South 1300 East. Suite 600	INSURER D:				
Salt Lake City, UT 84106	INSURER E :				
	INSURER F:				
COVERAGES CERTIFICATE NUMBER:	REVISION NUMBER:				
THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD					

INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

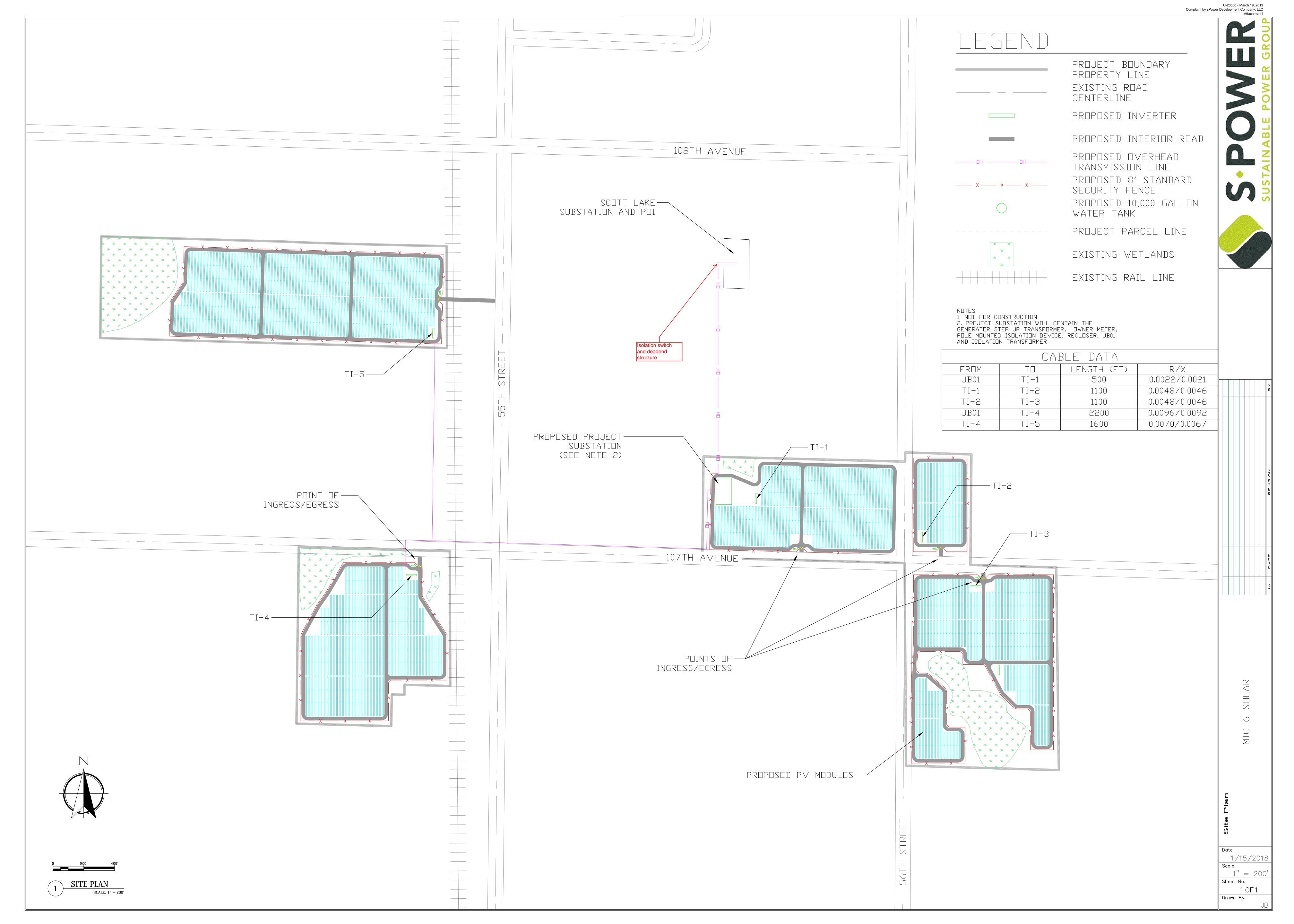
INSR LTR		TYPE OF INSURANCE	ADDL INSD	SUBR	POLICY NUMBER	POLICY EFF	POLICY EXP (MM/DD/YYYY)	LIMIT	s			
A	Х	COMMERCIAL GENERAL LIABILITY	INSD	WVD		(WIW/DD/TTTT)	(WIW/DD/TTTT)	EACH OCCURRENCE	\$	1,000,000		
		CLAIMS-MADE X OCCUR			EPO1003601-02	09/01/2018	12/21/2019	DAMAGE TO RENTED PREMISES (Ea occurrence)	\$	100,000		
								MED EXP (Any one person)	\$	5,000		
								PERSONAL & ADV INJURY	\$	1,000,000		
	GEI	N'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	\$	6,000,000		
		POLICY X PRO- X LOC						PRODUCTS - COMP/OP AGG	\$	2,000,000		
		OTHER:						PROJ/LOC AGG	\$	2,000,000		
Α	AU1	OMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	\$	1,000,000		
	X	ANY AUTO			CAB0057384-04	09/01/2018	12/21/2019	BODILY INJURY (Per person)	\$			
		OWNED SCHEDULED AUTOS						BODILY INJURY (Per accident)	\$			
		HIRED NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	\$			
									\$			
Α	X	UMBRELLA LIAB X OCCUR							EACH OCCURRENCE	\$	10,000,000	
		EXCESS LIAB CLAIMS-MADE			ULP0057153-04	09/01/2018	12/21/2019	AGGREGATE	\$	10,000,000		
		DED X RETENTION \$ 10,000							\$			
В	WOF	RKERS COMPENSATION EMPLOYERS' LIABILITY								X PER OTH- STATUTE ER		
	ANY	PROPRIETOR/PARTNER/EXECUTIVE TITLE	ECUTIVE Y/N N/A		UB-8J417632	12/20/2017	12/20/2018	E.L. EACH ACCIDENT	\$	1,000,000		
		CER/MEMBER EXCLUDED?	IX, A					E.L. DISEASE - EA EMPLOYEE	\$	1,000,000		
	DÉS	s, describe under CRIPTION OF OPERATIONS below						E.L. DISEASE - POLICY LIMIT	\$	1,000,000		
С	Exc	ess Liability			EXC10007270903	09/01/2018	12/21/2019	Limit (\$10M xs \$10M)		10,000,000		

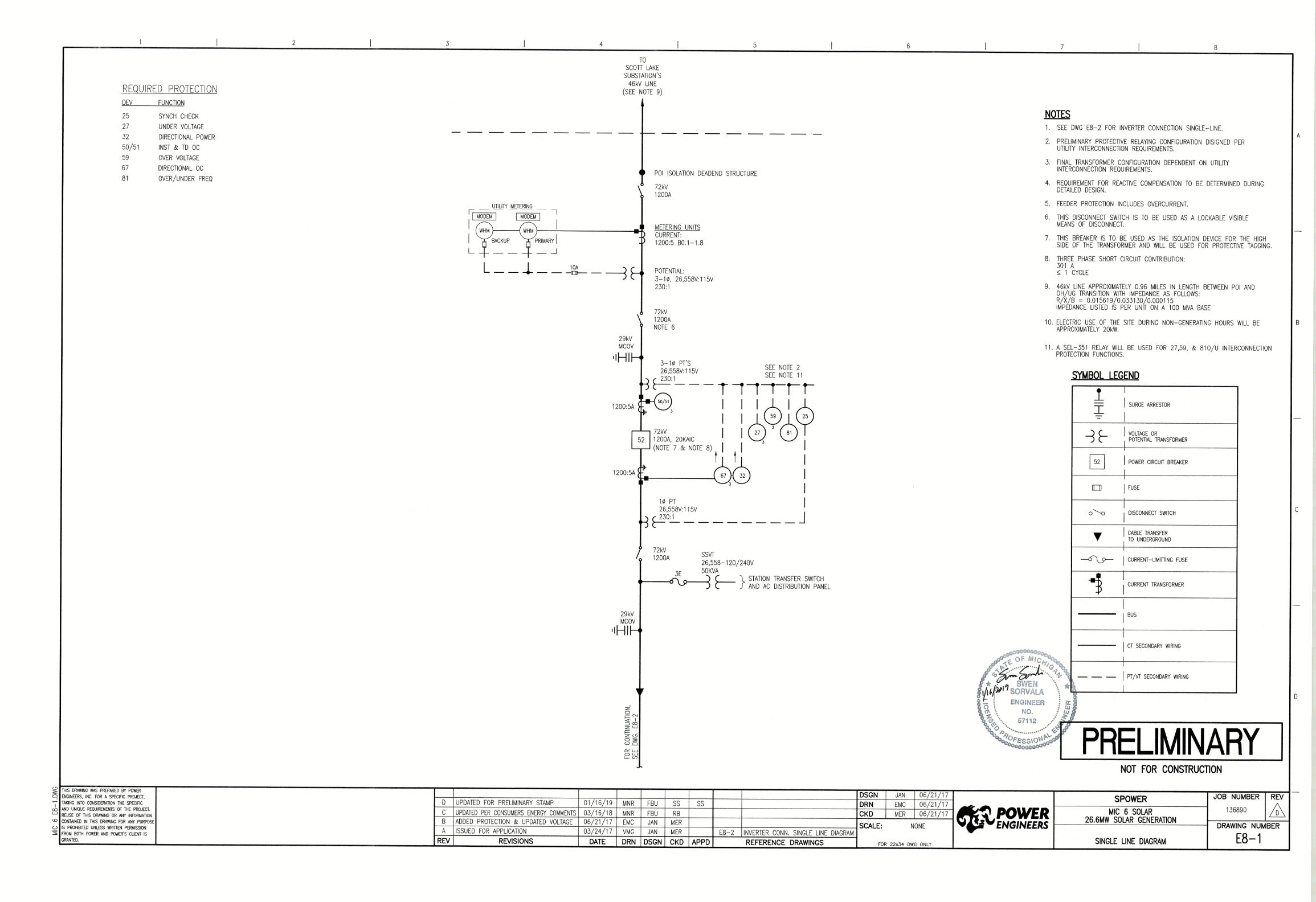
DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
The Insurer may cancel these policies by mailing or delivering to the First Named Insured written notice of cancellation at least: 10 days before the effective date of cancellation, if they cancel for non payment of premium; or 30 days before the effective date of cancellation, if they cancel for any other reason.

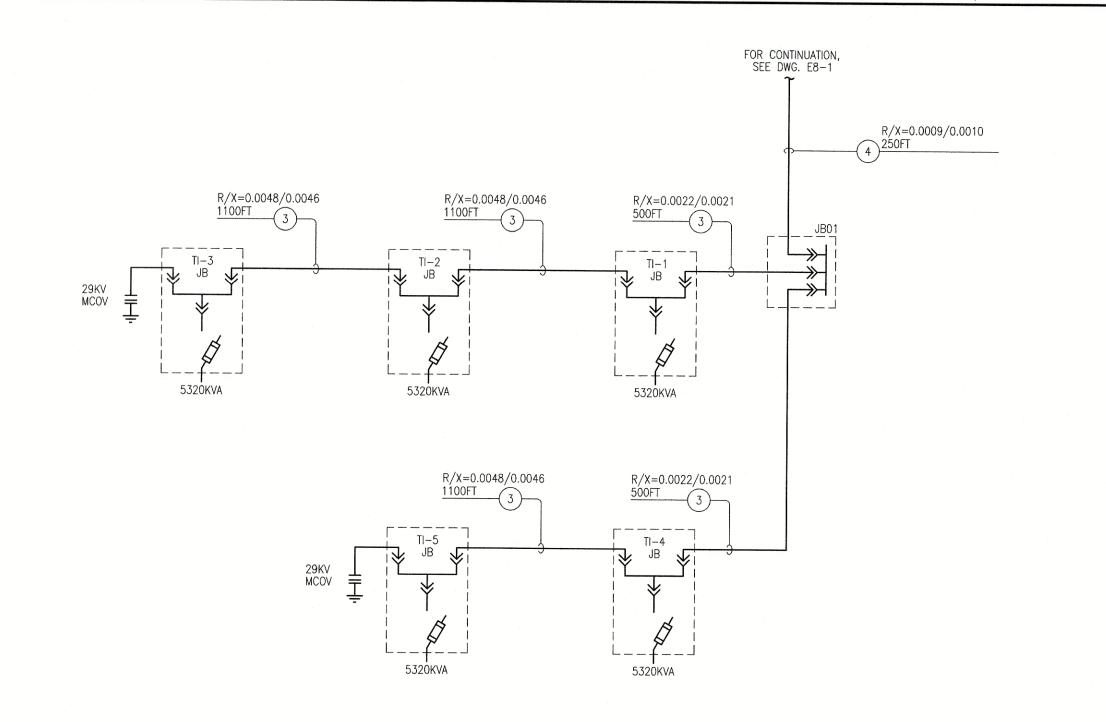
This certificate supersedes all previously issued certificates. All previously issued certificates are now void.

This Certificate is issued as Evidence of Insurance Only.

CERTIFICATE HOLDER	CANCELLATION
Evidence Only	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE

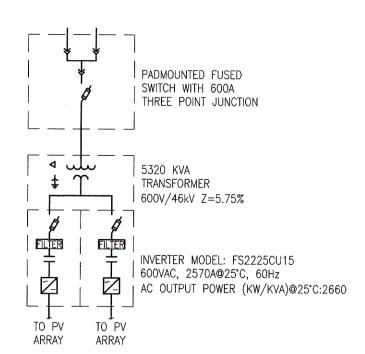






<u>NOTES</u>

- 1. CABLE SIZE & LENGTH TO BE VERIFIED DURING FINAL DESIGN.
- 2. CABLE AMPACITIES WERE CALCULATED AT A CONDUCTOR TEMPERATURE OF 105°C.
- 3. 10 INVERTERS X 2660 KVA = 26,600KVA TOTAL



2X HEC-US PLUS FS2225CU15 INVERTER CONFIGURATION

		CABLE DATA (SEE NO	TES 1&2)	
ID #	QTY	CABLE	GROUND	AMPACITY
1	3	#1/0 AWG 1/C-AL	#4-CU	230
2	3	#2/0 AWG 1/C-AL	#4-CU	260
3	3	#4/0 AWG 1/C-AL	#2-CU	340
4	3	#250 kcmil 1/C-AL	#2-CU	370
5	3	#500 kcmil 1/C-AL	#2-CU	545
6	3	#750 kcmil 1/C-AL	#1/0-CU	680
7	3	#1000 kcmil 1/C-AL	#2/0-CU	795
~ 8				

PRELIMINARY

NOT FOR CONSTRUCTION

WG	THIS DRAWING WAS PREPARED BY POWER ENGINEERS, INC. FOR A SPECIFIC PROJECT,	Г
	ENGINEERS, INC. FOR A SPECIFIC PROJECT,	
'	TAKING INTO CONSIDERATION THE SPECIFIC	
8	AND UNIQUE REQUIREMENTS OF THE PROJECT.	
	REUSE OF THIS DRAWING OR ANY INFORMATION	
	CONTAINED IN THIS DRAWING FOR ANY PURPOSE	
₩	IS PROHIBITED UNLESS WRITTEN PERMISSION FROM BOTH POWER AND POWER'S CLIENT IS	ŀ
-	GRANTED.	
-	GRANIED.	

F	UPDATED FOR PRELIMINARY STAMP	01/16/19	MNR	FBU	SS	SS			DSGN	JAN	07/24/17
Ε	UPDATED CABLE SIZING	01/10/19	MNR	FBU					DRN	EMC	07/24/17
D	UPDATED PER CONSUMERS ENERGY COMMENTS	03/16/18	MNR	FBU	RB				CKD	MER	07/24/17
С	UPDATE INVERTER TYPE	07/24/17	EMC	FBU	MER				SCALE:		
В	UPDATED VOLTAGE	06/21/17	EMC	JAN	MER		E8-1	SINGLE LINE DIAGRAM	SCALE:	ľ	IONE
REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD		REFERENCE DRAWINGS	FOI	R 22x34 DW	G ONLY

26.6 MW TYPICAL INSTALLATION

POWER ENGINEERS	
-----------------	--

SPOWER	JOB NUME
MIC 6 SOLAR 26.6MW SOLAR GENERATION	136890
INVERTER CONNECTION SINGLE LINE DIAGRAM	DRAWING E8



See Page 6 for sample Site Plan

Attached Specification for Equipment

Page # 11-12

See Page 7 for sample of Synchronous Generator Electrical One-Line Drawing See Page 8 for sample of Induction Generator Electrical One-Line Drawing

GENERATION INTERCONNECTION APPLICATION

Category 5
For All Projects with Aggregate Generator Output of
More Than 2 MW

ELECTRIC UTILITY CONTA	INFORMATION		FOR OFFICE USE ONLY	
			Application Number	
Consumers E				
Interconnection Co			Date and Time Application Received	
1945 West Parnall Road (,			
Jackson, MI 4				
(517)788-14				
Net Metering E-mail: net_mete	om			
	CUSTOMER / ACCC			
Customer Name (Last, First, Middle)	o ouncy outstand mass.	Customer Mailing Address		
sPower Development Company, LLC			1300 East, Suite 600, Salt Lake City, UT 84106	
Customer Phone Number			ail Address (Optional)	
(801) 679-3500		ic@spowe	, ,	
(001 / 0/) 3300	INSTALLATION			
Pi	roject Developer/Si			
Name	Phone Number		Fax Number	
Daniel Wang	(415)872-0764		()	
Address	7 110 7 0, 2 0, 0 1			
201 Mission St, Suite 540, San Franci	sco, CA 94105			
E-Mail Address				
ic@spower.com				
Project Site Address				
42.266399°, -84.144606°				
	NERATION SYSTE	M SITE INFO	PRMATION	
Project Type (Base load, Peaking, Intermediate)		Energization D	ate for Project Interconnection Facilities	
Base load		December		
First Parallel Operation Date for Testing		Project Comm	ercial Operation Date	
December 15, 2020		December	31, 2020	
Estimated Project Cost		Operation Mode		
TBD		TBD		
Attached Customer's Proof of General Liability Insu	rance for a minimum of \$	1,000,000		
Page #9				
(Per MPSC Order in Case No. U-15787 – Custome	r must maintain a minimu	m of \$1,000,000	General Liability Insurance.)	
Attached Site Plan				
Page # 10				
Attached Electrical One-Line Drawing				
Page # <u>11-12</u>				
(Per MPSC Order in Case No. U-15787 – The One	Line Drawing must be si	gned and sealed	d by a licensed professional engineer, licensed in the State of	

Form 1221 10-2009 Page 1 of 8

	7 tttdomment o			
ISOLATING TRANSFORMER(S) BETWEEN GENERATOR(S) AND UTILITY				
Transformer Model Number	Transformer Manufacturer			
TBD	TBD			
Rated kV and connection (delta, wye, wye-gnd) of each winding	kVA of each winding (kW)			
645 V (Wye-Gnd) / 46 kV (Delta)	2,800 kVA			
BIL of each winding	Fixed taps available for each winding (kW)			
350 kV	±5 @ 5%			
Positive/Negative range for any LTC windings	%Z impedance on transformer self cooled rating (kW)			
-5%, -2.5%, 0, 2.5%, 5%	5.75%			
Percent Excitation current at rated kV	Load Loss Watts at full load or X/R ratio (kW)			
0.25%	15 kW			

SYNCHRONOUS, INDUCTION AND INVERTER GENERATOR - BASED SYSTEMS (Must complete Page 3, Page 4 or Page 5 and attach Electrical One-Line Drawing

The following information on these system components shall appear on the Electrical One-Line Drawing:

- Breakers Rating, location and normal operating status (open or closed)
- Buses Operating voltage
- Capacitors Size of bank in Kvar
- Circuit Switchers Rating, location and normal operating status (open or closed)
- Current Transformers Overall ratio, connected ratio
- Fuses Normal operating status, rating (Amps), type
- Generators Capacity rating (kVA), location, type, method of grounding
- Grounding Resistors Size (ohms), current (Amps)
- Isolating Transformers Capacity rating (kVA), location, impedance, voltage ratings, primary and secondary connections and method of grounding
- Potential Transformers Ratio, connection
- Reactors Ohms/phase
- . Relays Types, quantity, IEEE device number, operator lines indicating the device initiated by the relays
- Switches Location and normal operating status (open or closed), type, rating
- Tagging Point Location, identification

Manufacturer	Model Name	Model Number	
Power Electronics	FS2800CU15		
CUSTOMER	R AND PROJECT DEVELOPER/CONTR	RACTOR SIGNATURES AND FEES	
Attached \$500 Intercon	nection Application Fee		
X Check #	Money Order #		
	d Application with Application Fee to I	Electric Utility Contact application form is complete and correct.	
Customer Signature:		Date	_
Project Developer/Contractor Signate	ure (if applicable):	Date3/6/2019	_
• •	"Michigan Electric Utility Generator Intercol Fees, Timelines, and Technical Requiremen	nnection Requirements" for a detailed explanation of the	ie

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INVERTER GENERATORS			
GENERATOR INFORMATION			
System Type (Solar, Wind, Biomass, Methane Digester, etc)	Generation Nameplate Rating (kW or MVA)		
Solar PV	20,070 kW*		
AC Operation Voltage	Manufacturer		
645 V	Power Electronics		
Model (Name/Number)	Attached Grid Configuration		
FS2800CU15	Page #		

^{*}Output from project at POI will never exceed 15 MW due to plant controller

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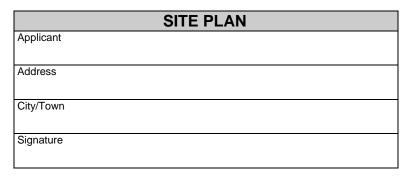
SYNCHRONOUS GENERATORS			
GENERATOR	INFORMATION		
Generator Nameplate Voltage	Generator Nameplate Watts or Volt-Amperes		
Generator Nameplate Power Factor (pf)	RPM		
TECHNICAL I	NFORMATION		
Minimum and Maximum Acceptable Terminal Voltage			
Direct Axis Reactance (saturated)			
Direct Axis Reactance (unsaturated)			
Quadrature Axis Reactance (unsaturated)			
Direct Axis Transient Reactance (saturated)			
Direct Axis Transient Reactance (unsaturated)			
Quadrature Axis Transient Reactance (unsaturated)			
Direct Axis Sub-Transient Reactance (saturated)			
Direct Axis Sub-Transient Reactance (unsaturated)			
Leakage Reactance			
Direct Axis Transient Open Circuit Time Constant			
Quadrature Axis Transient Open Circuit Time Constant			
Direct Axis Sub-Transient Open Circuit Time Constant			
Quadrature Axis Sub-Transient Open Circuit Time Constant			
Open Circuit Saturation Curve			
Reactive Capability Curve Showing Overexcited and Underexcited Limits (Re	eactive Information if Non-Synchronous)		
Excitation System Block Diagram with Values for Gains and Time Constants (Laplace Transforms)			
Short Circuit Current Contribution From Generator at the Point of Common Coupling			
Rotating Inertia of Overall Combination Generator, Prime Mover, Couplers and	nd Gear Drives		
Station Power Load When Generator is Off-Line, Watts, pf			
Station Power Load During Start-Up, Watts, pf			
Station Power Load During Operation, Watts, pf			

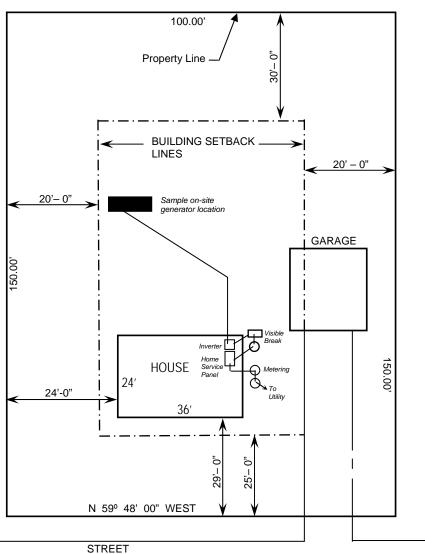
Form 1221 10-2009 Page 4 of 8

INDUCTION GENERATORS			
GENERATOR	INFORMATION		
Generator Nameplate Voltage	Generator Nameplate Watts or Volt-Amperes		
Generator Nameplate Power Factor (pf)	RPM		
TEOLINICAL	NEODIA TION		
	NFORMATION		
Synchronous Rotational Speed	Rotation Speed at Rated Power		
Slip at Rated Power			
Minimum and Maximum Acceptable Terminal Voltage			
Motoring Power (kW)			
Neutral Grounding Resistor (If Applicable)			
I2 2t or K (Heating Time Constant)			
Rotor Resistance			
Stator Resistance			
Stator Reactance			
Rotor Reactance			
Magnetizing Reactance			
Short Circuit Reactance			
Exciting Current			
Temperature Rise			
Frame Size			
Design Letter			
Reactive Power Required in Vars (No Load)			
Reactive Power Required in Vars (Full Load)			
Short Circuit Current Contribution from Generator at the Point of Common Co	pupling		
Rotating Inertia, H in Per Unit on kVA Base, of Overall Combination Generate	or, Prime Mover, Couplers and Gear Drives		
Station Power Load When Generator is Off-Line, Watts, pf			
Station Power Load During Start-Up, Watts, pf			
Station Power Load During Operation, Watts, pf			

Form 1221 10-2009 Page 5 of 8

SAMPLE SITE PLAN - PROVIDED FOR REFERENCE ONLY





Weblink to State of Michigan / Plats:

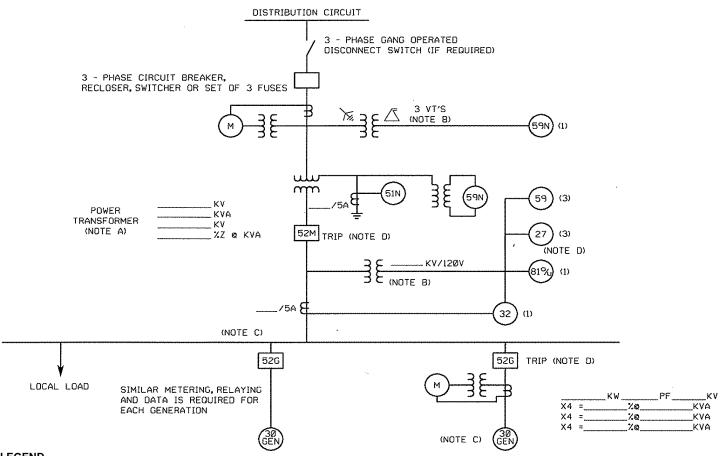
http://www.cis.state.mi.us/platmaps/sr_subs.asp

Note: Legible hand drawn site plans are acceptable

Form 1221 10-2009 Page 6 of 8

SAMPLE ELECTRICAL ONE-LINE DRAWING – PROVIDED FOR REFERENCE ONLY TYPICAL ISOLATION AND FAULT PROTECTION FOR SYNCHRONOUS GENERATOR

ONE-LINE DRAWING		
Licensed PE/Contractor PE/Contractor License Number		
PE/Contractor Address	PE/Contractor Signature	



LEGEND

- 27 Undervoltage
- 32 Reverse Power (Not Required for Flow-Back)
- 51N Neutral overcurrent (required for grounded secondary)
- 59 Overvoltage
- 59N Zero sequence overvoltage (assuming ungrounded secondary on power transformer)
- 81o/u Over/Underfrequency

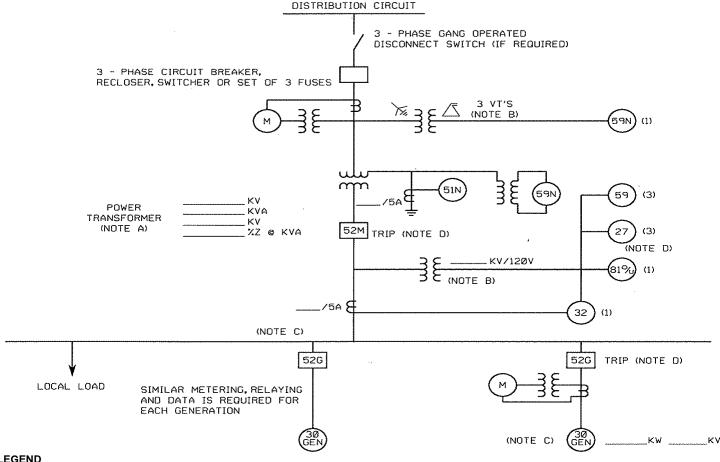
NOTES

- A) See technical requirements for permissible connection configurations and protection. Transformer connections proposed shall be shown on the one-line drawing by the Project Developer. Transformer connection and secondary grounding to be approved by Utility.
- B) Protection alternatives for the various acceptable transformer connections are shown. Only one protection alternative will ultimately be used, depending on the actual transformer winding connections. VT's for 59, 27, 81o/u and 32 are shown connected on the primary (Project side) of the power transformer, but may instead be connected on the secondary (Utility side). VT's are required on the secondary of the power transformer if a 59N is required for an ungrounded secondary connection. IEEE std 1547 requirements for voltage and frequency must be met at the PCC. IEEE Std. 1547 permits the VT's to be connected at the point of generator connection in certain cases.
- C) Main breaker protection, generator protection and synchronizing equipment are not shown.
- D) Trip of all 52G breakers or the 52M breaker is acceptable, depending upon whether the Project Developer wants to serve its own isolated load after loss of Utility service.

Form 1221 10-2009 Page 7 of 8

SAMPLE ELECTRICAL ONE-LINE DRAWING – PROVIDED FOR REFERENCE ONLY TYPICAL ISOLATION AND FAULT PROTECTION FOR INDUCTION GENERATOR

ONE-LINE DRAWING			
Licensed PE/Contractor	PE/Contractor License Number		
PE/Contractor Address	PE/Contractor Signature		
DISTRIBU	JTION CIRCUIT		
	3 - PHASE GANG OPERATED DISCONNECT SWITCH (IF REQUIRED)		



LEGEND

- 27 Undervoltage
- 32 Reverse Power (Not Required for Flow-Back)
- Neutral overcurrent (required for grounded secondary) 51N
- 59
- Zero sequence overvoltage (assuming ungrounded secondary on power transformer) 59N
- 81o/u Over/Underfrequency

NOTES

- See technical requirements for permissible connection configurations and protection. Transformer connections proposed shall be shown on the one-line drawing by the Project Developer. Transformer connection and secondary grounding to be approved by Utility.
- Protection alternatives for the various acceptable transformer connections are shown. Only one protection alternative will ultimately be used, depending on the actual transformer winding connections. VT's for 59, 27, 81o/u and 32 are shown connected on the primary (Project side) of the power transformer, but may instead be connected on the secondary (Utility side). VT's are required on the secondary of the power transformer if a 59N is required for an ungrounded secondary connection. IEEE std 1547 requirements for voltage and frequency must be met at the PCC. IEEE Std. 1547 permits the VT's to be connected at the point of generator connection in certain cases.
- Main breaker protection, generator protection and synchronizing equipment are not shown.
- Trip of all 52G breakers or the 52M breaker is acceptable, depending upon whether the Project Developer wants to serve its own isolated load after loss of Utility service.

Form 1221 10-2009 Page 8 of 8

WEVANS

Attachment J DATE (MM/DD/YYYY)



CERTIFICATE OF LIABILITY INSURANCE

09/04/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER. AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT Whitney Evans				
Krauter & Company - San Francisco 150 Spear Street, Suite 800	PHONE (A/C, No, Ext): (415) 944-3051 FAX (A/C, No): (415) 3	384-6669			
San Francisco, CA 94105	E-MAIL ADDRESS: wevans@krautergroup.com				
	INSURER(S) AFFORDING COVERAGE	NAIC #			
	INSURER A: Arch Insurance Company	11150			
INSURED	INSURER B: Travelers Property Casualty Company of America	25674			
FTP Power LLC	INSURER C: Endurance American Insurance Company 10641				
Sustainable Power Group, LLC 2180 South 1300 East, Suite 600	INSURER D:				
Salt Lake City, UT 84106	INSURER E:				
	INSURER F:				

COVERAGES **CERTIFICATE NUMBER: REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR		TYPE OF INSURANCE	ADDL	SUBR WVD	POLICY NUMBER	POLICY EFF	POLICY EXP (MM/DD/YYYY)	LIMIT	s	
A	Х	COMMERCIAL GENERAL LIABILITY	INSU	WVD		(WIW/DD/TTTT)	(WIW/DD/TTTT)	EACH OCCURRENCE	\$	1,000,000
		CLAIMS-MADE X OCCUR			EPO1003601-02	09/01/2018	12/21/2019	DAMAGE TO RENTED PREMISES (Ea occurrence)	\$	100,000
		<u> </u>						MED EXP (Any one person)	\$	5,000
								PERSONAL & ADV INJURY	\$	1,000,000
	GEN	I'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	\$	6,000,000
		POLICY X PRO- JECT X LOC						PRODUCTS - COMP/OP AGG	\$	2,000,000
		OTHER:						PROJ/LOC AGG	\$	2,000,000
Α	AUT	OMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	\$	1,000,000
	X	ANY AUTO			CAB0057384-04	09/01/2018	12/21/2019	BODILY INJURY (Per person)	\$	
		OWNED SCHEDULED AUTOS ONLY						BODILY INJURY (Per accident)	\$	
		HIRED NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	\$	
									\$	
Α	Х	UMBRELLA LIAB X OCCUR						EACH OCCURRENCE	\$	10,000,000
		EXCESS LIAB CLAIMS-MADE			ULP0057153-04	09/01/2018	12/21/2019	AGGREGATE	\$	10,000,000
		DED X RETENTION \$ 10,000)						\$	
В	WOF	KERS COMPENSATION EMPLOYERS' LIABILITY						X PER OTH-		
	ANY	PROPRIETOR/PARTNER/EXECUTIVE Y / N	N/A		UB-8J417632	12/20/2017	12/20/2018	E.L. EACH ACCIDENT	\$	1,000,000
		CER/MEMBER EXCLUDED?	N/A					E.L. DISEASE - EA EMPLOYEE	\$	1,000,000
	If yes	s, describe under CRIPTION OF OPERATIONS below						E.L. DISEASE - POLICY LIMIT	\$	1,000,000
С	Exc	ess Liability			EXC10007270903	09/01/2018	12/21/2019	Limit (\$10M xs \$10M)		10,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
The Insurer may cancel these policies by mailing or delivering to the First Named Insured written notice of cancellation at least: 10 days before the effective date of cancellation, if they cancel for non payment of premium; or 30 days before the effective date of cancellation, if they cancel for any other reason.

This certificate supersedes all previously issued certificates. All previously issued certificates are now void.

This Certificate is issued as Evidence of Insurance Only.

CERTIFICATE HOLDER	CANCELLATION
Evidence Only	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE

E8 - 1

SINGLE LINE DIAGRAM

TO LINE TAP ON REQUIRED PROTECTION EAST MICHIGAN AVENUE'S 46kV LINE DEV FUNCTION **NOTES** (SEE NOTE 7) 25 SYNCH CHECK 1. SEE DWG E8-2 FOR INVERTER CONNECTION SINGLE-LINE. 27 UNDER VOLTAGE 2. PRELIMINARY PROTECTIVE RELAYING CONFIGURATION DISIGNED PER 32 DIRECTIONAL POWER UTILITY INTERCONNECTION REQUIREMENTS. 50/51 INST & TD OC 3. REQUIREMENT FOR REACTIVE COMPENSATION TO BE DETERMINED DURING 59 OVER VOLTAGE DETAILED DESIGN. 67 DIRECTIONAL OC 4. THIS DISCONNECT SWITCH IS TO BE USED AS A LOCKABLE VISIBLE 81 OVER/UNDER FREQ 72kV MEANS OF DISCONNECT. 1200A 5. THIS BREAKER IS TO BE USED AS THE ISOLATION DEVICE FOR THE HIGH UTILITY METERING SIDE OF THE TRANSFORMER AND WILL BE USED FOR PROTECTIVE TAGGING. MODEM MODEM 6. THREE PHASE SHORT CIRCUIT CONTRIBUTION: 226 A (WHM ≤ 1 CYCLE METERING UNITS PRIMARY BACKUP POTENTIAL: 7. 46kV LINE APPROXIMATELY 0.028 MILES IN LENGTH BETWEEN POI AND OH/UG TRANSITION WITH IMPEDANCE AS FOLLOWS: 3-1ø, 26,558V:115V, 230:1 CURRENT: R/X/B = 0.000456/0.000966/0.0000031200:5 B0.1-1.8 IMPÉDANCE LISTED IS PER UNIT ON A 100 MVA BASE 8. ELECTRIC USE OF THE SITE DURING NON-GENERATING HOURS WILL BE APPROXIMATELY 12kW. 1200A NOTE 4 29kV MCOV 3-1ø PT'S SEE NOTE 2 26,558V:115V SYMBOL LEGEND 230:1 SURGE ARRESTOR MRCT 1200:5A VOLTAGE OR POTENTIAL TRANSFORMER 1200A, 20KAIC (NOTE 5 & NOTE 6) 52 POWER CIRCUIT BREAKER 1200:5A FUSE 26,558V:115V 00 DISCONNECT SWITCH 230:1 CABLE TRANSFER TO UNDERGROUND 1200A CURRENT-LIMITTING FUSE 26,558-120/240V 50KVA CURRENT TRANSFORMER J AND AC DISTRIBUTION PANEL BUS 29kV MCOV CT SECONDARY WIRING Son Emily PT/VT SECONDARY WIRING SWEN 1/16/2019SORVALA ENGINEER NO. 57112 NOT FOR CONSTRUCTION THIS DRAWING WAS PREPARED BY POWER ENGINEERS, INC. FOR A SPECIFIC PROJECT, TAKING INTO CONSIDERATION THE SPECIFIC **DSGN** JAN 07/12/17 JOB NUMBER | REV SPOWER D UPDATED FOR PRELIMINARY STAMP 01/16/19 MNR FBU SS DRN EMC 07/12/1 POWER ENGINEERS MIC 2 SOLAR 15MW SOLAR GENERATION 136890 AND UNIQUE REQUIREMENTS OF THE PROJECT. CKD C UPDATED TO 15MW INSTALLATION MER 07/12/1 07/12/17 EMC FBU JAN REUSE OF THIS DRAWING OR ANY INFORMATION
CONTAINED IN THIS DRAWING FOR ANY PURPOSE B ADDED PROTECTION & UPDATED VOLTAGE | 06/21/17 | EMC | JAN | MER DRAWING NUMBER SCALE:

03/24/17 VMG JAN MER

DATE DRN DSGN CKD APPD

E8-2 INVERTER CONN. SINGLE LINE DIAGRAM

REFERENCE DRAWINGS

FOR 22x34 DWG ONLY

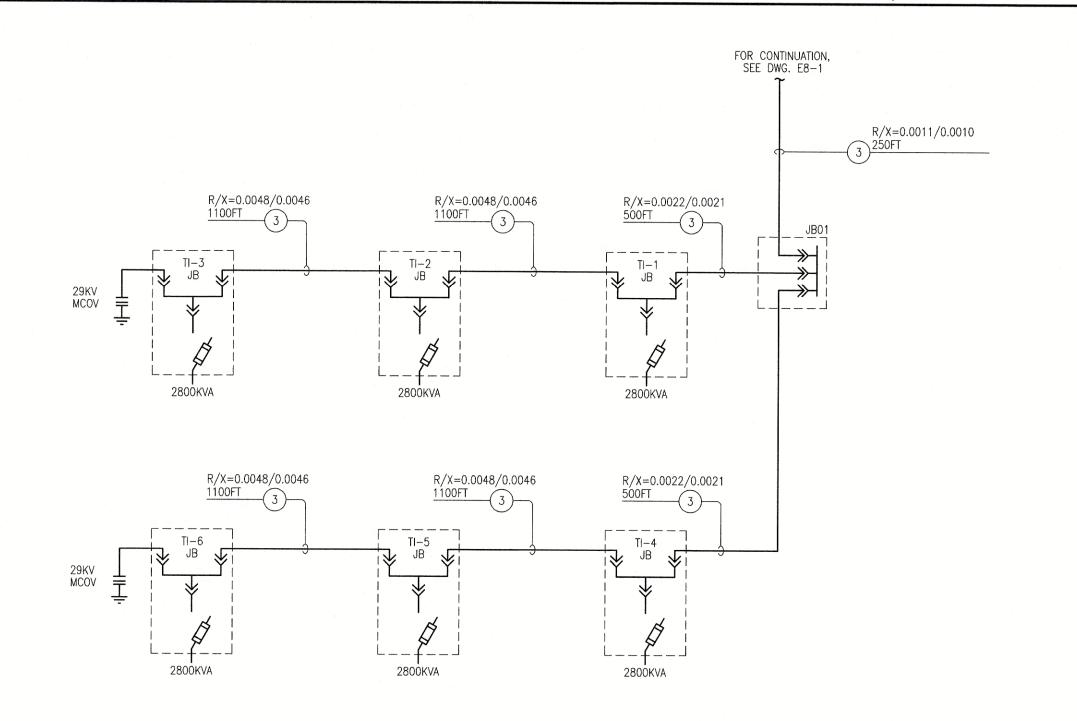
A ISSUED FOR APPLICATION

REVISIONS

REV

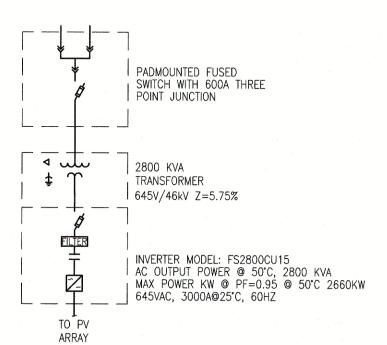
IS PROHIBITED UNLESS WRITTEN PERMISSION

FROM BOTH POWER AND POWER'S CLIENT IS



NOTES

- 1. CABLE SIZE & LENGTH TO BE VERIFIED DURING FINAL DESIGN.
- 2. CABLE AMPACITIES WERE CALCULATED AT A CONDUCTOR TEMPERATURE OF 105°C.



1X HEC-US PLUS FS2800CU15 INVERTER CONFIGURATION

			CABLE DATA (SEE NO	TES 1&2)	-
	ID #	QTY	CABLE	GROUND	AMPACITY
	1	3	#1/0 AWG 1/C-AL	#4-CU	230
	2	3	#2/0 AWG 1/C-AL	#4-CU	260
	3	3	#4/0 AWG 1/C-AL	#2-CU	340
OF MICH	4	3	#250 kcmil 1/C-AL	#2-CU	370
OF MICH	5	3	#500 kcmil 1/C-AL	#2-CU	545
SINEN	6	3	#750 kcmil 1/C-AL	#1/0-CU	680
VI6/2014 SORVALA	7 8	3	#1000 kcmil 1/C-AL	#2/0-CU	795
SORVALA ENGINEER NO.	VEER PERSON				
82	33				

NOT FOR CONSTRUCTION

		_
WG	THIS DRAWING WAS PREPARED BY POWER ENGINEERS, INC. FOR A SPECIFIC PROJECT,	Γ
۵.	ENGINEERS, INC. FOR A SPECIFIC PROJECT,	ı
5	TAKING INTO CONSIDERATION THE SPECIFIC	ı
က်	AND UNIQUE REQUIREMENTS OF THE PROJECT.	ı
ш	REUSE OF THIS DRAWING OR ANY INFORMATION	ı
7	CONTAINED IN THIS DRAWING FOR ANY PURPOSE	ı
O	IS PROHIBITED UNLESS WRITTEN PERMISSION	l
⋝	FROM BOTH POWER AND POWER'S CLIENT IS	ı
	GRANTED.	ı

			***									_
REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD		REFERENCE DRAWINGS	FO	R 22×34 DW	G ONLY	ı
	ISSUED FOR APPLICATION	03/24/17	VMG	JAN	MER		E8-1	SINGLE LINE DIAGRAM				
В	UPDATED VOLTAGE	06/21/17	EMC	JAN	MER				SCALE:	N	IONE	1
C	UPDATED TO 15MW INSTALLATION	07/12/17	EMC	FBU	JAN				CKD	MER	07/24/17	1
D	UPDATED INVERTER TYPE	07/24/17	EMC	FBU	JAN				DRN	EMC	07/24/17	1
	UPDATED FOR PRELIMINARY STAMP	01/16/19	MNR	FBU	SS	SS			DSGN	JAN	07/24/17	_
em												

15 MW TYPICAL INSTALLATION

,	POWER ENGINEERS	
	ENGINEERS	-

SPOWER	JOB NUMBER	REV
MIC 2 SOLAR 15MW SOLAR GENERATION	136890	E
INVERTER CONNECTION SINGLE LINE DIAGRAM	DRAWING NUME E8-2	IBER

FEDERAL ENERGY REGULATORY COMMISSION WASHINGTON, DC

OMB Control # 1902-0075 Expiration 06/30/2019

Form 556 Certification of Qualifying Facility (QF) Status for a Small Power Production or Cogeneration Facility

General

Questions about completing this form should be sent to Form556@ferc.gov. Information about the Commission's QF program, answers to frequently asked questions about QF requirements or completing this form, and contact information for QF program staff are available at the Commission's QF website, <u>www.ferc.gov/QF</u>. The Commission's QF website also provides links to the Commission's QF regulations (18 C.F.R. § 131.80 and Part 292), as well as other statutes and orders pertaining to the Commission's QF program.

Who Must File

Any applicant seeking QF status or recertification of QF status for a generating facility with a net power production capacity (as determined in lines 7a through 7g below) greater than 1000 kW must file a self-certification or an application for Commission certification of QF status, which includes a properly completed Form 556. Any applicant seeking QF status for a generating facility with a net power production capacity 1000 kW or less is exempt from the certification requirement, and is therefore not required to complete or file a Form 556. See 18 C.F.R. § 292.203.

How to Complete the Form 556

This form is intended to be completed by responding to the items in the order they are presented, according to the instructions given. If you need to back-track, you may need to clear certain responses before you will be allowed to change other responses made previously in the form. If you experience problems, click on the nearest help button (🙌) for assistance, or contact Commission staff at Form556@ferc.gov.

Certain lines in this form will be automatically calculated based on responses to previous lines, with the relevant formulas shown. You must respond to all of the previous lines within a section before the results of an automatically calculated field will be displayed. If you disagree with the results of any automatic calculation on this form, contact Commission staff at Form556@ferc.gov to discuss the discrepancy before filing.

You must complete all lines in this form unless instructed otherwise. Do not alter this form or save this form in a different format. Incomplete or altered forms, or forms saved in formats other than PDF, will be rejected.

How to File a Completed Form 556

Applicants are required to file their Form 556 electronically through the Commission's eFiling website (see instructions on page 2). By filing electronically, you will reduce your filing burden, save paper resources, save postage or courier charges, help keep Commission expenses to a minimum, and receive a much faster confirmation (via an email containing the docket number assigned to your facility) that the Commission has received your filing.

If you are simultaneously filing both a waiver request and a Form 556 as part of an application for Commission certification, see the "Waiver Requests" section on page 3 for more information on how to file.

Paperwork Reduction Act Notice

This form is approved by the Office of Management and Budget. Compliance with the information requirements established by the FERC Form No. 556 is required to obtain or maintain status as a QF. See 18 C.F.R. § 131.80 and Part 292. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The estimated burden for completing the FERC Form No. 556, including gathering and reporting information, is as follows: 3 hours for self-certification of a small power production facility, 8 hours for self-certifications of a cogeneration facility, 6 hours for an application for Commission certification of a small power production facility, and 50 hours for an application for Commission certification of a cogeneration facility. Send comments regarding this burden estimate or any aspect of this collection of information, including suggestions for reducing this burden, to the following: Information Clearance Officer, Office of the Executive Director (ED-32), Federal Energy Regulatory Commission, 888 First Street N.E., Washington, DC 20426 (DataClearance@ferc.gov); and Desk Officer for FERC, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503 (oira submission@omb.eop.gov). Include the Control No. 1902-0075 in any correspondence.

FERC Form 556 Page 2 - Instructions

Electronic Filing (eFiling)

To electronically file your Form 556, visit the Commission's QF website at www.ferc.gov/QF and click the eFiling link.

If you are eFiling your first document, you will need to register with your name, email address, mailing address, and phone number. If you are registering on behalf of an employer, then you will also need to provide the employer name, alternate contact name, alternate contact phone number and and alternate contact email.

Once you are registered, log in to eFiling with your registered email address and the password that you created at registration. Follow the instructions. When prompted, select one of the following QF-related filing types, as appropriate, from the Electric or General filing category.

Filing category	Filing Type as listed in eFiling	Description		
	(Fee) Application for Commission Cert. as Cogeneration QF	Use to submit an application for Commission certification or Commission recertification of a cogeneration facility as a QF.		
	(Fee) Application for Commission Cert. as Small Power QF	Use to submit an application for Commission certification or Commission recertification of a small power production facility as a QF.		
	Self-Certification Notice (QF, EG, FC)	Use to submit a notice of self- certification of your facility (cogeneration or small power production) as a QF.		
Electric	Self-Recertification of Qualifying Facility (QF)	Use to submit a notice of self- recertification of your facility (cogeneration or small power production) as a QF.		
	Supplemental Information or Request	Use to correct or supplement a Form 556 that was submitted with errors or omissions, or for which Commission staff has requested additional information. Do <i>not</i> use this filing type to report new changes to a facility or its ownership; rather, use a self- recertification or Commission recertification to report such changes.		
General	(Fee) Petition for Declaratory Order (not under FPA Part 1)	Use to submit a petition for declaratory order granting a waiver of Commission QF regulations pursuant to 18 C.F.R. §§ 292.204(a) (3) and/or 292.205(c). A Form 556 is not required for a petition for declaratory order unless Commission recertification is being requested as part of the petition.		

You will be prompted to submit your filing fee, if applicable, during the electronic submission process. Filing fees can be paid via electronic bank account debit or credit card.

During the eFiling process, you will be prompted to select your file(s) for upload from your computer.

FERC Form 556 Page 3 - Instructions

Filing Fee

No filing fee is required if you are submitting a self-certification or self-recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(a).

A filing fee is required if you are filing either of the following:

- (1) an application for Commission certification or recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(b), or
- (2) a petition for declaratory order granting waiver pursuant to 18 C.F.R. §§ 292.204(a)(3) and/or 292.205(c).

The current fees for applications for Commission certifications and petitions for declaratory order can be found by visiting the Commission's QF website at www.ferc.gov/QF and clicking the Fee Schedule link.

You will be prompted to submit your filing fee, if applicable, during the electronic filing process described on page 2.

Required Notice to Utilities and State Regulatory Authorities

Pursuant to 18 C.F.R. § 292.207(a)(ii), you must provide a copy of your self-certification or request for Commission certification to the utilities with which the facility will interconnect and/or transact, as well as to the State regulatory authorities of the states in which your facility and those utilities reside. Links to information about the regulatory authorities in various states can be found by visiting the Commission's QF website at www.ferc.gov/QF and clicking the Notice Requirements link.

What to Expect From the Commission After You File

An applicant filing a Form 556 electronically will receive an email message acknowledging receipt of the filing and showing the docket number assigned to the filing. Such email is typically sent within one business day, but may be delayed pending confirmation by the Secretary of the Commission of the contents of the filing.

An applicant submitting a self-certification of QF status should expect to receive no documents from the Commission, other than the electronic acknowledgement of receipt described above. Consistent with its name, a self-certification is a certification by the applicant itself that the facility meets the relevant requirements for QF status, and does not involve a determination by the Commission as to the status of the facility. An acknowledgement of receipt of a self-certification, in particular, does not represent a determination by the Commission with regard to the QF status of the facility. An applicant self-certifying may, however, receive a rejection, revocation or deficiency letter if its application is found, during periodic compliance reviews, not to comply with the relevant requirements.

An applicant submitting a request for Commission certification will receive an order either granting or denying certification of QF status, or a letter requesting additional information or rejecting the application. Pursuant to 18 C.F.R. § 292.207(b)(3), the Commission must act on an application for Commission certification within 90 days of the later of the filing date of the application or the filing date of a supplement, amendment or other change to the application.

Waiver Requests

18 C.F.R. § 292.204(a)(3) allows an applicant to request a waiver to modify the method of calculation pursuant to 18 C.F.R. § 292.204(a)(2) to determine if two facilities are considered to be located at the same site, for good cause. 18 C.F.R. § 292.205(c) allows an applicant to request waiver of the requirements of 18 C.F.R. §§ 292.205(a) and (b) for operating and efficiency upon a showing that the facility will produce significant energy savings. A request for waiver of these requirements must be submitted as a petition for declaratory order, with the appropriate filing fee for a petition for declaratory order. Applicants requesting Commission recertification as part of a request for waiver of one of these requirements should electronically submit their completed Form 556 along with their petition for declaratory order, rather than filing their Form 556 as a separate request for Commission recertification. Only the filing fee for the petition for declaratory order must be paid to cover both the waiver request and the request for recertification *if such requests are made simultaneously*.

18 C.F.R. § 292.203(d)(2) allows an applicant to request a waiver of the Form 556 filing requirements, for good cause. Applicants filing a petition for declaratory order requesting a waiver under 18 C.F.R. § 292.203(d)(2) do not need to complete or submit a Form 556 with their petition.

FERC Form 556 Page 4 - Instructions

Geographic Coordinates

If a street address does not exist for your facility, then line 3c of the Form 556 requires you to report your facility's geographic coordinates (latitude and longitude). Geographic coordinates may be obtained from several different sources. You can find links to online services that show latitude and longitude coordinates on online maps by visiting the Commission's QF webpage at www.ferc.gov/QF and clicking the Geographic Coordinates link. You may also be able to obtain your geographic coordinates from a GPS device, Google Earth (available free at https://earth.google.com), a property survey, various engineering or construction drawings, a property deed, or a municipal or county map showing property lines.

Filing Privileged Data or Critical Energy Infrastructure Information in a Form 556

The Commission's regulations provide procedures for applicants to either (1) request that any information submitted with a Form 556 be given privileged treatment because the information is exempt from the mandatory public disclosure requirements of the Freedom of Information Act, 5 U.S.C. § 552, and should be withheld from public disclosure; or (2) identify any documents containing critical energy infrastructure information (CEII) as defined in 18 C.F.R. § 388.113 that should not be made public.

If you are seeking privileged treatment or CEII status for any data in your Form 556, then you must follow the procedures in 18 C.F.R. § 388.112. See www.ferc.gov/help/filing-guide/file-ceii.asp for more information.

Among other things (see 18 C.F.R. § 388.112 for other requirements), applicants seeking privileged treatment or CEII status for data submitted in a Form 556 must prepare and file both (1) a complete version of the Form 556 (containing the privileged and/or CEII data), and (2) a public version of the Form 556 (with the privileged and/or CEII data redacted). Applicants preparing and filing these different versions of their Form 556 must indicate below the security designation of this version of their document. If you are *not* seeking privileged treatment or CEII status for any of your Form 556 data, then you should not respond to any of the items on this page.

Non-Public: Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines indicated below. This non-public version of the applicant's Form 556 contains all data, including the data that is redacted in the (separate) public version of the applicant's Form 556.
Public (redacted): Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines indicated below. This public version of the applicants's Form 556 contains all data except for data from the lines indicated below, which has been redacted.
Privileged : Indicate below which lines of your form contain data for which you are seeking privileged treatment
Critical Energy Infrastructure Information (CEII): Indicate below which lines of your form contain data for which you are seeking CEII status

The eFiling process described on page 2 will allow you to identify which versions of the electronic documents you submit are public, privileged and/or CEII. The filenames for such documents should begin with "Public", "Priv", or "CEII", as applicable, to clearly indicate the security designation of the file. Both versions of the Form 556 should be unaltered PDF copies of the Form 556, as available for download from www.ferc.gov/QF. To redact data from the public copy of the submittal, simply omit the relevant data from the Form. For numerical fields, leave the redacted fields blank. For text fields, complete as much of the field as possible, and replace the redacted portions of the field with the word "REDACTED" in brackets. Be sure to identify above all fields which contain data for which you are seeking non-public status.

The Commission is not responsible for detecting or correcting filer errors, including those errors related to security designation. If your documents contain sensitive information, make sure they are filed using the proper security designation.

FEDERAL ENERGY REGULATORY COMMISSION WASHINGTON, DC

OMB Control # 1902-0075 Expiration 06/30/2019

Form 556 Certification of Qualifying Facility (QF) Status for a Small Power Production or Cogeneration Facility

1b Applicant street a 2180 South 13	oddress 00 East, Suite 600		
1c City		1d State/prov	ince
Salt Lake Cit	У	Utah	
1e Postal code 84106	1f Country (if not United States)		1g Telephone number 801–679–3500
1h Has the instant fa	cility ever previously been certified as a C	QF? Yes 🗌 1	No 🗵
1i If yes, provide the	docket number of the last known QF filir	g pertaining to tl	his facility: QF
1j Under which certi	fication process is the applicant making t	his filing?	<u> </u>
Notice of self-co	ertification/	Application for Co	ommission certification (requires filing e" section on page 3)
QF status. A not notice of self-cer	elf-certification is a notice by the applican ice of self-certification does not establish tification to verify compliance. See the "\ 3 for more information.	a proceeding, an	d the Commission does not review a
1k What type(s) of Q	F status is the applicant seeking for its fac	cility? (check all th	nat apply)
Qualifying sma	l power production facility status	Qualifying cogen	eration facility status
1I What is the purpo	se and expected effective date(s) of this f	iling?	
○ Original certifice ○ Original c	ation; facility expected to be installed by	9/30/20 a	nd to begin operation on 12/31/20
	previously certified facility to be effective		
) of change(s) below, and describe chang	ge(s) in the Miscel	laneous section starting on page 19)
	ge and/or other administrative change(s)		
☐ Change in o	·	1	
_	ffecting plant equipment, fuel use, powe		acity and/or cogeneration thermal outpu
	orrection to a previous filing submitted on pplement or correction in the Miscellane		ng on page 10)
	sible, explaining any special circumstanc		ribe your situation and complete the forr neous section starting on page 19.
previously gra	cility complies with the Commission's QF anted by the Commission in an order dat Miscellaneous section starting on page 19	ed	virtue of a waiver of certain regulations (specify any other relevant waiver
	cility would comply with the Commissior with this application is granted	n's QF requiremer	nts if a petition for waiver submitted
The instant fa	cility complies with the Commission's reco	julations, but has	special circumstances, such as the

FERC Form 556 Page 6 - All Facilities

tion	2a Name of contact person Sean McBride			2b Telephone number 801–679–3506		
	2c Which of the following describes the contact person's relationship to the applicant? (check one)					
		·				
				zed to represent the applicant		
	Employee of a company affiliat					
Па	Lawyer, consultant, or other re	<u> </u>		<u>·</u>	_	
Jorr	2d Company or organization name FTP Power LLC	(if applicant is an individu	al, check here and	d skip to line 2e)		
Contact Information	2e Street address (if same as Application	ant, check here and skip t	o line 3a) 🔀		0	
Ŭ	2f City		2g State/provi	ince	_	
	2h Postal code	2i Country (if not United	l States)			
	3a Facility name				-	
O	Thorn Lake Solar Facilit	СУ				
ati	3b Street address (if a street address	s does not exist for the fac	ility, check here a	nd skip to line 3c) 🔀	A	
o ₋					•	
þ						
entification and Location	3c Geographic coordinates: If you indicated that no street address exists for your facility by checking the box in line 3b, then you must specify the latitude and longitude coordinates of the facility in degrees (to three decimal places). Use the following formula to convert to decimal degrees from degrees, minutes and seconds: decimal degrees = degrees + (minutes/60) + (seconds/3600). See the "Geographic Coordinates" section on page 4 for help. If you provided a street address for your facility in line 3b, then specifying the geographic coordinates below is optional.					
denti	Longitude East (+) 84	degrees	Latitude	\bigcirc North (+) 42.266 degrees \bigcirc		
Facility Id	3d City (if unincorporated, check here and enter nearest city) 3e State/p			rovince		
i≟	Grass Lake Charter Township Michigan					
.ac	3f County (or check here for independent	ndent city) 🗌 3	g Country (if not	United States)	A	
Щ	Jackson				•	
	Identify the electric utilities that are contemplated to transact with the facility.					
es	4a Identify utility interconnecting with the facility					
ΞΞ	Consumers Energy					
g Uti	4b Identify utilities providing wheeling service or check here if none ⊠					
Transacting Utilities	4c Identify utilities purchasing the useful electric power output or check here if none Consumers Energy				0	
Tran	4d Identify utilities providing supplementary power, backup power, maintenance power, and/or interruptible power service or check here if none				7	
	Consumers Energy					

FERC Form 556 Page 7 - All Facilities

	Direct ownership as of effective date or operation date: Identify all direct owners of percent equity interest. For each identified owner, also (1) indicate whether that ow defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or a holding con 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)), and (utilities or holding companies, provide the percentage of equity interest in the facility direct owners hold at least 10 percent equity interest in the facility, then provide the two direct owners with the largest equity interest in the facility.	oner is an electric uti mpany, as defined ir (2) for owners which ty held by that own	lity, as n section are electri er. If no
	Full legal names of direct owners	Electric utility or holding company	If Yes % equi intere
1)	sPower Development Company, LLC	Yes ⊠ No □	10
2)		Yes No	
3)		Yes No	
4)		Yes No	
5)		Yes No	
6)		Yes No	
7)		Yes No	
8)		Yes No	
9)		Yes No	
10))	Yes No	
5b	Upstream (i.e., indirect) ownership as of effective date or operation date: Identify all of the facility that both (1) hold at least 10 percent equity interest in the facility, and defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or holding com 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)). Also equity interest in the facility held by such owners. (Note that, because upstream ow	l upstream (i.e., indir (2) are electric utilit panies, as defined ir provide the percen	ect) owno
5b	Upstream (i.e., indirect) ownership as of effective date or operation date: Identify all of the facility that both (1) hold at least 10 percent equity interest in the facility, and defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or holding com 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)). Also equity interest in the facility held by such owners. (Note that, because upstream ow another, total percent equity interest reported may exceed 100 percent.) Check here if no such upstream owners exist.	l upstream (i.e., indir (2) are electric utilit panies, as defined ir provide the percen ners may be subsidi	ect) ownores, as a section tage of aries of o
	Upstream (i.e., indirect) ownership as of effective date or operation date: Identify all of the facility that both (1) hold at least 10 percent equity interest in the facility, and defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or holding com 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)). Also equity interest in the facility held by such owners. (Note that, because upstream ow another, total percent equity interest reported may exceed 100 percent.) Check here if no such upstream owners exist. Full legal names of electric utility or holding company upstream own	l upstream (i.e., indir (2) are electric utilit panies, as defined ir provide the percen ners may be subsidi	ect) owners, as a section tage of aries of o
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U-20500 - March 19, 2019 Complaint by sPower Development Company, LLC Attachment K

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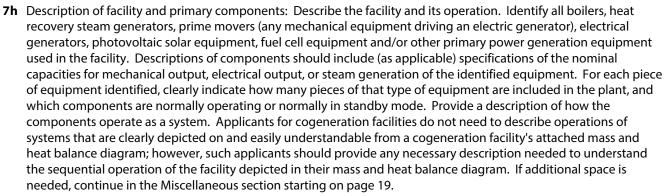
oa De	scribe the primary energy input: (check	Cone main category and, ii applicab	ie, one subcategory)					
	Biomass (specify)	Renewable resources (specify	y) Geothermal					
	☐ Landfill gas	☐ Hydro power - river	Fossil fuel (specify)					
		☐ Hydro power - tidal	☐ Coal (not waste)					
	☐ Municipal solid waste	☐ Hydro power - wave	☐ Fuel oil/diesel					
	☐ Sewage digester gas	⊠ Solar - photovoltaic	Natural gas (not waste)					
	☐ Wood	☐ Solar - thermal	Other fossil fuel					
	Other biomass (describe on pag	je 19) 🔲 Wind	(describe on page 19)					
	Waste (specify type below in line 6b)	Other renewable resou (describe on page 19)	rce Other (describe on page 19)					
6b If y	6b If you specified "waste" as the primary energy input in line 6a, indicate the type of waste fuel used: (check one)							
	Waste fuel listed in 18 C.F.R. § 292.20	02(b) (specify one of the following)						
	☐ Anthracite culm produced pri	or to July 23, 1985						
	Anthracite refuse that has an a ash content of 45 percent or n		less per pound and has an average					
	Bituminous coal refuse that had average ash content of 25 per	as an average heat content of 9,500 cent or more	Btu per pound or less and has an					
	Top or bottom subbituminous coal produced on Federal lands or on Indian lands that has been determined to be waste by the United States Department of the Interior's Bureau of Land Management (BLM) or that is located on non-Federal or non-Indian lands outside of BLM's jurisdiction, provided that the applicant shows that the latter coal is an extension of that determined by BLM to be waste							
	Coal refuse produced on Federal lands or on Indian lands that has been determined to be waste by the BLM or that is located on non-Federal or non-Indian lands outside of BLM's jurisdiction, provided that applicant shows that the latter is an extension of that determined by BLM to be waste							
	$\hfill\Box$ Lignite produced in association with the production of montan wax and lignite that becomes exposed as a result of such a mining operation							
	☐ Gaseous fuels (except natural gas and synthetic gas from coal) (describe on page 19)							
	Waste natural gas from gas or oil wells (describe on page 19 how the gas meets the requirements of 18 C.F.R. § 2.400 for waste natural gas; include with your filing any materials necessary to demonstrate compliance with 18 C.F.R. § 2.400)							
	Materials that a government a	gency has certified for disposal by c	ombustion (describe on page 19)					
	☐ Heat from exothermic reaction	ns (describe on page 19)	Residual heat (describe on page 19)					
	☐ Used rubber tires ☐ P	lastic materials	y off-gas 🔲 Petroleum coke					
	Other waste energy input that has little or no commercial value and exists in the absence of the qualifying facility industry (describe in the Miscellaneous section starting on page 19; include a discussion of the fuel's lack of commercial value and existence in the absence of the qualifying facility industry)							
en	ovide the average energy input, calcula ergy inputs, and provide the related pe 2.202(j)). For any oil or natural gas fuel	ercentage of the total average annua	al energy input to the facility (18 C.F.R. §					
	Fuel	Annual average energy input for specified fuel	Percentage of total annual energy input					
	Natural gas	0 Btu/l	n 0 %					
	Oil-based fuels	0 Btu/l	n 0 %					
	Coal	∩ Rtu/l	0 %					

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Indicate the maximum gross and maximum net electric power production capacity of the facility at the point(s) of delivery by completing the worksheet below. Respond to all items. If any of the parasitic loads and/or losses identified in lines 7b through 7e are negligible, enter zero for those lines.

7a The maximum gross power production capacity at the terminals of the individual generator(s) under the most favorable anticipated design conditions	26,000 kW
7b Parasitic station power used at the facility to run equipment which is necessary and integral to the power production process (boiler feed pumps, fans/blowers, office or maintenance buildings directly related to the operation of the power generating facility, etc.). If this facility includes non-power production processes (for instance, power consumed by a cogeneration facility's thermal host), do not include any power consumed by the non-power production activities in your	
reported parasitic station power.	0 kW
7c Electrical losses in interconnection transformers	
	0 kW
7d Electrical losses in AC/DC conversion equipment, if any	
	6,000 kW
7e Other interconnection losses in power lines or facilities (other than transformers and AC/DC conversion equipment) between the terminals of the generator(s) and the point of interconnection	
with the utility	0 kW
7f Total deductions from gross power production capacity = 7b + 7c + 7d + 7e	
	6,000.0 kW
7g Maximum net power production capacity = 7a - 7f	
	20,000.0 kW



The facility will be comprised of 74,286 solar modules with a nameplate DC rating of 350W each. The modules will be attached to single-axis tracker racking. The facility will use 10 inverters with a nameplate AC output of 2,000 kW each.

The facility includes all generator interconnection equipment necessary to deliver output from the facility to the grid .



Information Required for Small Power Production Facility

If you indicated in line 1k that you are seeking qualifying small power production facility status for your facility, then you must respond to the items on this page. Otherwise, skip page 10.

	Pursuant to 18 C.F.R. § 292.204(a), the power production capacity of any small power with the power production capacity of any other small power production facilities th resource, are owned by the same person(s) or its affiliates, and are located at the sam megawatts. To demonstrate compliance with this size limitation, or to demonstrate from this size limitation under the Solar, Wind, Waste, and Geothermal Power Produc (Pub. L. 101-575, 104 Stat. 2834 (1990) as amended by Pub. L. 102-46, 105 Stat. 249 (1991) as a policible of through 8e below (as applicable).	at use the same energy ne site, may not exceed 80 that your facility is exempt ction Incentives Act of 1990
41	8a Identify any facilities with electrical generating equipment located within 1 mile equipment of the instant facility, and for which any of the entities identified in lines 5 at least a 5 percent equity interest.	
JCE	Check here if no such facilities exist.	1
of Compliar Limitations	Facility location Root docket # (city or county, state) (if any) Common owner(s)	Maximum net power production capacity
om) tati	1) QF	kW
j. Ei	2) QF	kW
in o Se L	3) QF	kW
tification with Size	Check here and continue in the Miscellaneous section starting on page 19 if add	litional space is needed
Certification of Compliance with Size Limitations	 8b The Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 199 exemption from the size limitations in 18 C.F.R. § 292.204(a) for certain facilities that a Are you seeking exemption from the size limitations in 18 C.F.R. § 292.204(a) by virtue.	were certified prior to 1995. e of the Incentives Act? ough 8e)
	8d Did construction of the facility commence on or before December 31, 1999? Yes	es No
	8e If you answered No in line 8d, indicate whether reasonable diligence was exercis the facility, taking into account all factors relevant to construction? Yes No a brief narrative explanation in the Miscellaneous section starting on page 19 of the coparticular, describe why construction started so long after the facility was certified) at toward completion of the facility.	If you answered Yes, provide construction timeline (in
Certification of Compliance with Fuel Use Requirements	Pursuant to 18 C.F.R. § 292.204(b), qualifying small power production facilities may u amounts, for only the following purposes: ignition; start-up; testing; flame stabilizati prevention of unanticipated equipment outages; and alleviation or prevention of em the public health, safety, or welfare, which would result from electric power outages. used for these purposes may not exceed 25 percent of the total energy input of the f period beginning with the date the facility first produces electric energy or any calen	on; control use; alleviation or nergencies, directly affecting . The amount of fossil fuels facility during the 12-month
of C Re	9a Certification of compliance with 18 C.F.R. § 292.204(b) with respect to uses of foss	sil fuel:
on o Use	Applicant certifies that the facility will use fossil fuels exclusively for the purpo	oses listed above.
cati Jel	9b Certification of compliance with 18 C.F.R. § 292.204(b) with respect to amount of	fossil fuel used annually:
Certifi vith Fu	Applicant certifies that the amount of fossil fuel used at the facility will not, in percent of the total energy input of the facility during the 12-month period b facility first produces electric energy or any calendar year thereafter.	

Information Required for Cogeneration Facility

If you indicated in line 1k that you are seeking qualifying cogeneration facility status for your facility, then you must respond to the items on pages 11 through 13. Otherwise, skip pages 11 through 13.

	Pursuant to 18 C.F.R. § 292.202(c), a cogeneration facility produces electric energy and forms of useful thermal energy (such as heat or steam) used for industrial, commercial, heating, or cooling purposes, through the sequential use of energy. Pursuant to 18 C.F.R. § 292.202(s), "sequential use" of energy means the following: (1) for a topping-cycle cogeneration facility, the use of reject heat from a power production process in sufficient amounts in a				
	thermal application or process to conform to the requirements of the operating standard contained in 18 C.F.R. § 292.205(a); or (2) for a bottoming-cycle cogeneration facility, the use of at least some reject heat from a thermal application or process for power production.				
	10a What type(s) of cog	eneration technology does the facility represent? (check all that apply)			
		cogeneration Bottoming-cycle cogeneration			
	10b To help demonstrate the sequential operation of the cogeneration process, and to support compliance with other requirements such as the operating and efficiency standards, include with your filing a mass and heat balance diagram depicting average annual operating conditions. This diagram must include certain items and meet certain requirements, as described below. You must check next to the description of each requirement below to certify that you have complied with these requirements.				
	Check to certify compliance with				
	indicated requirement	Requirement			
ration ر		Diagram must show orientation within system piping and/or ducts of all prime movers, heat recovery steam generators, boilers, electric generators, and condensers (as applicable), as well as any other primary equipment relevant to the cogeneration process.			
gene natior		Any average annual values required to be reported in lines 10b, 12a, 13a, 13b, 13d, 13f, 14a, 15b, 15d and/or 15f must be computed over the anticipated hours of operation.			
General Cogeneration Information		Diagram must specify all fuel inputs by fuel type and average annual rate in Btu/h. Fuel for supplementary firing should be specified separately and clearly labeled. All specifications of fuel inputs should use lower heating values.			
iene		Diagram must specify average gross electric output in kW or MW for each generator.			
IJ		Diagram must specify average mechanical output (that is, any mechanical energy taken off of the shaft of the prime movers for purposes not directly related to electric power generation) in horsepower, if any. Typically, a cogeneration facility has no mechanical output.			
		At each point for which working fluid flow conditions are required to be specified (see below), such flow condition data must include mass flow rate (in lb/h or kg/s), temperature (in °F, R, °C or K), absolute pressure (in psia or kPa) and enthalpy (in Btu/lb or kJ/kg). Exception: For systems where the working fluid is <i>liquid only</i> (no vapor at any point in the cycle) and where the type of liquid and specific heat of that liquid are clearly indicated on the diagram or in the Miscellaneous section starting on page 19, only mass flow rate and temperature (not pressure and enthalpy) need be specified. For reference, specific heat at standard conditions for pure liquid water is approximately 1.002 Btu/ (lb*R) or 4.195 kJ/(kg*K).			
		Diagram must specify working fluid flow conditions at input to and output from each steam turbine or other expansion turbine or back-pressure turbine.			
		Diagram must specify working fluid flow conditions at delivery to and return from each thermal application.			
		Diagram must specify working fluid flow conditions at make-up water inputs.			





	3 3	
	EPAct 2005 cogeneration facilities: The Energy Policy Act of 2005 (EPAct 2005) established a new section 210(n) of the Public Utility Regulatory Policies Act of 1978 (PURPA), 16 USC 824a-3(n), with additional requirements for any qualifying cogeneration facility that (1) is seeking to sell electric energy pursuant to section 210 of PURPA and (2) was either not a cogeneration facility on August 8, 2005, or had not filed a self-certification or application for Commission certification of QF status on or before February 1, 2006. These requirements were implemented by the Commission in 18 C.F.R. § 292.205(d). Complete the lines below, carefully following the instructions, to demonstrate whether these additional requirements apply to your cogeneration facility and, if so, whether your facility complies with such requirements.	
	11a Was your facility operating as a qualifying cogeneration facility on or before August 8, 2005? Yes No	E
	11b Was the initial filing seeking certification of your facility (whether a notice of self-certification or an application for Commission certification) filed on or before February 1, 2006? Yes No	E
ی په	If the answer to either line 11a or 11b is Yes, then continue at line 11c below. Otherwise, if the answers to both lines 11a and 11b are No, skip to line 11e below.	
ntal Use scilities	11c With respect to the design and operation of the facility, have any changes been implemented on or after February 2, 2006 that affect general plant operation, affect use of thermal output, and/or increase net power production capacity from the plant's capacity on February 1, 2006?	•
ner 7 F	Yes (continue at line 11d below)	
2005 Requirements for Fundamental Use ergy Output from Cogeneration Facilities	No. Your facility is not subject to the requirements of 18 C.F.R. § 292.205(d) at this time. However, it may be subject to to these requirements in the future if changes are made to the facility. At such time, the applicant would need to recertify the facility to determine eligibility. Skip lines 11d through 11j.	
s for oger	11d Does the applicant contend that the changes identified in line 11c are not so significant as to make the facility a "new" cogeneration facility that would be subject to the 18 C.F.R. § 292.205(d) cogeneration requirements?	E
ements from C	Yes. Provide in the Miscellaneous section starting on page 19 a description of any relevant changes made to the facility (including the purpose of the changes) and a discussion of why the facility should not be considered a "new" cogeneration facility in light of these changes. Skip lines 11e through 11j.	
Require utput 1	No. Applicant stipulates to the fact that it is a "new" cogeneration facility (for purposes of determining the applicability of the requirements of 18 C.F.R. § 292.205(d)) by virtue of modifications to the facility that were initiated on or after February 2, 2006. Continue below at line 11e.	
05	11e Will electric energy from the facility be sold pursuant to section 210 of PURPA?	E
t 20 nerg	Yes. The facility is an EPAct 2005 cogeneration facility. You must demonstrate compliance with 18 C.F.R. § 292.205(d)(2) by continuing at line 11f below.	
EPAct 2 of Ener	No. Applicant certifies that energy will <i>not</i> be sold pursuant to section 210 of PURPA. Applicant also certifies its understanding that it must recertify its facility in order to determine compliance with the requirements of 18 C.F.R. § 292.205(d) <i>before</i> selling energy pursuant to section 210 of PURPA in the future. Skip lines 11f through 11j.	
	11f Is the net power production capacity of your cogeneration facility, as indicated in line 7g above, less than or equal to 5,000 kW?	E
	Yes, the net power production capacity is less than or equal to 5,000 kW. 18 C.F.R. § 292.205(d)(4) provides a rebuttable presumption that cogeneration facilities of 5,000 kW and smaller capacity comply with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2). Applicant certifies its understanding that, should the power production capacity of the facility increase above 5,000 kW, then the facility must be recertified to (among other things) demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Skip lines 11g through 11j.	
	No, the net power production capacity is greater than 5,000 kW. Demonstrate compliance with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2) by continuing on the next page at line 11g	

Page 13 - Cogeneration Facilities

FERC Form 556

EPAct 2005 Requirements for Fundamental Use of Energy Output from Cogeneration Facilities (continued)

Lines 11g through 11k below guide the applicant through the process of demonstrating compliance with the requirements for "fundamental use" of the facility's energy output. 18 C.F.R. § 292.205(d)(2). Only respond to the lines on this page if the instructions on the previous page direct you to do so. Otherwise, skip this page.

18 C.F.R. § 292.205(d)(2) requires that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility. If you were directed on the previous page to respond to the items on this page, then your facility is an EPAct 2005 cogeneration facility that is subject to this "fundamental use" requirement.

The Commission's regulations provide a two-pronged approach to demonstrating compliance with the requirements for fundamental use of the facility's energy output. First, the Commission has established in 18 C.F.R. § 292.205(d)(3) a "fundamental use test" that can be used to demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Under the fundamental use test, a facility is considered to comply with 18 C.F.R. § 292.205(d)(2) if at least 50 percent of the facility's total annual energy output (including electrical, thermal, chemical and mechanical energy output) is used for industrial, commercial, residential or institutional purposes.

Second, an applicant for a facility that does not pass the fundamental use test may provide a narrative explanation of and support for its contention that the facility nonetheless meets the requirement that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility.

Complete lines 11g through 11j below to determine compliance with the fundamental use test in 18 C.F.R. § 292.205(d)(3). Complete lines 11g through 11j even if you do not intend to rely upon the fundamental use test to demonstrate compliance with 18 C.F.R. § 292.205(d)(2).

11g Amount of electrical, thermal, chemical and mechanical energy output (net of internal	
generation plant losses and parasitic loads) expected to be used annually for industrial,	
commercial, residential or institutional purposes and not sold to an electric utility	MWh
11h Total amount of electrical, thermal, chemical and mechanical energy expected to be	
sold to an electric utility	MWh
11i Percentage of total annual energy output expected to be used for industrial,	
commercial, residential or institutional purposes and not sold to a utility	
= 100 * 11g /(11g + 11h)	0 %

Yes. Your facility complies with 18 C.F.R. § 292.205(d)(2) by virtue of passing the fundamental use test

11j Is the response in line 11i greater than or equal to 50 percent?

provided in 18 C.F.R. § 292.205(d)(3). Applicant certifies its understanding that, if it is to rely upon passing the fundamental use test as a basis for complying with 18 C.F.R. § 292.205(d)(2), then the facility must comply with the fundamental use test both in the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years. No. Your facility does not pass the fundamental use test. Instead, you must provide in the Miscellaneous section starting on page 19 a narrative explanation of and support for why your facility meets the requirement that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a QF to its host facility. Applicants providing a narrative explanation of why their facility should be found to comply with 18 C.F.R. § 292.205(d)(2) in spite of non-compliance with the fundamental use test may want to review paragraphs 47 through 61 of Order No. 671 (accessible from the Commission's QF website at www.ferc.gov/QF), which provide discussion of the facts and circumstances that may support their explanation. Applicant should also note that the percentage reported above will establish the standard that that facility must comply with, both for the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years. See Order No. 671 at paragraph 51. As such, the applicant should make sure that it reports appropriate values on lines 11g and 11h above to serve as the relevant annual standard, taking into account expected variations in production conditions.

Usefulness of Topping-Cycle Thermal Output

Information Required for Topping-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents topping-cycle cogeneration technology, then you must respond to the items on pages 14 and 15. Otherwise, skip pages 14 and 15.

The thermal energy output of a topping-cycle cogeneration facility is the net energy made available to an industrial or commercial process or used in a heating or cooling application. Pursuant to sections 292.202(c), (d) and (h) of the Commission's regulations (18 C.F.R. §§ 292.202(c), (d) and (h)), the thermal energy output of a qualifying toppingcycle cogeneration facility must be useful. In connection with this requirement, describe the thermal output of the topping-cycle cogeneration facility by responding to lines 12a and 12b below. 12a Identify and describe each thermal host, and specify the annual average rate of thermal output made available to each host for each use. For hosts with multiple uses of thermal output, provide the data for each use in separate rows. Average annual rate of thermal output attributable to use (net of Name of entity (thermal host) Thermal host's relationship to facility; heat contained in process taking thermal output Thermal host's use of thermal output return or make-up water) Select thermal host's relationship to facility 1) Select thermal host's use of thermal output Btu/h Select thermal host's relationship to facility 2) Select thermal host's use of thermal output Btu/h Select thermal host's relationship to facility 3) Select thermal host's use of thermal output Btu/h Select thermal host's relationship to facility 4) Select thermal host's use of thermal output Btu/h Select thermal host's relationship to facility 5) Select thermal host's use of thermal output Btu/h Select thermal host's relationship to facility 6) Select thermal host's use of thermal output Btu/h Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed 12b Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each use of the thermal output identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's use of thermal output is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific use of thermal output related to the instant facility, then you need only provide a brief description of that use and a reference by date and docket number to the order certifying your facility with the indicated use. Such exemption may not be used if any change creates a material deviation from the previously authorized use.) If additional space is needed, continue in the Miscellaneous section starting on page 19.



Topping-Cycle Operating and Efficiency Value Calculation

-Cycle Cogeneration Fa	acilities
of the Commission's cycle cogeneration facility that. Section 292.205 ration facilities for whice cility plus one-half the cof natural gas and oil to energy output of the facy. To demonstrate instrate that your facility	ities: (a)(2) :h useful the tility,
inputs and outputs diagram must make cle	ear
	D: //
	Btu/h
	kW
0	Btu/h
	hp
0	Btu/h
U	Dtu/II
	Btu/h
0	%
	mpliance with the toppi of the Commission's cycle cogeneration facility and interest of the facility plus one-half the control of the facility plus one-half the control of the facility plus one-half the control of the facility facility for a demonstrate of the facility respond to lines 13a the ming-cycle cogeneration in inputs and outputs diagram must make cleaping or bottoming) of

	Yes (complies with operating standard) No (does not comply with operating standard)
13j D	oid installation of the facility in its current form commence on or after March 13, 1980?
	Yes. Your facility is subject to the efficiency requirements of 18 C.F.R. § 292.205(a)(2). Demonstrate compliance with the efficiency requirement by responding to line 13k or 13l, as applicable, below.
	No. Your facility is exempt from the efficiency standard. Skip lines 13k and 13l.
13k (Compliance with efficiency standard (for low operating value): If the operating value shown in line 13g is les

13i Compliance with operating standard: Is the operating value shown in line 13g greater than or equal to 5%?

131 Compliance with efficiency standard (for high operating value): If the operating value shown in line 13g is greater than or equal to 15%, then indicate below whether the efficiency value shown in line 13h is greater than or equal to 42.5%:

No (does not comply with efficiency standard)

No (does not comply with efficiency standard)

than 15%, then indicate below whether the efficiency value shown in line 13h greater than or equal to 45%:

Yes (complies with efficiency standard)

Yes (complies with efficiency standard)

Page 16 - Bottoming-Cycle Cogeneration Facilities

Information Required for Bottoming-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents bottoming-cycle cogeneration technology, then you must respond to the items on pages 16 and 17. Otherwise, skip pages 16 and 17.

	The thermal energy output of a bottoming-cycle cogeneration facility is the energy related to which at least some of the reject heat is then used for power production. Pursuant to sections the Commission's regulations (18 C.F.R. § 292.202(c) and (e)), the thermal energy output of a q cycle cogeneration facility must be useful. In connection with this requirement, describe the p at least some of the reject heat is used for power production by responding to lines 14a and 14					
	14a	host. For hosts with multiple bo	nal host and each bottoming-cycle cogeneration prottoming-cycle cogeneration processes, provide the			
		Name of entity (thermal host) performing the process from which at least some of the reject heat is used for power production	Thermal host's relationship to facility; Thermal host's process type	Has the energy input to the thermal host been augmented for purposes of increasing power production capacity? (if Yes, describe on p. 19)		
	1)		Select thermal host's relationship to facility	Yes No		
	',		Select thermal host's process type			
<u>ө</u>	2)		Select thermal host's relationship to facility	Yes No		
.yc	2)		Select thermal host's process type			
) O	3)		Select thermal host's relationship to facility	Yes No		
ii. Ct	3)		Select thermal host's process type			
om utp		Check here and continue in the	ne Miscellaneous section starting on page 19 if addi	tional space is needed		
Usefulness of Bottoming-Cycle Thermal Output	iden facil mus addi prev facil to th char	ntified above. In some cases, this ity's process is not common, and it provide additional details as nestional information may be requirationally received a Commission ceity, then you need only provide a ne order certifying your facility wi	thermal output: At a minimum, provide a brief description is sufficient to demonstrate usefulr for if the usefulness of such thermal output is not recessary to demonstrate usefulness. Your application red if an insufficient showing of usefulness is made. It is a specific bottoming cycle probrief description of that process and a reference by the indicated process. Such exemption may not reade.) If additional space is needed, continue in the formal space is needed.	ness. However, if your asonably clear, then you n may be rejected and/or (Exception: If you have cess related to the instant date and docket number be used if any material		

Page 17 - Bottoming-Cycle Cogeneration Facilities

No (does not comply with efficiency standard)

Applicants for facilities representing bottoming-cycle technology and for which installation commenced on or after March 13, 1990 must demonstrate compliance with the bottoming-cycle efficiency standards. Section 292.205(b) of the Commission's regulations (18 C.F.R. § 292.205(b)) establishes the efficiency standard for bottoming-cycle cogeneration facilities: the useful power output of the facility must be no less than 45 percent of the energy input of natural gas and oil for supplementary firing. To demonstrate compliance with the bottoming-cycle efficiency standard (if applicable), or to demonstrate that your facility is exempt from this standard based on the date that installation of the facility began, respond to lines 15a through 15h below. If you indicated in line 10a that your facility represents both topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 15a through 15h below considering only the energy inputs and outputs attributable to the bottoming-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion of the cogeneration system (topping or bottoming). 15a Did installation of the facility in its current form commence on or after March 13, 1980? Ves. Your facility is subject to the efficiency requirement of 18 C F.R. § 292-205(b). Demonstrate compliance

with the efficiency requirement by responding to lines 15b through 15h below.	emonstrate compilance
No. Your facility is exempt from the efficiency standard. Skip the rest of page 17.	
15b Indicate the annual average rate of net electrical energy output	
	kW
15c Multiply line 15b by 3,412 to convert from kW to Btu/h	
	0 Btu/h
15d Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production	
(this value is usually zero)	hp
15e Multiply line 15d by 2,544 to convert from hp to Btu/h	
	0 Btu/h
15f Indicate the annual average rate of supplementary energy input from natural gas	
or oil	Btu/h
15g Bottoming-cycle efficiency value = 100 * (15c + 15e) / 15f	
	0 %
15h Compliance with efficiency standard: Indicate below whether the efficiency value show than or equal to 45%:	vn in line 15g is greater

Yes (complies with efficiency standard)









FERC Form 556 Page 18 - All Facilities

Certificate of Completeness, Accuracy and Authority

Applicant must certify compliance with and understanding of filing requirements by checking next to each item below and signing at the bottom of this section. Forms with incomplete Certificates of Completeness, Accuracy and Authority will be rejected by the Secretary of the Commission.

Signer identified below certifies the following: (check all items and applicable subitems)

J	g any information contained in any attached docun I any information contained in the Miscellaneous se	•
$oxed{\boxtimes}$ He or she has provided all of the requ to the best of his or her knowledge ar	ired information for certification, and the provided nd belief.	information is true as stated,
He or she possess full power and auth Practice and Procedure (18 C.F.R. § 38	nority to sign the filing; as required by Rule 2005(a)(5.2005(a)(3)), he or she is one of the following: (che	3) of the Commission's Rules of ck one)
$\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	he filing is made	
 An officer of the corporation, 	trust, association, or other organized group on beh	alf of which the filing is made
\Box An officer, agent, or employed filing is made	of the governmental authority, agency, or instrume	ntality on behalf of which the
A representative qualified to practice and Procedure (18 C.I	oractice before the Commission under Rule 2101 of F.R. § 385.2101) and who possesses authority to sig	the Commission's Rules of n
He or she has reviewed all automatic of Miscellaneous section starting on pag	calculations and agrees with their results, unless otl ge 19.	nerwise noted in the
interconnect and transact (see lines 4	Form 556 and all attachments to the utilities with was through 4d), as well as to the regulatory authorition the Required Notice to Public Utilities and State Required Notice The Required No	es of the states in which the
Procedure (18 C.F.R. § 385.2005(c)) provide	ture date below. Rule 2005(c) of the Commission's es that persons filing their documents electronically led documents. A person filing this document elected below.	may use typed characters
Your Signature	Your address	Date
Jennifer L. Mersing	600 University Street, Suite 3600 Seattle, WA 98101	10/31/2018
Audit Notes		
Commission Staff Use Only:		

U-20500 - March 19, 2019 Complaint by sPower Development Company, LLC

FERC Form 556 Page 19 - All Facilities

Miscellaneous

Use this space to provide any information for which there was not sufficient space in the previous sections of the form to provide. For each such item of information *clearly identify the line number that the information belongs to*. You may also use this space to provide any additional information you believe is relevant to the certification of your facility.

Your response below is not limited to one page. Additional page(s) will automatically be inserted into this form if the length of your response exceeds the space on this page. Use as many pages as you require.

Line 5a: sPower Development Company, LLC is not currently an electric utility as defined under section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), but will become an electric utility on the date the facility first generates test power.

U-20500 - March 19, 2019 Complaint by sPower Development Company, LLC Attachment L

FEDERAL ENERGY REGULATORY COMMISSION WASHINGTON, DC

OMB Control # 1902-0075 Expiration 06/30/2019

Form 556 Certification of Qualifying Facility (QF) Status for a Small Power Production or Cogeneration Facility

General

Questions about completing this form should be sent to Form556@ferc.gov. Information about the Commission's QF program, answers to frequently asked questions about QF requirements or completing this form, and contact information for QF program staff are available at the Commission's QF website, www.ferc.gov/QF. The Commission's QF website also provides links to the Commission's QF regulations (18 C.F.R. § 131.80 and Part 292), as well as other statutes and orders pertaining to the Commission's QF program.

Who Must File

Any applicant seeking QF status or recertification of QF status for a generating facility with a net power production capacity (as determined in lines 7a through 7g below) greater than 1000 kW must file a self-certification or an application for Commission certification of QF status, which includes a properly completed Form 556. Any applicant seeking QF status for a generating facility with a net power production capacity 1000 kW or less is exempt from the certification requirement, and is therefore not required to complete or file a Form 556. See 18 C.F.R. § 292.203.

How to Complete the Form 556

This form is intended to be completed by responding to the items in the order they are presented, according to the instructions given. If you need to back-track, you may need to clear certain responses before you will be allowed to change other responses made previously in the form. If you experience problems, click on the nearest help button () for assistance, or contact Commission staff at Form556@ferc.gov.

Certain lines in this form will be automatically calculated based on responses to previous lines, with the relevant formulas shown. You must respond to all of the previous lines within a section before the results of an automatically calculated field will be displayed. If you disagree with the results of any automatic calculation on this form, contact Commission staff at Form556@ferc.gov to discuss the discrepancy before filing.

You must complete all lines in this form unless instructed otherwise. Do not alter this form or save this form in a different format. Incomplete or altered forms, or forms saved in formats other than PDF, will be rejected.

How to File a Completed Form 556

Applicants are required to file their Form 556 electronically through the Commission's eFiling website (see instructions on page 2). By filing electronically, you will reduce your filing burden, save paper resources, save postage or courier charges, help keep Commission expenses to a minimum, and receive a much faster confirmation (via an email containing the docket number assigned to your facility) that the Commission has received your filing.

If you are simultaneously filing both a waiver request and a Form 556 as part of an application for Commission certification, see the "Waiver Requests" section on page 3 for more information on how to file.

Paperwork Reduction Act Notice

This form is approved by the Office of Management and Budget. Compliance with the information requirements established by the FERC Form No. 556 is required to obtain or maintain status as a QF. See 18 C.F.R. § 131.80 and Part 292. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The estimated burden for completing the FERC Form No. 556, including gathering and reporting information, is as follows: 3 hours for self-certification of a small power production facility, 8 hours for self-certifications of a cogeneration facility, 6 hours for an application for Commission certification of a small power production facility, and 50 hours for an application for Commission certification of acility. Send comments regarding this burden estimate or any aspect of this collection of information, including suggestions for reducing this burden, to the following: Information Clearance Officer, Office of the Executive Director (ED-32), Federal Energy Regulatory Commission, 888 First Street N.E., Washington, DC 20426 (DataClearance@ferc.gov); and Desk Officer for FERC, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503 (oira_submission@omb.eop.gov). Include the Control No. 1902-0075 in any correspondence.

FERC Form 556

Electronic Filing (eFiling)

To electronically file your Form 556, visit the Commission's QF website at www.ferc.gov/QF and click the eFiling link.

If you are eFiling your first document, you will need to register with your name, email address, mailing address, and phone number. If you are registering on behalf of an employer, then you will also need to provide the employer name, alternate contact name, alternate contact phone number and and alternate contact email.

Once you are registered, log in to eFiling with your registered email address and the password that you created at registration. Follow the instructions. When prompted, select one of the following QF-related filing types, as appropriate, from the Electric or General filing category.

Filing category	Filing Type as listed in eFiling	Description
	(Fee) Application for Commission Cert. as Cogeneration QF	Use to submit an application for Commission certification or Commission recertification of a cogeneration facility as a QF.
	(Fee) Application for Commission Cert. as Small Power QF	Use to submit an application for Commission certification or Commission recertification of a small power production facility as a QF.
	Self-Certification Notice (QF, EG, FC)	Use to submit a notice of self- certification of your facility (cogeneration or small power production) as a QF.
Electric	Self-Recertification of Qualifying Facility (QF)	Use to submit a notice of self- recertification of your facility (cogeneration or small power production) as a QF.
	Supplemental Information or Request	Use to correct or supplement a Form 556 that was submitted with errors or omissions, or for which Commission staff has requested additional information. Do not use this filing type to report new changes to a facility or its ownership; rather, use a self-recertification or Commission recertification to report such changes.
General	(Fee) Petition for Declaratory Order (not under FPA Part 1)	Use to submit a petition for declaratory order granting a waiver of Commission QF regulations pursuant to 18 C.F.R. §§ 292.204(a) (3) and/or 292.205(c). A Form 556 is not required for a petition for declaratory order unless Commission recertification is being requested as part of the petition.

You will be prompted to submit your filing fee, if applicable, during the electronic submission process. Filing fees can be paid via electronic bank account debit or credit card.

During the eFiling process, you will be prompted to select your file(s) for upload from your computer.

FERC Form 556

Filing Fee

No filing fee is required if you are submitting a self-certification or self-recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(a).

A filing fee is required if you are filing either of the following:

(1) an application for Commission certification or recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(b), or (2) a petition for declaratory order granting waiver pursuant to 18 C.F.R. §§ 292.204(a)(3) and/or 292.205(c).

The current fees for applications for Commission certifications and petitions for declaratory order can be found by visiting the Commission's QF website at www.ferc.gov/QF and clicking the Fee Schedule link.

You will be prompted to submit your filing fee, if applicable, during the electronic filing process described on page 2.

Required Notice to Utilities and State Regulatory Authorities

Pursuant to 18 C.F.R. § 292.207(a)(ii), you must provide a copy of your self-certification or request for Commission certification to the utilities with which the facility will interconnect and/or transact, as well as to the State regulatory authorities of the states in which your facility and those utilities reside. Links to information about the regulatory authorities in various states can be found by visiting the Commission's QF website at www.ferc.gov/QF and clicking the Notice Requirements link.

What to Expect From the Commission After You File

An applicant filing a Form 556 electronically will receive an email message acknowledging receipt of the filing and showing the docket number assigned to the filing. Such email is typically sent within one business day, but may be delayed pending confirmation by the Secretary of the Commission of the contents of the filing.

An applicant submitting a self-certification of QF status should expect to receive no documents from the Commission, other than the electronic acknowledgement of receipt described above. Consistent with its name, a self-certification is a certification by the applicant itself that the facility meets the relevant requirements for QF status, and does not involve a determination by the Commission as to the status of the facility. An acknowledgement of receipt of a self-certification, in particular, does not represent a determination by the Commission with regard to the QF status of the facility. An applicant self-certifying may, however, receive a rejection, revocation or deficiency letter if its application is found, during periodic compliance reviews, not to comply with the relevant requirements.

An applicant submitting a request for Commission certification will receive an order either granting or denying certification of QF status, or a letter requesting additional information or rejecting the application. Pursuant to 18 C.F.R. § 292.207(b)(3), the Commission must act on an application for Commission certification within 90 days of the later of the filing date of the application or the filing date of a supplement, amendment or other change to the application.

Waiver Requests

18 C.F.R. § 292.204(a)(3) allows an applicant to request a waiver to modify the method of calculation pursuant to 18 C.F.R. § 292.204(a)(2) to determine if two facilities are considered to be located at the same site, for good cause. 18 C.F.R. § 292.205(c) allows an applicant to request waiver of the requirements of 18 C.F.R. §§ 292.205(a) and (b) for operating and efficiency upon a showing that the facility will produce significant energy savings. A request for waiver of these requirements must be submitted as a petition for declaratory order, with the appropriate filing fee for a petition for declaratory order. Applicants requesting Commission recertification as part of a request for waiver of one of these requirements should electronically submit their completed Form 556 along with their petition for declaratory order, rather than filing their Form 556 as a separate request for Commission recertification. Only the filing fee for the petition for declaratory order must be paid to cover both the waiver request and the request for recertification if such requests are made simultaneously.

18 C.F.R. § 292.203(d)(2) allows an applicant to request a waiver of the Form 556 filing requirements, for good cause. Applicants filing a petition for declaratory order requesting a waiver under 18 C.F.R. § 292.203(d)(2) do not need to complete or submit a Form 556 with their petition.

Geographic Coordinates

If a street address does not exist for your facility, then line 3c of the Form 556 requires you to report your facility's geographic coordinates (latitude and longitude). Geographic coordinates may be obtained from several different sources. You can find links to online services that show latitude and longitude coordinates on online maps by visiting the Commission's QF webpage at www.ferc.gov/QF and clicking the Geographic Coordinates link. You may also be able to obtain your geographic coordinates from a GPS device, Google Earth (available free at http://earth.google.com), a property survey, various engineering or construction drawings, a property deed, or a municipal or county map showing property lines.

Filing Privileged Data or Critical Energy Infrastructure Information in a Form 556

The Commission's regulations provide procedures for applicants to either (1) request that any information submitted with a Form 556 be given privileged treatment because the information is exempt from the mandatory public disclosure requirements of the Freedom of Information Act, 5 U.S.C. § 552, and should be withheld from public disclosure; or (2) identify any documents containing critical energy infrastructure information (CEII) as defined in 18 C.F.R. § 388.113 that should not be made public.

If you are seeking privileged treatment or CEII status for any data in your Form 556, then you must follow the procedures in 18 C.F.R. § 388.112. See www.ferc.gov/help/filing-quide/file-ceii.asp for more information.

Among other things (see 18 C.F.R. § 388.112 for other requirements), applicants seeking privileged treatment or CEII status for data submitted in a Form 556 must prepare and file both (1) a complete version of the Form 556 (containing the privileged and/or CEII data), and (2) a public version of the Form 556 (with the privileged and/or CEII data redacted). Applicants preparing and filing these different versions of their Form 556 must indicate below the security designation of this version of their document. If you are *not* seeking privileged treatment or CEII status for any of your Form 556 data, then you should not respond to any of the items on this page.

Non-Public: Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines indicated below. This non-public version of the applicant's Form 556 contains all data, including the data that is redacted in the (separate) public version of the applicant's Form 556. Public (redacted): Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines indicated below. This public version of the applicants's Form 556 contains all data except for data from the lines indicated below, which has been redacted.
Privileged : Indicate below which lines of your form contain data for which you are seeking privileged treatment
Critical Energy Infrastructure Information (CEII): Indicate below which lines of your form contain data for which you are seeking CEII status

The eFiling process described on page 2 will allow you to identify which versions of the electronic documents you submit are public, privileged and/or CEII. The filenames for such documents should begin with "Public", "Priv", or "CEII", as applicable, to clearly indicate the security designation of the file. Both versions of the Form 556 should be unaltered PDF copies of the Form 556, as available for download from www.ferc.gov/QF. To redact data from the public copy of the submittal, simply omit the relevant data from the Form. For numerical fields, leave the redacted fields blank. For text fields, complete as much of the field as possible, and replace the redacted portions of the field with the word "REDACTED" in brackets. Be sure to identify above all fields which contain data for which you are seeking non-public status.

The Commission is not responsible for detecting or correcting filer errors, including those errors related to security designation. If your documents contain sensitive information, make sure they are filed using the proper security designation.

FEDERAL ENERGY REGULATORY COMMISSION WASHINGTON, DC

OMB Control # 1902-0075 Expiration 06/30/2019

Form 556 Certification of Qualifying Facility (QF) Status for a Small Power Production or Cogeneration Facility

d State/provin	1g Telephone number 801–679–3500				
Yes 🗌 N					
Yes N	001-079-3300				
	o 🔀				
ertaining to th	is facility: QF				
filing?					
lication for Co see "Filing Fee	mmission certification (requires filing " section on page 3)				
(see note below) Note: a notice of self-certification is a notice by the applicant itself that its facility complies with the requirements for QF status. A notice of self-certification does not establish a proceeding, and the Commission does not review a notice of self-certification to verify compliance. See the "What to Expect From the Commission After You File" section on page 3 for more information.					
1k What type(s) of QF status is the applicant seeking for its facility? (check all that apply)					
□ Qualifying small power production facility status □ Qualifying cogeneration facility status					
11 What is the purpose and expected effective date(s) of this filing?					
\bigcirc Original certification; facility expected to be installed by $9/30/19$ and to begin operation on $12/31/19$					
Change(s) to a previously certified facility to be effective on					
(identify type(s) of change(s) below, and describe change(s) in the Miscellaneous section starting on page 19)					
☐ Name change and/or other administrative change(s)					
Change in ownership					
Change(s) affecting plant equipment, fuel use, power production capacity and/or cogeneration thermal output					
Supplement or correction to a previous filing submitted on (describe the supplement or correction in the Miscellaneous section starting on page 19)					
1m If any of the following three statements is true, check the box(es) that describe your situation and complete the form to the extent possible, explaining any special circumstances in the Miscellaneous section starting on page 19. The instant facility complies with the Commission's QF requirements by virtue of a waiver of certain regulations previously granted by the Commission in an order dated orders in the Miscellaneous section starting on page 19) The instant facility would comply with the Commission's QF requirements if a petition for waiver submitted concurrently with this application is granted					
n t qu	es) that descr the Miscellan iirements by				

	2a Name of contact person			2b Telephone number	1	
	Sean McBride 801-679-3506					
	2c Which of the following describes the contact person's relationship to the applicant? (check one)					
	_	•	•	zed to represent the applicant		
on	Employee of a company affiliat	•	• •	·		
ati	Lawyer, consultant, or other re	• •	•	• •		
Ę	2d Company or organization name	-			1	
Contact Information	FTP Power LLC	(ii applicant is an inalivial	adi, cricci ricic ani	a stap to line 2c,		
بر ا	2e Street address (if same as Application	ant, check here and skip t	to line 3a) 🔀		A	
tac	μμ.	γ			•	
.uo						
Ŭ	2f City		2g State/provi	ince	1	
	2h Postal code	2i Country (if not United	d States)		1	
	an rostarcode	Zi country (ii not office	a states,			
	3a Facility name				1	
u	Cement City Solar Facili	lty				
atic	3b Street address (if a street address	s does not exist for the fa	cility, check here a	nd skip to line 3c)⊠	0	
ÖÖ	on other address (if a street address.	s does not exist for the la	emely, effectivele a	step tot 50, 2	t	
7						
anc	3c Geographic coordinates: If you indicated that no street address exists for your facility by checking the box in line 3b,					
<u> </u>	then you must specify the latitude and longitude coordinates of the facility in degrees (to three decimal places). Use					
ıţi	the following formula to convert to decimal degrees from degrees, minutes and seconds: decimal degrees = degrees + (minutes/60) + (seconds/3600). See the "Geographic Coordinates" section on page 4 for help. If you					
<u>[]</u>				graphic coordinates below is optional.		
)ţi	 East (+)	. 255 1		North (+) 42,004, I		
Facility Identification and Location	Longitude West (-)	degrees	Latitude	South (-) 42.084 degrees		
<u>></u>	3d City (if unincorporated, check he	re and enter nearest city)	3e State/p	rovince		
<u></u>	Cement City		Michigan			
-ac	3f County (or check here for indepe	ndent city)	Bg Country (if not	United States)	A	
	Jackson				•	
	Identify the electric utilities that are o	contemplated to transact	with the facility.			
es	4a Identify utility interconnecting with the facility					
ı <u>≡</u>	Consumers Energy					
Ŭ.	4b Identify utilities providing wheeling service or check here if none					
βL	, , ,				t	
l ij.	4c Identify utilities purchasing the u	seful electric power outp	out or check here it	f none	7	
sa	Consumers Energy				•	
Transacting Utilities	4d Identify utilities providing supple	ementary power, backup	power, maintenar	nce power, and/or interruptible power	e	
∸	4d Identify utilities providing supplementary power, backup power, maintenance power, and/or interruptible power service or check here if none					
	Consumers Energy					

5a Direct ownership as of effective date or operation date: Identify all direct owners of the facility holding at least 10 percent equity interest. For each identified owner, also (1) indicate whether that owner is an electric utility, as defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or a holding company, as defined in section 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)), and (2) for owners which are electric utilities or holding companies, provide the percentage of equity interest in the facility held by that owner. If no

two direct owners with the largest equity interest in the facility. Full legal names of direct owners	Electric utility or holding company	If Yes, % equity interest
1) sPower Development Company, LLC	Yes ⊠ No □	100%
2)		%
3)	Yes No	
4)	Yes No	%
5)	Yes No	%
6)	Yes No	%
7)	Yes No	%
8)	Yes No	%
9)	Yes No	%
10)	Yes No	
Upstream (i.e., indirect) ownership as of effective date or operation date of the facility that both (1) hold at least 10 percent equity interest in the defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or have 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 164 equity interest in the facility held by such owners. (Note that, because up 12 to 13 to 14 to 15 to 15 to 15 to 15 to 15 to 16	facility, and (2) are electric utilit holding companies, as defined in 51(8)). Also provide the percen	ies, as n section tage of
of the facility that both (1) hold at least 10 percent equity interest in the defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or h	facility, and (2) are electric utilit holding companies, as defined in 51(8)). Also provide the percen pstream owners may be subsid)	ies, as n section tage of
of the facility that both (1) hold at least 10 percent equity interest in the defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or h 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 164 equity interest in the facility held by such owners. (Note that, because u another, total percent equity interest reported may exceed 100 percent. Check here if no such upstream owners exist. Full legal names of electric utility or holding company up 1) FTD. Power, LLC.	facility, and (2) are electric utility including companies, as defined in 51(8)). Also provide the percent pstream owners may be subsided)	ies, as in section tage of taries of one % equity interest
of the facility that both (1) hold at least 10 percent equity interest in the defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or h 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 164 equity interest in the facility held by such owners. (Note that, because u another, total percent equity interest reported may exceed 100 percent. Check here if no such upstream owners exist.	facility, and (2) are electric utility including companies, as defined in 51(8)). Also provide the percent pstream owners may be subsided)	% equity
of the facility that both (1) hold at least 10 percent equity interest in the defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or h 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 164 equity interest in the facility held by such owners. (Note that, because u another, total percent equity interest reported may exceed 100 percent. Check here if no such upstream owners exist. Full legal names of electric utility or holding company up 10 FTP Power LLC	facility, and (2) are electric utility including companies, as defined in 51(8)). Also provide the percent pstream owners may be subsided)	% equity interest
of the facility that both (1) hold at least 10 percent equity interest in the defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or h 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 164 equity interest in the facility held by such owners. (Note that, because u another, total percent equity interest reported may exceed 100 percent. Check here if no such upstream owners exist. Full legal names of electric utility or holding company up 1) FTP Power LLC 2) AES Lumos Holdings, LLC	facility, and (2) are electric utility including companies, as defined in 51(8)). Also provide the percent pstream owners may be subsided)	% equity interest
of the facility that both (1) hold at least 10 percent equity interest in the defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or h 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 164 equity interest in the facility held by such owners. (Note that, because u another, total percent equity interest reported may exceed 100 percent. Check here if no such upstream owners exist. Full legal names of electric utility or holding company up 1) FTP Power LLC AES Lumos Holdings, LLC 3) AES Corporation	facility, and (2) are electric utility including companies, as defined in 51(8)). Also provide the percent pstream owners may be subsided)	% equity interest
of the facility that both (1) hold at least 10 percent equity interest in the defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or h 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 164 equity interest in the facility held by such owners. (Note that, because u another, total percent equity interest reported may exceed 100 percent. Check here if no such upstream owners exist. Full legal names of electric utility or holding company up 1) FTP Power LLC AES Lumos Holdings, LLC AES Corporation 4) PIP5 Lumos LLC	facility, and (2) are electric utility including companies, as defined in 51(8)). Also provide the percent pstream owners may be subsided)	% equity interest 100 % 50 % 50 %
of the facility that both (1) hold at least 10 percent equity interest in the defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or h 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 164 equity interest in the facility held by such owners. (Note that, because u another, total percent equity interest reported may exceed 100 percent. Check here if no such upstream owners exist. Full legal names of electric utility or holding company up	facility, and (2) are electric utility including companies, as defined in 51(8)). Also provide the percent pstream owners may be subsided)	% equity interest 100 % 50 % 50 %
of the facility that both (1) hold at least 10 percent equity interest in the defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or h 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 164 equity interest in the facility held by such owners. (Note that, because u another, total percent equity interest reported may exceed 100 percent. Check here if no such upstream owners exist. Full legal names of electric utility or holding company up 1) FTP Power LLC 2) AES Lumos Holdings, LLC 3) AES Corporation 4) PIP5 Lumos LLC 5) Alberta Investment Management Corporation 6)	facility, and (2) are electric utility including companies, as defined in 51(8)). Also provide the percent pstream owners may be subsided)	ies, as n section tage of aries of one % equity

5c Identify the facility operator

sPower Development Company, LLC

U-20500 - March 19, 2019 Complaint by sPower Development Company, LLC Attachment L Page 8 - All Facilities

FERC Form 556 Attachment L
Page 8 - All Facilities

6a Describe the primary energy input: (check one main category and, if applicable, one subcategory)								
		Biomas	s (specify)	⊠ Re	newable resources (specify)	☐ Geothermal	
		□ L	andfill gas		☐ Hydro power - ri	ver	Fossil fuel (spec	ify)
		□ N	Nanure digester gas		☐ Hydro power - ti	dal	☐ Coal (not	waste)
		□ N	Nunicipal solid waste		☐ Hydro power - w	ave	☐ Fuel oil/d	iesel
		□ S	ewage digester gas		⊠ Solar - photovol	taic	☐ Natural g	as (not waste)
		□ V	Vood		☐ Solar - thermal		Other fos	
			Other biomass (describe on	page 19)	☐ Wind			on page 19)
		☐ Waste (specify type below in line 6	b)	Other renewable (describe on page		Other (describe	on page 19)
	6b	If you spec	ified "waste" as the primary	energy inpu	ıt in line 6a, indicate	the type o	of waste fuel used: (che	eck one)
		☐ Waste	e fuel listed in 18 C.F.R. § 29	2.202(b) (spe	ecify one of the follo	wing)		
			Anthracite culm produced	prior to July	23, 1985			
			Anthracite refuse that has ash content of 45 percent		eat content of 6,000) Btu or les	ss per pound and has a	n average
			Bituminous coal refuse tha average ash content of 25			9,500 Btu	per pound or less and	has an
nput		Top or bottom subbituminous coal produced on Federal lands or on Indian lands that has been determined to be waste by the United States Department of the Interior's Bureau of Land Management (BLM) or that is located on non-Federal or non-Indian lands outside of BLM's jurisdiction, provided that the applicant shows that the latter coal is an extension of that determined by BLM to be waste						
Energy Input		Coal refuse produced on Federal lands or on Indian lands that has been determined to be waste by the BLM or that is located on non- Federal or non-Indian lands outside of BLM's jurisdiction, provided that applicant shows that the latter is an extension of that determined by BLM to be waste						
Ш		Lignite produced in association with the production of montan wax and lignite that becomes exposed as a result of such a mining operation						
		☐ Gaseous fuels (except natural gas and synthetic gas from coal) (describe on page 19)						
	Waste natural gas from gas or oil wells (describe on page 19 how the gas meets the requirements of 18 C.F.R. § 2.400 for waste natural gas; include with your filing any materials necessary to demonstrate compliance with 18 C.F.R. § 2.400)							
			Materials that a governme	nt agency ha	s certified for dispos	sal by com	bustion (describe on p	page 19)
			Heat from exothermic read	tions (descri	be on page 19)		Residual heat (describ	e on page 19)
			Used rubber tires] Plastic ma	terials 🗌 F	Refinery of	f-gas 🗌 Petr	oleum coke
		facilit	r waste energy input that ha y industry (describe in the I of commercial value and exi	Miscellaneou	ıs section starting or	n page 19;	include a discussion o	
	6c Provide the average energy input, calculated on a calendar year basis, in terms of Btu/h for the following fossil fuel energy inputs, and provide the related percentage of the total average annual energy input to the facility (18 C.F.R. § 292.202(j)). For any oil or natural gas fuel, use lower heating value (18 C.F.R. § 292.202(m)).							
			F 1		ual average energy		Percentage of total	
			Fuel Natural gas	inp	ut for specified fuel	- D: "	annual energy input]
			Oil-based fuels			Btu/h	0 %	-
			Coal			Btu/h	0 %	-

Indicate the maximum gross and maximum net electric power production capacity of the facility at the point(s) of delivery by completing the worksheet below. Respond to all items. If any of the parasitic loads and/or losses identified in lines 7b through 7e are negligible, enter zero for those lines.

26,000 kW
0 kW
0 kW
6,000 kW
0 kW
6,000.0 kW
20,000.0 kW

7h Description of facility and primary components: Describe the facility and its operation. Identify all boilers, heat recovery steam generators, prime movers (any mechanical equipment driving an electric generator), electrical generators, photovoltaic solar equipment, fuel cell equipment and/or other primary power generation equipment used in the facility. Descriptions of components should include (as applicable) specifications of the nominal capacities for mechanical output, electrical output, or steam generation of the identified equipment. For each piece of equipment identified, clearly indicate how many pieces of that type of equipment are included in the plant, and which components are normally operating or normally in standby mode. Provide a description of how the components operate as a system. Applicants for cogeneration facilities do not need to describe operations of systems that are clearly depicted on and easily understandable from a cogeneration facility's attached mass and heat balance diagram; however, such applicants should provide any necessary description needed to understand the sequential operation of the facility depicted in their mass and heat balance diagram. If additional space is needed, continue in the Miscellaneous section starting on page 19.

The facility will be comprised of 74,286 solar modules with a nameplate DC rating of 350W each. The modules will be attached to single-axis tracker racking. The facility will use 10 inverters with a nameplate AC output of 2,000 kW each.

The facility includes all generator interconnection equipment necessary to deliver output from the facility to the grid.



Information Required for Small Power Production Facility

If you indicated in line 1k that you are seeking qualifying small power production facility status for your facility, then you must respond to the items on this page. Otherwise, skip page 10.

Pursuant to 18 C.F.R. § 292.204(a), the power production capacity of any small power production facility, together with the power production capacity of any other small power production facilities that use the same energy resource, are owned by the same person(s) or its affiliates, and are located at the same site, may not exceed 80 megawatts. To demonstrate compliance with this size limitation, or to demonstrate that your facility is exempt from this size limitation under the Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Pub. L. 101-575, 104 Stat. 2834 (1990) as amended by Pub. L. 102-46, 105 Stat. 249 (1991)), respond to lines 8a through 8e below (as applicable). 8a Identify any facilities with electrical generating equipment located within 1 mile of the electrical generating equipment of the instant facility, and for which any of the entities identified in lines 5a or 5b, or their affiliates, holds at least a 5 percent equity interest. Certification of Compliance Check here if no such facilities exist. Root docket # **Facility location** Maximum net power with Size Limitations (city or county, state) (if any) Common owner(s) production capacity 1) QF kW 2) QF kW OF kW Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed 8b The Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Incentives Act) provides exemption from the size limitations in 18 C.F.R. § 292.204(a) for certain facilities that were certified prior to 1995. Are you seeking exemption from the size limitations in 18 C.F.R. § 292.204(a) by virtue of the Incentives Act? Yes (continue at line 8c below) No (skip lines 8c through 8e) 8c Was the original notice of self-certification or application for Commission certification of the facility filed on or before December 31, 1994? Yes No **8d** Did construction of the facility commence on or before December 31, 1999? Yes 8e If you answered No in line 8d, indicate whether reasonable diligence was exercised toward the completion of the facility, taking into account all factors relevant to construction? Yes No If you answered Yes, provide a brief narrative explanation in the Miscellaneous section starting on page 19 of the construction timeline (in particular, describe why construction started so long after the facility was certified) and the diligence exercised toward completion of the facility. Pursuant to 18 C.F.R. § 292.204(b), qualifying small power production facilities may use fossil fuels, in minimal with Fuel Use Reguirements Certification of Compliance amounts, for only the following purposes: ignition; start-up; testing; flame stabilization; control use; alleviation or prevention of unanticipated equipment outages; and alleviation or prevention of emergencies, directly affecting the public health, safety, or welfare, which would result from electric power outages. The amount of fossil fuels used for these purposes may not exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter. 9a Certification of compliance with 18 C.F.R. § 292.204(b) with respect to uses of fossil fuel: Applicant certifies that the facility will use fossil fuels *exclusively* for the purposes listed above. 9b Certification of compliance with 18 C.F.R. § 292.204(b) with respect to amount of fossil fuel used annually: Applicant certifies that the amount of fossil fuel used at the facility will not, in aggregate, exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter.

Information Required for Cogeneration Facility

If you indicated in line 1k that you are seeking qualifying cogeneration facility status for your facility, then you must respond to the items on pages 11 through 13. Otherwise, skip pages 11 through 13.

to the h	Pursuant to 18 C.F.R. § 29 energy (such as heat or suse of energy. Pursuant cycle cogeneration facility thermal application or pursuant application or pursuant cycle.	22.202(c), a cogeneration facility produces electric energy and forms of useful thermal iteam) used for industrial, commercial, heating, or cooling purposes, through the sequential to 18 C.F.R. § 292.202(s), "sequential use" of energy means the following: (1) for a toppingty, the use of reject heat from a power production process in sufficient amounts in a process to conform to the requirements of the operating standard contained in 18 C.F.R. § attoming-cycle cogeneration facility, the use of at least some reject heat from a thermal or power production.
		eneration technology does the facility represent? (check all that apply)
	10b To help demonstrat other requirements balance diagram de meet certain requir	te the sequential operation of the cogeneration process, and to support compliance with such as the operating and efficiency standards, include with your filing a mass and heat epicting average annual operating conditions. This diagram must include certain items and ements, as described below. You must check next to the description of each requirement tyou have complied with these requirements.
	Check to certify compliance with indicated requirement	Requirement
ration 1		Diagram must show orientation within system piping and/or ducts of all prime movers, heat recovery steam generators, boilers, electric generators, and condensers (as applicable), as well as any other primary equipment relevant to the cogeneration process.
genel atior		Any average annual values required to be reported in lines 10b, 12a, 13a, 13b, 13d, 13f, 14a, 15b, 15d and/or 15f must be computed over the anticipated hours of operation.
General Cogeneration Information		Diagram must specify all fuel inputs by fuel type and average annual rate in Btu/h. Fuel for supplementary firing should be specified separately and clearly labeled. All specifications of fuel inputs should use lower heating values.
ene		Diagram must specify average gross electric output in kW or MW for each generator.
G		Diagram must specify average mechanical output (that is, any mechanical energy taken off of the shaft of the prime movers for purposes not directly related to electric power generation) in horsepower, if any. Typically, a cogeneration facility has no mechanical output.
		At each point for which working fluid flow conditions are required to be specified (see below), such flow condition data must include mass flow rate (in lb/h or kg/s), temperature (in °F, R, °C or K), absolute pressure (in psia or kPa) and enthalpy (in Btu/lb or kJ/kg). Exception: For systems where the working fluid is <i>liquid only</i> (no vapor at any point in the cycle) and where the type of liquid and specific heat of that liquid are clearly indicated on the diagram or in the Miscellaneous section starting on page 19, only mass flow rate and temperature (not pressure and enthalpy) need be specified. For reference, specific heat at standard conditions for pure liquid water is approximately 1.002 Btu/(lb*R) or 4.195 kJ/(kg*K).
		Diagram must specify working fluid flow conditions at input to and output from each steam turbine or other expansion turbine or back-pressure turbine.
		Diagram must specify working fluid flow conditions at delivery to and return from each thermal application.
		Diagram must specify working fluid flow conditions at make-up water inputs.

Page 12 - Cogeneration Facilities

	EPAct 2005 cogeneration facilities: The Energy Policy Act of 2005 (EPAct 2005) established a new section 210(n) of the Public Utility Regulatory Policies Act of 1978 (PURPA), 16 USC 824a-3(n), with additional requirements for any qualifying cogeneration facility that (1) is seeking to sell electric energy pursuant to section 210 of PURPA and (2) was either not a cogeneration facility on August 8, 2005, or had not filed a self-certification or application for Commission certification of QF status on or before February 1, 2006. These requirements were implemented by the Commission in 18 C.F.R. § 292.205(d). Complete the lines below, carefully following the instructions, to demonstrate whether these additional requirements apply to your cogeneration facility and, if so, whether your facility complies with such requirements.	
	11a Was your facility operating as a qualifying cogeneration facility on or before August 8, 2005? Yes No	E
	11b Was the initial filing seeking certification of your facility (whether a notice of self-certification or an application for Commission certification) filed on or before February 1, 2006? Yes No	E
s se	If the answer to either line 11a or 11b is Yes, then continue at line 11c below. Otherwise, if the answers to both lines 11a and 11b are No, skip to line 11e below.	
ntal Us acilitie	11c With respect to the design and operation of the facility, have any changes been implemented on or after February 2, 2006 that affect general plant operation, affect use of thermal output, and/or increase net power production capacity from the plant's capacity on February 1, 2006?	•
mer n Fa	Yes (continue at line 11d below)	
Fundar	No. Your facility is not subject to the requirements of 18 C.F.R. § 292.205(d) at this time. However, it may be subject to to these requirements in the future if changes are made to the facility. At such time, the applicant would need to recertify the facility to determine eligibility. Skip lines 11d through 11j.	
s tor l oger	11d Does the applicant contend that the changes identified in line 11c are not so significant as to make the facility a "new" cogeneration facility that would be subject to the 18 C.F.R. § 292.205(d) cogeneration requirements?	•
ement from C	Yes. Provide in the Miscellaneous section starting on page 19 a description of any relevant changes made to the facility (including the purpose of the changes) and a discussion of why the facility should not be considered a "new" cogeneration facility in light of these changes. Skip lines 11e through 11j.	
2005 Requirements for Fundamental Use ergy Output from Cogeneration Facilities	No. Applicant stipulates to the fact that it is a "new" cogeneration facility (for purposes of determining the applicability of the requirements of 18 C.F.R. § 292.205(d)) by virtue of modifications to the facility that were initiated on or after February 2, 2006. Continue below at line 11e.	
05 y	11e Will electric energy from the facility be sold pursuant to section 210 of PURPA?	E
. (1)	Yes. The facility is an EPAct 2005 cogeneration facility. You must demonstrate compliance with 18 C.F.R. § 292.205(d)(2) by continuing at line 11f below.	
EPACt of En	No. Applicant certifies that energy will <i>not</i> be sold pursuant to section 210 of PURPA. Applicant also certifies its understanding that it must recertify its facility in order to determine compliance with the requirements of 18 C.F.R. § 292.205(d) <i>before</i> selling energy pursuant to section 210 of PURPA in the future. Skip lines 11f through 11j.	
	11f Is the net power production capacity of your cogeneration facility, as indicated in line 7g above, less than or equal to 5,000 kW?	E
	Yes, the net power production capacity is less than or equal to 5,000 kW. 18 C.F.R. § 292.205(d)(4) provides a rebuttable presumption that cogeneration facilities of 5,000 kW and smaller capacity comply with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2). Applicant certifies its understanding that, should the power production capacity of the facility increase above 5,000 kW, then the facility must be recertified to (among other things) demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Skip lines 11g through 11j.	
	No, the net power production capacity is greater than 5,000 kW. Demonstrate compliance with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2) by continuing on the next page at line 11g.	

Lines 11g through 11k below guide the applicant through the process of demonstrating compliance with the requirements for "fundamental use" of the facility's energy output. 18 C.F.R. § 292.205(d)(2). Only respond to the

lines on this page if the instructions on the previous page direct you to do so. Otherwise, skip this page.

18 C.F.R. § 292.205(d)(2) requires that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility. If you were directed on the previous page to respond to the items on this page, then your facility is an EPAct 2005 cogeneration facility that is subject to this "fundamental use" requirement.

The Commission's regulations provide a two-pronged approach to demonstrating compliance with the requirements for fundamental use of the facility's energy output. First, the Commission has established in 18 C.F.R. § 292.205(d)(3) a "fundamental use test" that can be used to demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Under the fundamental use test, a facility is considered to comply with 18 C.F.R. § 292.205(d)(2) if at least 50 percent of the facility's total annual energy output (including electrical, thermal, chemical and mechanical energy output) is used for industrial, commercial, residential or institutional purposes.

Second, an applicant for a facility that does not pass the fundamental use test may provide a narrative explanation of and support for its contention that the facility nonetheless meets the requirement that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility.

Complete lines 11g through 11j below to determine compliance with the fundamental use test in 18 C.F.R. § 292.205(d)(3). Complete lines 11g through 11j even if you do not intend to rely upon the fundamental use test to demonstrate compliance with 18 C.F.R. § 292.205(d)(2).

11g Amount of electrical, thermal, chemical and mechanical energy output (net of internal	
generation plant losses and parasitic loads) expected to be used annually for industrial,	
commercial, residential or institutional purposes and not sold to an electric utility	MWh
11h Total amount of electrical, thermal, chemical and mechanical energy expected to be	
sold to an electric utility	MWh
11i Percentage of total annual energy output expected to be used for industrial,	
commercial, residential or institutional purposes and not sold to a utility	
= 100 * 11g /(11g + 11h)	0 %

11j Is the response in line 11i greater than or equal to 50 percent?

res. Your facility complies with 18 C.F.R. § 292.205(d)(2) by virtue of passing the fundamental use test provided in 18 C.F.R. § 292.205(d)(3). Applicant certifies its understanding that, if it is to rely upon passing the fundamental use test as a basis for complying with 18 C.F.R. § 292.205(d)(2), then the facility must comply with the fundamental use test both in the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years.
No. Your facility does not pass the fundamental use test. Instead, you must provide in the Miscellaneous section starting on page 19 a narrative explanation of and support for why your facility meets the requirement that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a QF to its host facility. Applicants providing a narrative explanation of why their facility should be found to comply with 18 C.F.R. § 292.205(d)(2) in spite of non-compliance with the fundamental use test may want to review paragraphs 47 through 61 of Order No. 671 (accessible from the Commission's QF website at www.ferc.gov/QF), which provide discussion of the facts and circumstances that may support their explanation. Applicant should also note that the percentage reported above will establish the standard that that facility must comply with, both for the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years. See Order No. 671 at paragraph 51. As such,

the applicant should make sure that it reports appropriate values on lines 11g and 11h above to serve as the

relevant annual standard, taking into account expected variations in production conditions.



Btu/h

Btu/h

Btu/h

5)

6)

Information Required for Topping-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents topping-cycle cogeneration technology, then you must respond to the items on pages 14 and 15. Otherwise, skip pages 14 and 15.

The thermal energy output of a topping-cycle cogeneration facility is the net energy made available to an industrial or commercial process or used in a heating or cooling application. Pursuant to sections 292.202(c), (d) and (h) of the Commission's regulations (18 C.F.R. §§ 292.202(c), (d) and (h)), the thermal energy output of a qualifying toppingcycle cogeneration facility must be useful. In connection with this requirement, describe the thermal output of the topping-cycle cogeneration facility by responding to lines 12a and 12b below. 12a Identify and describe each thermal host, and specify the annual average rate of thermal output made available to each host for each use. For hosts with multiple uses of thermal output, provide the data for each use in separate rows. Average annual rate of thermal output attributable to use (net of Name of entity (thermal host) Thermal host's relationship to facility; heat contained in process taking thermal output Thermal host's use of thermal output return or make-up water) Select thermal host's relationship to facility 1) Select thermal host's use of thermal output Btu/h Select thermal host's relationship to facility 2) Select thermal host's use of thermal output Btu/h Select thermal host's relationship to facility 3) Select thermal host's use of thermal output Btu/h Select thermal host's relationship to facility 4)

	Check here and	l continue in the l	viscellaneous sec	tion starting on	i page 19 if additiona	al space is needed
--	----------------	---------------------	-------------------	------------------	------------------------	--------------------

Select thermal host's use of thermal output

Select thermal host's relationship to facility

Select thermal host's use of thermal output

Select thermal host's relationship to facility

Select thermal host's use of thermal output

12b Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each use of the thermal output identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's use of thermal output is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific use of thermal output related to the instant facility, then you need only provide a brief description of that use and a reference by date and docket number to the order certifying your facility with the indicated use. Such exemption may not be used if any change creates a material deviation from the previously authorized use.) If additional space is needed, continue in the Miscellaneous section starting on page 19.

Page 15 - Topping-Cycle Cogeneration Facilities Applicants for facilities representing topping-cycle technology must demonstrate compliance with the toppingcycle operating standard and, if applicable, efficiency standard. Section 292.205(a)(1) of the Commission's regulations (18 C.F.R. § 292.205(a)(1)) establishes the operating standard for topping-cycle cogeneration facilities: the useful thermal energy output must be no less than 5 percent of the total energy output. Section 292.205(a)(2) (18 C.F.R. § 292.205(a)(2)) establishes the efficiency standard for topping-cycle cogeneration facilities for which installation commenced on or after March 13, 1980: the useful power output of the facility plus one-half the useful thermal energy output must (A) be no less than 42.5 percent of the total energy input of natural gas and oil to the facility; and (B) if the useful thermal energy output is less than 15 percent of the total energy output of the facility, be no less than 45 percent of the total energy input of natural gas and oil to the facility. To demonstrate compliance with the topping-cycle operating and/or efficiency standards, or to demonstrate that your facility is exempt from the efficiency standard based on the date that installation commenced, respond to lines 13a through 13l below. If you indicated in line 10a that your facility represents both topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 13a through 13l below considering only the energy inputs and outputs attributable to the topping-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion (topping or bottoming) of the

cogeneration system.						
13a Indicate the annual average rate of useful thermal energy output made available						
to the host(s), net of any heat contained in condensate return or make-up water	Btu/h					
13b Indicate the annual average rate of net electrical energy output						
	kW					
13c Multiply line 13b by 3,412 to convert from kW to Btu/h						
	0 Btu/h					
13d Indicate the annual average rate of mechanical energy output taken directly off						
of the shaft of a prime mover for purposes not directly related to power production						
(this value is usually zero)	hp					
13e Multiply line 13d by 2,544 to convert from hp to Btu/h						
	0 Btu/h					
13f Indicate the annual average rate of energy input from natural gas and oil						
	Btu/h					
13g Topping-cycle operating value = 100 * 13a / (13a + 13c + 13e)						
	0 %					
13h Topping-cycle efficiency value = 100 * (0.5*13a + 13c + 13e) / 13f						
	0 %					
13i Compliance with operating standard: Is the operating value shown in line 13g gre	eater than or equal to 5%?					
	·					
Yes (complies with operating standard) No (does not comply wi	th operating standard)					
421 D. H	0003					
13j Did installation of the facility in its current form commence on or after March 13, 1	980?					
Yes. Your facility is subject to the efficiency requirements of 18 C.F.R. § 292.20	5(a)(2). Demonstrate					
compliance with the efficiency requirement by responding to line 13k or 13l, as applicable, below.						
	•					
No. Your facility is exempt from the efficiency standard. Skip lines 13k and 13l						
13k Compliance with efficiency standard (for low operating value): If the operating value	9					
than 15%, then indicate below whether the efficiency value shown in line 13h greater	than or equal to 45%:					
Yes (complies with efficiency standard) No (does not comply wi	th efficiency standard)					
131 Compliance with efficiency standard (for high operating value): If the operating value	alue shown in line 13g is					
greater than or equal to 15%, then indicate below whether the efficiency value shown in line 13h is greater than or						
equal to 42.5%:						
Yes (complies with efficiency standard) No (does not comply wi	th efficiency standard)					
i res (complies with emciency standard)	in emiciency standard)					

Page 16 - Bottoming-Cycle Cogeneration Facilities

Information Required for Bottoming-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents bottoming-cycle cogeneration technology, then you must respond to the items on pages 16 and 17. Otherwise, skip pages 16 and 17.

The thermal energy output of a bottoming-cycle cogeneration facility is the energy related to the process(es) from which at least some of the reject heat is then used for power production. Pursuant to sections 292.202(c) and (e) of the Commission's regulations (18 C.F.R. § 292.202(c) and (e)), the thermal energy output of a qualifying bottomingcycle cogeneration facility must be useful. In connection with this requirement, describe the process(es) from which at least some of the reject heat is used for power production by responding to lines 14a and 14b below. 14a Identify and describe each thermal host and each bottoming-cycle cogeneration process engaged in by each host. For hosts with multiple bottoming-cycle cogeneration processes, provide the data for each process in separate rows. Has the energy input to the thermal host been Name of entity (thermal host) performing the process from augmented for purposes which at least some of the of increasing power reject heat is used for power production capacity? Thermal host's relationship to facility; production Thermal host's process type (if Yes, describe on p. 19) Select thermal host's relationship to facility Yes No 1) Select thermal host's process type Select thermal host's relationship to facility Yes No 2) Select thermal host's process type Select thermal host's relationship to facility Yes No 3) Select thermal host's process type Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed 14b Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each process identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's process is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific bottoming-cycle process related to the instant facility, then you need only provide a brief description of that process and a reference by date and docket number to the order certifying your facility with the indicated process. Such exemption may not be used if any material changes to the process have been made.) If additional space is needed, continue in the Miscellaneous section starting on page 19.

Page 17 - Bottoming-Cycle Cogeneration Facilities

Applicants for facilities representing bottoming-cycle technology and for which installation commenced on or after March 13, 1990 must demonstrate compliance with the bottoming-cycle efficiency standards. Section 292.205(b) of the Commission's regulations (18 C.F.R. § 292.205(b)) establishes the efficiency standard for bottoming-cycle cogeneration facilities: the useful power output of the facility must be no less than 45 percent of the energy input of natural gas and oil for supplementary firing. To demonstrate compliance with the bottoming-cycle efficiency standard (if applicable), or to demonstrate that your facility is exempt from this standard based on the date that installation of the facility began, respond to lines 15a through 15h below.

If you indicated in line 10a that your facility represents *both* topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 15a through 15h below considering only the energy inputs and outputs attributable to the bottoming-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion of the cogeneration system (topping or bottoming).

15a Did installation of the facility in its current form commence on or after March 13, 1980?				
\square Yes. Your facility is subject to the efficiency requirement of 18 C.F.R. § 292.205(b). Demonstrate compliance with the efficiency requirement by responding to lines 15b through 15h below.				
No. Your facility is exempt from the efficiency standard. Skip the rest of page	17.			
15b Indicate the annual average rate of net electrical energy output				
	kW			
15c Multiply line 15b by 3,412 to convert from kW to Btu/h				
	0 Btu/h			
15d Indicate the annual average rate of mechanical energy output taken directly off				
of the shaft of a prime mover for purposes not directly related to power production				
(this value is usually zero)	hp			
15e Multiply line 15d by 2,544 to convert from hp to Btu/h				
	0 Btu/h			
15f Indicate the annual average rate of supplementary energy input from natural gas				
or oil	Btu/h			
15g Bottoming-cycle efficiency value = 100 * (15c + 15e) / 15f				
	0 %			
15h Compliance with efficiency standard: Indicate below whether the efficiency value shown in line 15g is greater than or equal to 45%:				
Yes (complies with efficiency standard) No (does not comply with efficiency standard)				

Commission Staff Use Only:

Certificate of Completeness, Accuracy and Authority

Applicant must certify compliance with and understanding of filing requirements by checking next to each item below and signing at the bottom of this section. Forms with incomplete Certificates of Completeness, Accuracy and Authority will be rejected by the Secretary of the Commission.

Signer identified below certifies the following: (check all items and applicable subitems) He or she has read the filing, including any information contained in any attached documents, such as cogeneration mass and heat balance diagrams, and any information contained in the Miscellaneous section starting on page 19, and knows its contents. He or she has provided all of the required information for certification, and the provided information is true as stated, to the best of his or her knowledge and belief. He or she possess full power and authority to sign the filing; as required by Rule 2005(a)(3) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(a)(3)), he or she is one of the following: (check one) ☐ The person on whose behalf the filing is made An officer of the corporation, trust, association, or other organized group on behalf of which the filing is made An officer, agent, or employe of the governmental authority, agency, or instrumentality on behalf of which the filing is made A representative qualified to practice before the Commission under Rule 2101 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2101) and who possesses authority to sign He or she has reviewed all automatic calculations and agrees with their results, unless otherwise noted in the Miscellaneous section starting on page 19. He or she has provided a copy of this Form 556 and all attachments to the utilities with which the facility will interconnect and transact (see lines 4a through 4d), as well as to the regulatory authorities of the states in which the facility and those utilities reside. See the Required Notice to Public Utilities and State Regulatory Authorities section on page 3 for more information. Provide your signature, address and signature date below. Rule 2005(c) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(c)) provides that persons filing their documents electronically may use typed characters representing his or her name to sign the filed documents. A person filing this document electronically should sign (by typing his or her name) in the space provided below. Your address Your Signature Date 600 University Street, Suite 3600 Seattle, WA 98101 Jennifer L. Mersing 10/8/2018 **Audit Notes**

Miscellaneous

Use this space to provide any information for which there was not sufficient space in the previous sections of the form to provide. For each such item of information *clearly identify the line number that the information belongs to.* You may also use this space to provide any additional information you believe is relevant to the certification of your facility.

Your response below is not limited to one page. Additional page(s) will automatically be inserted into this form if the length of your response exceeds the space on this page. Use as many pages as you require.

Line 5a: sPower Development Company, LLC is not currently an electric utility as defined under section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), but will become an electric utility on the date the facility first generates test power.

U-20500 - March 19, 2019 Complaint by sPower Development Company, LLC Attachment M

FEDERAL ENERGY REGULATORY COMMISSION WASHINGTON, DC

OMB Control # 1902-0075 Expiration 06/30/2019

Form 556 Certification of Qualifying Facility (QF) Status for a Small Power Production or Cogeneration Facility

General

Questions about completing this form should be sent to Form556@ferc.gov. Information about the Commission's QF program, answers to frequently asked questions about QF requirements or completing this form, and contact information for QF program staff are available at the Commission's QF website, www.ferc.gov/QF. The Commission's QF website also provides links to the Commission's QF regulations (18 C.F.R. § 131.80 and Part 292), as well as other statutes and orders pertaining to the Commission's QF program.

Who Must File

Any applicant seeking QF status or recertification of QF status for a generating facility with a net power production capacity (as determined in lines 7a through 7g below) greater than 1000 kW must file a self-certification or an application for Commission certification of QF status, which includes a properly completed Form 556. Any applicant seeking QF status for a generating facility with a net power production capacity 1000 kW or less is exempt from the certification requirement, and is therefore not required to complete or file a Form 556. See 18 C.F.R. § 292.203.

How to Complete the Form 556

This form is intended to be completed by responding to the items in the order they are presented, according to the instructions given. If you need to back-track, you may need to clear certain responses before you will be allowed to change other responses made previously in the form. If you experience problems, click on the nearest help button () for assistance, or contact Commission staff at Form556@ferc.gov.

Certain lines in this form will be automatically calculated based on responses to previous lines, with the relevant formulas shown. You must respond to all of the previous lines within a section before the results of an automatically calculated field will be displayed. If you disagree with the results of any automatic calculation on this form, contact Commission staff at Form556@ferc.gov to discuss the discrepancy before filing.

You must complete all lines in this form unless instructed otherwise. Do not alter this form or save this form in a different format. Incomplete or altered forms, or forms saved in formats other than PDF, will be rejected.

How to File a Completed Form 556

Applicants are required to file their Form 556 electronically through the Commission's eFiling website (see instructions on page 2). By filing electronically, you will reduce your filing burden, save paper resources, save postage or courier charges, help keep Commission expenses to a minimum, and receive a much faster confirmation (via an email containing the docket number assigned to your facility) that the Commission has received your filing.

If you are simultaneously filing both a waiver request and a Form 556 as part of an application for Commission certification, see the "Waiver Requests" section on page 3 for more information on how to file.

Paperwork Reduction Act Notice

This form is approved by the Office of Management and Budget. Compliance with the information requirements established by the FERC Form No. 556 is required to obtain or maintain status as a QF. See 18 C.F.R. § 131.80 and Part 292. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The estimated burden for completing the FERC Form No. 556, including gathering and reporting information, is as follows: 3 hours for self-certification of a small power production facility, 8 hours for self-certifications of a cogeneration facility, 6 hours for an application for Commission certification of a small power production facility, and 50 hours for an application for Commission certification of acility. Send comments regarding this burden estimate or any aspect of this collection of information, including suggestions for reducing this burden, to the following: Information Clearance Officer, Office of the Executive Director (ED-32), Federal Energy Regulatory Commission, 888 First Street N.E., Washington, DC 20426 (DataClearance@ferc.gov); and Desk Officer for FERC, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503 (oira_submission@omb.eop.gov). Include the Control No. 1902-0075 in any correspondence.

Electronic Filing (eFiling)

To electronically file your Form 556, visit the Commission's QF website at www.ferc.gov/QF and click the eFiling link.

If you are eFiling your first document, you will need to register with your name, email address, mailing address, and phone number. If you are registering on behalf of an employer, then you will also need to provide the employer name, alternate contact name, alternate contact phone number and and alternate contact email.

Once you are registered, log in to eFiling with your registered email address and the password that you created at registration. Follow the instructions. When prompted, select one of the following QF-related filing types, as appropriate, from the Electric or General filing category.

Filing category	Filing Type as listed in eFiling	Description
	(Fee) Application for Commission Cert. as Cogeneration QF	Use to submit an application for Commission certification or Commission recertification of a cogeneration facility as a QF.
	(Fee) Application for Commission Cert. as Small Power QF	Use to submit an application for Commission certification or Commission recertification of a small power production facility as a QF.
	Self-Certification Notice (QF, EG, FC)	Use to submit a notice of self- certification of your facility (cogeneration or small power production) as a QF.
Electric	Self-Recertification of Qualifying Facility (QF)	Use to submit a notice of self- recertification of your facility (cogeneration or small power production) as a QF.
	Supplemental Information or Request	Use to correct or supplement a Form 556 that was submitted with errors or omissions, or for which Commission staff has requested additional information. Do <i>not</i> use this filing type to report new changes to a facility or its ownership; rather, use a self-recertification or Commission recertification to report such changes.
General	(Fee) Petition for Declaratory Order (not under FPA Part 1)	Use to submit a petition for declaratory order granting a waiver of Commission QF regulations pursuant to 18 C.F.R. §§ 292.204(a) (3) and/or 292.205(c). A Form 556 is not required for a petition for declaratory order unless Commission recertification is being requested as part of the petition.

You will be prompted to submit your filing fee, if applicable, during the electronic submission process. Filing fees can be paid via electronic bank account debit or credit card.

During the eFiling process, you will be prompted to select your file(s) for upload from your computer.

Filing Fee

No filing fee is required if you are submitting a self-certification or self-recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(a).

A filing fee is required if you are filing either of the following:

(1) an application for Commission certification or recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(b), or (2) a petition for declaratory order granting waiver pursuant to 18 C.F.R. §§ 292.204(a)(3) and/or 292.205(c).

The current fees for applications for Commission certifications and petitions for declaratory order can be found by visiting the Commission's QF website at www.ferc.gov/QF and clicking the Fee Schedule link.

You will be prompted to submit your filing fee, if applicable, during the electronic filing process described on page 2.

Required Notice to Utilities and State Regulatory Authorities

Pursuant to 18 C.F.R. § 292.207(a)(ii), you must provide a copy of your self-certification or request for Commission certification to the utilities with which the facility will interconnect and/or transact, as well as to the State regulatory authorities of the states in which your facility and those utilities reside. Links to information about the regulatory authorities in various states can be found by visiting the Commission's QF website at www.ferc.gov/QF and clicking the Notice Requirements link.

What to Expect From the Commission After You File

An applicant filing a Form 556 electronically will receive an email message acknowledging receipt of the filing and showing the docket number assigned to the filing. Such email is typically sent within one business day, but may be delayed pending confirmation by the Secretary of the Commission of the contents of the filing.

An applicant submitting a self-certification of QF status should expect to receive no documents from the Commission, other than the electronic acknowledgement of receipt described above. Consistent with its name, a self-certification is a certification by the applicant itself that the facility meets the relevant requirements for QF status, and does not involve a determination by the Commission as to the status of the facility. An acknowledgement of receipt of a self-certification, in particular, does not represent a determination by the Commission with regard to the QF status of the facility. An applicant self-certifying may, however, receive a rejection, revocation or deficiency letter if its application is found, during periodic compliance reviews, not to comply with the relevant requirements.

An applicant submitting a request for Commission certification will receive an order either granting or denying certification of QF status, or a letter requesting additional information or rejecting the application. Pursuant to 18 C.F.R. § 292.207(b)(3), the Commission must act on an application for Commission certification within 90 days of the later of the filing date of the application or the filing date of a supplement, amendment or other change to the application.

Waiver Requests

18 C.F.R. § 292.204(a)(3) allows an applicant to request a waiver to modify the method of calculation pursuant to 18 C.F.R. § 292.204(a)(2) to determine if two facilities are considered to be located at the same site, for good cause. 18 C.F.R. § 292.205(c) allows an applicant to request waiver of the requirements of 18 C.F.R. §§ 292.205(a) and (b) for operating and efficiency upon a showing that the facility will produce significant energy savings. A request for waiver of these requirements must be submitted as a petition for declaratory order, with the appropriate filing fee for a petition for declaratory order. Applicants requesting Commission recertification as part of a request for waiver of one of these requirements should electronically submit their completed Form 556 along with their petition for declaratory order, rather than filing their Form 556 as a separate request for Commission recertification. Only the filing fee for the petition for declaratory order must be paid to cover both the waiver request and the request for recertification *if such requests are made simultaneously*.

18 C.F.R. § 292.203(d)(2) allows an applicant to request a waiver of the Form 556 filing requirements, for good cause. Applicants filing a petition for declaratory order requesting a waiver under 18 C.F.R. § 292.203(d)(2) do not need to complete or submit a Form 556 with their petition.

Geographic Coordinates

If a street address does not exist for your facility, then line 3c of the Form 556 requires you to report your facility's geographic coordinates (latitude and longitude). Geographic coordinates may be obtained from several different sources. You can find links to online services that show latitude and longitude coordinates on online maps by visiting the Commission's QF webpage at www.ferc.gov/QF and clicking the Geographic Coordinates link. You may also be able to obtain your geographic coordinates from a GPS device, Google Earth (available free at http://earth.google.com), a property survey, various engineering or construction drawings, a property deed, or a municipal or county map showing property lines.

Filing Privileged Data or Critical Energy Infrastructure Information in a Form 556

The Commission's regulations provide procedures for applicants to either (1) request that any information submitted with a Form 556 be given privileged treatment because the information is exempt from the mandatory public disclosure requirements of the Freedom of Information Act, 5 U.S.C. § 552, and should be withheld from public disclosure; or (2) identify any documents containing critical energy infrastructure information (CEII) as defined in 18 C.F.R. § 388.113 that should not be made public.

If you are seeking privileged treatment or CEII status for any data in your Form 556, then you must follow the procedures in 18 C.F.R. § 388.112. See www.ferc.gov/help/filing-quide/file-ceii.asp for more information.

Among other things (see 18 C.F.R. § 388.112 for other requirements), applicants seeking privileged treatment or CEII status for data submitted in a Form 556 must prepare and file both (1) a complete version of the Form 556 (containing the privileged and/or CEII data), and (2) a public version of the Form 556 (with the privileged and/or CEII data redacted). Applicants preparing and filing these different versions of their Form 556 must indicate below the security designation of this version of their document. If you are *not* seeking privileged treatment or CEII status for any of your Form 556 data, then you should not respond to any of the items on this page.

The eFiling process described on page 2 will allow you to identify which versions of the electronic documents you submit are public, privileged and/or CEII. The filenames for such documents should begin with "Public", "Priv", or "CEII", as applicable, to clearly indicate the security designation of the file. Both versions of the Form 556 should be unaltered PDF copies of the Form 556, as available for download from www.ferc.gov/QF. To redact data from the public copy of the submittal, simply omit the relevant data from the Form. For numerical fields, leave the redacted fields blank. For text fields, complete as much of the field as possible, and replace the redacted portions of the field with the word "REDACTED" in brackets. Be sure to identify above all fields which contain data for which you are seeking non-public status.

The Commission is not responsible for detecting or correcting filer errors, including those errors related to security designation. If your documents contain sensitive information, make sure they are filed using the proper security designation.

FEDERAL ENERGY REGULATORY COMMISSION WASHINGTON, DC

OMB Control # 1902-0075 Expiration 06/30/2019

Form 556 Certification of Qualifying Facility (QF) Status for a Small Power Production or Cogeneration Facility

1b Applicant street add 2180 South 1300	dress East, Suite 600		
1c City		1d State/provi	nce
Salt Lake City		Utah	
1e Postal code 84106	1f Country (if not United States)		1g Telephone number 801–679–3500
1h Has the instant facil	ity ever previously been certified as a Q	F? Yes N	lo 🔀
1i If yes, provide the do	ocket number of the last known QF filing	g pertaining to th	nis facility: QF
1j Under which certific	ation process is the applicant making th	nis filing?	
Notice of self-cert (see note below)	fication \Box A fe	pplication for Co ee; see "Filing Fee	mmission certification (requires filing e" section on page 3)
QF status. A notice notice of self-certifi	certification is a notice by the applicant of self-certification does not establish a cation to verify compliance. See the "Wor more information.	proceeding, and	
· ·	tatus is the applicant seeking for its fac	ility? (check all th	nat apply)
Qualifying small p	ower production facility status 🔲 Q	ualifying cogene	eration facility status
11 What is the purpose	and expected effective date(s) of this fil	ing?	
	on; facility expected to be installed by	9/30/19 ar	nd to begin operation on 12/31/19
	eviously certified facility to be effective		
(identify type(s) of change(s) below, and describe change(s) in the Miscellaneous section starting on page 19)			
_	and/or other administrative change(s)		
☐ Change in owr	·	1	
			city and/or cogeneration thermal output
Supplement or correction to a previous filing submitted on			
(describe the supplement or correction in the Miscellaneous section starting on page 19)			
1m If any of the following three statements is true, check the box(es) that describe your situation and complete the form to the extent possible, explaining any special circumstances in the Miscellaneous section starting on page 19.			
The instant facility complies with the Commission's QF requirements by virtue of a waiver of certain regulations previously granted by the Commission in an order dated (specify any other relevant waiver orders in the Miscellaneous section starting on page 19)			
	ty would comply with the Commission' h this application is granted	s QF requiremen	ts if a petition for waiver submitted
employment of	ty complies with the Commission's regularized or innovative technologies not one of compliance via this form difficult	contemplated by	the structure of this form, that make

	2a Name of contact person			2b Telephone number		
	Sean McBride			801-679-3506		
	2c Which of the following describes the contact person's relationship to the applicant? (check one)					
		·		zed to represent the applicant		
l C	Employee of a company affilia			·		
atic	Lawyer, consultant, or other re	• •	•	• •		
Ĕ		-			-	
Employee of a company affiliated with the applicant authorized to represent the Lawyer, consultant, or other representative authorized to represent the application process. 2d Company or organization name (if applicant is an individual, check here and skip FTP Power LLC 2e Street address (if same as Applicant, check here and skip to line 3a)				a skip to line ze)		
ਹ ਹ	2e Street address (if same as Applicant, check here and skip to line 3a) ⊠					
ıta						
Į						
	2f City		2g State/provi	ince		
	2h Postal code	2i Country (if not United	States)			
	3a Facility name				1	
on	Pullman Solar Facility					
ati	3b Street address (if a street address	s does not exist for the faci	lity, check here a	nd skip to line 3c)	a	
00.			•		•	
Facility Identification and Location	Geographic coordinates: If you indicated that no street address exists for your facility by checking the box in line 3b, then you must specify the latitude and longitude coordinates of the facility in degrees (to three decimal places). Use the following formula to convert to decimal degrees from degrees, minutes and seconds: decimal degrees = degrees + (minutes/60) + (seconds/3600). See the "Geographic Coordinates" section on page 4 for help. If you provided a street address for your facility in line 3b, then specifying the geographic coordinates below is optional.				-	
ntii	East (+)	. 002 dames	1 1	North (+) 42, 467, dayraas		
dei	Longitude West (-)	degrees degrees	Latitude	South (-) 42.467 degrees		
<u> </u>	3d City (if unincorporated, check he	re and enter nearest city) [
≝	Allegan		Michigan			
- <u>a</u>	3f County (or check here for indepe	ndent city) 🗌 3g	Country (if not	United States)	a	
	Allegan					
	Identify the electric utilities that are contemplated to transact with the facility.					
ies	4a Identify utility interconnecting with the facility					
≝	Consumers Energy					
Transacting Utilities	4b Identify utilities providing wheel	ing service or check here if	none 🔀		7	
ːti	4c Identify utilities purchasing the u	seful electric power outpu	t or check here if	f none	7	
sac	Consumers Energy	The second second second			6	
an:		ementary nower hackup n	ower maintenar	nce nower, and/or interruntible nower		
تّ	4d Identify utilities providing supplementary power, backup power, maintenance power, and/or interruptible power service or check here if none					
	Consumers Energy					

FEI

Ownership and Operation

sPower Development Company, LLC

RC Form 556		Page 7 -	All Facilities
5a Direct ownership as of effective date or operation date: Identify all direct owners of the percent equity interest. For each identified owner, also (1) indicate whether that own defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or a holding compact (1262(8)) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)), and (1262(8)) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)), and (1262(8)) or holding companies, provide the percentage of equity interest in the facility, then provide the two direct owners with the largest equity interest in the facility.	ner is an ele mpany, as de 2) for owner ry held by th	ctric utilite fined in s s which a at owner	ty, as section are electric r. If no
two direct owners with the largest equity interest in the facility.	Electric u	itility or	If Yes,
	hold	•	% equity
Full legal names of direct owners	comp	•	interest
1) sPower Development Company, LLC	Yes 🔀	No 🗌	100%
2)	Yes	No 🗌	%
3)	Yes 🗌	No 🗌	~~~~~~°
4)	Yes 🗌	No 🗌	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
5)	Yes 🗌	No 🗌	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
6)	Yes 🗌	No 🗌	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
7)	Yes 🗌	No 🗌	%
8)	Yes 🗌	No 🗌	%
9)	Yes 🗌	No 🗌	%
10)	Yes	No 🗌	%
Check here and continue in the Miscellaneous section starting on page 19 if add	litional spac	e is need	ed
of the facility that both (1) hold at least 10 percent equity interest in the facility, and defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or holding comp 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)). Also equity interest in the facility held by such owners. (Note that, because upstream own another, total percent equity interest reported may exceed 100 percent.) Check here if no such upstream owners exist.	panies, as de provide the	efined in s percenta	section age of
eneek here ii no sach apstream owners exist.			% equity
Full legal names of electric utility or holding company upstream own	ers		interest
1) FTP Power LLC			8
2) AES Lumos Holdings, LLC			50%
3) AES Corporation			50%
4) PIP5 Lumos LLC			50%
5) Alberta Investment Management Corporation			50 %
6)			%
7)			%
8)			~~~~~~ <u></u> %
9)			~~~~~ <u></u> %
10)			~~~~~ <u></u> %
Check here and continue in the Miscellaneous section starting on page 19 if addi	tional space	is neede	:d
5c Identify the facility operator			



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FERC Form 556 Page 8 - All Facilities

6a Describe the primary energy input: (check one main category and, if applicable, one subcategory)							
	Biomass (specify)		⊠ Renewal	ole resources (sp	oecify)	Geothermal	
	Landfill gas		□ Ну	dro power - rive	er	Fossil fuel (spec	ify)
	☐ Manure diges	ter gas	□ Ну	dro power - tid	al	☐ Coal (not	waste)
	☐ Municipal sol	d waste	□ Ну	dro power - wa	ve	☐ Fuel oil/di	esel
	Sewage diges	ter gas	⊠ So	lar - photovolta	ic	☐ Natural ga	as (not waste)
	☐ Wood		☐ So	lar - thermal		Other foss	
	☐ Other biomas	s (describe on page 19	9) 🗌 Wi	nd		☐ (describe	on page 19)
	Waste (specify type	below in line 6b)		her renewable i escribe on page		Other (describe	on page 19)
6b	If you specified "waste"	as the primary energy	input in lir	ne 6a, indicate tl	he type of	waste fuel used: (che	ck one)
	Waste fuel listed in	n 18 C.F.R. § 292.202(b) (specify o	ne of the follow	ing)		
	☐ Anthracite o	ulm produced prior to	July 23, 19	85			
		efuse that has an aver of 45 percent or more		entent of 6,000 E	Btu or less	per pound and has a	n average
		coal refuse that has ar content of 25 percen		eat content of 9),500 Btu p	per pound or less and	has an
Top or bottom subbituminous coal produced on Federal lands or on Indian lands that has determined to be waste by the United States Department of the Interior's Bureau of Land M (BLM) or that is located on non-Federal or non-Indian lands outside of BLM's jurisdiction, p the applicant shows that the latter coal is an extension of that determined by BLM to be well applicant shows that is located on non-Federal or non-Indian lands outside of BLM's jurisdiction, proposed applicant shows that the latter is an extension of that determined by BLM to be waste				the Interio	or's Bureau of Land M BLM's jurisdiction, pro	anagement ovided that	
				BLM's jurisdiction, pro			
		luced in association w f such a mining opera		duction of mont	an wax ar	nd lignite that become	es exposed
	☐ Gaseous fue	els (except natural gas	and synthe	tic gas from coa	al) (describ	pe on page 19)	
	☐ C.F.R. § 2.40	al gas from gas or oil v 0 for waste natural ga with 18 C.F.R. § 2.400	s; include w		_		
	☐ Materials th	at a government ager	cy has certi	fied for disposa	l by comb	oustion (describe on p	age 19)
	☐ Heat from e	xothermic reactions (d	describe on	page 19)	☐ R	esidual heat (describe	on page 19)
	Used rubbe	r tires 🔲 Plast	ic materials	☐ Re	finery off-	-gas 🗌 Petro	oleum coke
Other waste energy input that has little or no commercial value and exists in the absence of the qualify facility industry (describe in the Miscellaneous section starting on page 19; include a discussion of the lack of commercial value and existence in the absence of the qualifying facility industry) 6c Provide the average energy input, calculated on a calendar year basis, in terms of Btu/h for the following fos energy inputs, and provide the related percentage of the total average annual energy input to the facility (1 292.202(j)). For any oil or natural gas fuel, use lower heating value (18 C.F.R. § 292.202(m)). Annual average energy Percentage of total input for specified fuel annual energy input							
	Natural gas			0	Btu/h	0 %	
	Oil-based fu	els		0	Btu/h	0 %	
	Coal			0	Rtu/h	0 %	

Indicate the maximum gross and maximum net electric power production capacity of the facility at the point(s) of delivery by completing the worksheet below. Respond to all items. If any of the parasitic loads and/or losses identified in lines 7b through 7e are negligible, enter zero for those lines.

7a The maximum gross power production capacity at the terminals of the individual generator(s) under the most favorable anticipated design conditions	26,000 kW
7b Parasitic station power used at the facility to run equipment which is necessary and integral to the power production process (boiler feed pumps, fans/blowers, office or maintenance buildings directly related to the operation of the power generating facility, etc.). If this facility includes non-power production processes (for instance, power consumed by a cogeneration facility's thermal host), do not include any power consumed by the non-power production activities in your reported parasitic station power.	
reported parasitie station power.	0 kW
7c Electrical losses in interconnection transformers	0 kW
7d Electrical losses in AC/DC conversion equipment, if any	
	6,000 kW
7e Other interconnection losses in power lines or facilities (other than transformers and AC/DC conversion equipment) between the terminals of the generator(s) and the point of interconnection	
with the utility	0 kW
7f Total deductions from gross power production capacity = 7b + 7c + 7d + 7e	
	6,000.0 kW
7g Maximum net power production capacity = 7a - 7f	
	20,000.0 kW

7h Description of facility and primary components: Describe the facility and its operation. Identify all boilers, heat recovery steam generators, prime movers (any mechanical equipment driving an electric generator), electrical generators, photovoltaic solar equipment, fuel cell equipment and/or other primary power generation equipment used in the facility. Descriptions of components should include (as applicable) specifications of the nominal capacities for mechanical output, electrical output, or steam generation of the identified equipment. For each piece of equipment identified, clearly indicate how many pieces of that type of equipment are included in the plant, and which components are normally operating or normally in standby mode. Provide a description of how the components operate as a system. Applicants for cogeneration facilities do not need to describe operations of systems that are clearly depicted on and easily understandable from a cogeneration facility's attached mass and heat balance diagram; however, such applicants should provide any necessary description needed to understand the sequential operation of the facility depicted in their mass and heat balance diagram. If additional space is needed, continue in the Miscellaneous section starting on page 19.

The facility will be comprised of 74,286 solar modules with a nameplate DC rating of 350W each. The modules will be attached to single-axis tracker racking. The facility will use 10 inverters with a nameplate AC output of 2,000 kW each.

The facility includes all generator interconnection equipment necessary to deliver output from the facility to the grid.



Information Required for Small Power Production Facility

If you indicated in line 1k that you are seeking qualifying small power production facility status for your facility, then you must respond to the items on this page. Otherwise, skip page 10.

Pursuant to 18 C.F.R. § 292.204(a), the power production capacity of any small power production facility, together with the power production capacity of any other small power production facilities that use the same energy resource, are owned by the same person(s) or its affiliates, and are located at the same site, may not exceed 80 megawatts. To demonstrate compliance with this size limitation, or to demonstrate that your facility is exempt from this size limitation under the Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Pub. L. 101-575, 104 Stat. 2834 (1990) as amended by Pub. L. 102-46, 105 Stat. 249 (1991)), respond to lines 8a through 8e below (as applicable). 8a Identify any facilities with electrical generating equipment located within 1 mile of the electrical generating equipment of the instant facility, and for which any of the entities identified in lines 5a or 5b, or their affiliates, holds at least a 5 percent equity interest. Certification of Compliance Check here if no such facilities exist. Root docket # **Facility location** Maximum net power with Size Limitations (city or county, state) (if any) Common owner(s) production capacity 1) QF kW 2) QF kW OF kW Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed 8b The Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Incentives Act) provides exemption from the size limitations in 18 C.F.R. § 292.204(a) for certain facilities that were certified prior to 1995. Are you seeking exemption from the size limitations in 18 C.F.R. § 292.204(a) by virtue of the Incentives Act? Yes (continue at line 8c below) No (skip lines 8c through 8e) 8c Was the original notice of self-certification or application for Commission certification of the facility filed on or before December 31, 1994? Yes No **8d** Did construction of the facility commence on or before December 31, 1999? Yes 8e If you answered No in line 8d, indicate whether reasonable diligence was exercised toward the completion of the facility, taking into account all factors relevant to construction? Yes No If you answered Yes, provide a brief narrative explanation in the Miscellaneous section starting on page 19 of the construction timeline (in particular, describe why construction started so long after the facility was certified) and the diligence exercised toward completion of the facility. Pursuant to 18 C.F.R. § 292.204(b), qualifying small power production facilities may use fossil fuels, in minimal with Fuel Use Reguirements Certification of Compliance amounts, for only the following purposes: ignition; start-up; testing; flame stabilization; control use; alleviation or prevention of unanticipated equipment outages; and alleviation or prevention of emergencies, directly affecting the public health, safety, or welfare, which would result from electric power outages. The amount of fossil fuels used for these purposes may not exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter. 9a Certification of compliance with 18 C.F.R. § 292.204(b) with respect to uses of fossil fuel: Applicant certifies that the facility will use fossil fuels *exclusively* for the purposes listed above. 9b Certification of compliance with 18 C.F.R. § 292.204(b) with respect to amount of fossil fuel used annually: Applicant certifies that the amount of fossil fuel used at the facility will not, in aggregate, exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter.

Information Required for Cogeneration Facility

If you indicated in line 1k that you are seeking qualifying cogeneration facility status for your facility, then you must respond to the items on pages 11 through 13. Otherwise, skip pages 11 through 13.

to the h	Pursuant to 18 C.F.R. § 29 energy (such as heat or suse of energy. Pursuant cycle cogeneration facility thermal application or pursuant application or pursuant cycle.	22.202(c), a cogeneration facility produces electric energy and forms of useful thermal iteam) used for industrial, commercial, heating, or cooling purposes, through the sequential to 18 C.F.R. § 292.202(s), "sequential use" of energy means the following: (1) for a toppingty, the use of reject heat from a power production process in sufficient amounts in a process to conform to the requirements of the operating standard contained in 18 C.F.R. § attoming-cycle cogeneration facility, the use of at least some reject heat from a thermal or power production.				
		eneration technology does the facility represent? (check all that apply)				
	10b To help demonstrat other requirements balance diagram de meet certain requir	Topping-cycle cogeneration Bottoming-cycle cogeneration 10b To help demonstrate the sequential operation of the cogeneration process, and to support compliance with other requirements such as the operating and efficiency standards, include with your filing a mass and heat balance diagram depicting average annual operating conditions. This diagram must include certain items and meet certain requirements, as described below. You must check next to the description of each requirement below to certify that you have complied with these requirements.				
	Check to certify compliance with indicated requirement	Requirement				
General Cogeneration Information		Diagram must show orientation within system piping and/or ducts of all prime movers, heat recovery steam generators, boilers, electric generators, and condensers (as applicable), as well as any other primary equipment relevant to the cogeneration process.				
		Any average annual values required to be reported in lines 10b, 12a, 13a, 13b, 13d, 13f, 14a, 15b, 15d and/or 15f must be computed over the anticipated hours of operation.				
		Diagram must specify all fuel inputs by fuel type and average annual rate in Btu/h. Fuel for supplementary firing should be specified separately and clearly labeled. All specifications of fuel inputs should use lower heating values.				
ene		Diagram must specify average gross electric output in kW or MW for each generator.				
G		Diagram must specify average mechanical output (that is, any mechanical energy taken off of the shaft of the prime movers for purposes not directly related to electric power generation) in horsepower, if any. Typically, a cogeneration facility has no mechanical output.				
		At each point for which working fluid flow conditions are required to be specified (see below), such flow condition data must include mass flow rate (in lb/h or kg/s), temperature (in °F, R, °C or K), absolute pressure (in psia or kPa) and enthalpy (in Btu/lb or kJ/kg). Exception: For systems where the working fluid is <i>liquid only</i> (no vapor at any point in the cycle) and where the type of liquid and specific heat of that liquid are clearly indicated on the diagram or in the Miscellaneous section starting on page 19, only mass flow rate and temperature (not pressure and enthalpy) need be specified. For reference, specific heat at standard conditions for pure liquid water is approximately 1.002 Btu/(lb*R) or 4.195 kJ/(kg*K).				
		Diagram must specify working fluid flow conditions at input to and output from each steam turbine or other expansion turbine or back-pressure turbine.				
		Diagram must specify working fluid flow conditions at delivery to and return from each thermal application.				
		Diagram must specify working fluid flow conditions at make-up water inputs.				

Page 12 - Cogeneration Facilities

EPAct 2005 cogeneration facilities: The Energy Policy Act of 2005 (EPAct 2005) established a new section 210(n) of the Public Utility Regulatory Policies Act of 1978 (PURPA), 16 USC 824a-3(n), with additional requirements for any qualifying cogeneration facility that (1) is seeking to sell electric energy pursuant to section 210 of PURPA and (2) was either not a cogeneration facility on August 8, 2005, or had not filed a self-certification or application for Commission certification of QF status on or before February 1, 2006. These requirements were implemented by the Commission in 18 C.F.R. § 292.205(d). Complete the lines below, carefully following the instructions, to demonstrate whether these additional requirements apply to your cogeneration facility and, if so, whether your facility complies with such requirements. 11a Was your facility operating as a qualifying cogeneration facility on or before August 8, 2005? Yes No 11b Was the initial filing seeking certification of your facility (whether a notice of self-certification or an application for Commission certification) filed on or before February 1, 2006? Yes If the answer to either line 11a or 11b is Yes, then continue at line 11c below. Otherwise, if the answers to both lines 11a and 11b are No, skip to line 11e below. of Energy Output from Cogeneration Facilities 11c With respect to the design and operation of the facility, have any changes been implemented on or after February 2, 2006 that affect general plant operation, affect use of thermal output, and/or increase net power production capacity from the plant's capacity on February 1, 2006? Yes (continue at line 11d below) No. Your facility is not subject to the requirements of 18 C.F.R. § 292.205(d) at this time. However, it may be subject to to these requirements in the future if changes are made to the facility. At such time, the applicant would need to recertify the facility to determine eligibility. Skip lines 11d through 11j. 11d Does the applicant contend that the changes identified in line 11c are not so significant as to make the facility a "new" cogeneration facility that would be subject to the 18 C.F.R. § 292.205(d) cogeneration requirements? Yes. Provide in the Miscellaneous section starting on page 19 a description of any relevant changes made to the facility (including the purpose of the changes) and a discussion of why the facility should not be considered a "new" cogeneration facility in light of these changes. Skip lines 11e through 11i. No. Applicant stipulates to the fact that it is a "new" cogeneration facility (for purposes of determining the applicability of the requirements of 18 C.F.R. § 292.205(d)) by virtue of modifications to the facility that were initiated on or after February 2, 2006. Continue below at line 11e. 11e Will electric energy from the facility be sold pursuant to section 210 of PURPA? Yes. The facility is an EPAct 2005 cogeneration facility. You must demonstrate compliance with 18 C.F.R. § 292.205(d)(2) by continuing at line 11f below. No. Applicant certifies that energy will not be sold pursuant to section 210 of PURPA. Applicant also certifies its understanding that it must recertify its facility in order to determine compliance with the requirements of 18 C.F.R. § 292.205(d) before selling energy pursuant to section 210 of PURPA in the future. Skip lines 11f through 11j. 11f Is the net power production capacity of your cogeneration facility, as indicated in line 7g above, less than or equal to 5,000 kW? Yes, the net power production capacity is less than or equal to 5,000 kW. 18 C.F.R. § 292.205(d)(4) provides a rebuttable presumption that cogeneration facilities of 5,000 kW and smaller capacity comply with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2). Applicant certifies its understanding that, should the power production capacity of the facility increase above 5,000 kW, then the facility must be recertified to (among other things) demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Skip lines 11g through 11j. No, the net power production capacity is greater than 5,000 kW. Demonstrate compliance with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2) by continuing on the next page at line 11g.

of Energy Output from Cogeneration Facilities (continued) EPAct 2005 Requirements for Fundamental Use

Lines 11g through 11k below guide the applicant through the process of demonstrating compliance with the requirements for "fundamental use" of the facility's energy output. 18 C.F.R. § 292.205(d)(2). Only respond to the lines on this page if the instructions on the previous page direct you to do so. Otherwise, skip this page.

18 C.F.R. § 292.205(d)(2) requires that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility. If you were directed on the previous page to respond to the items on this page, then your facility is an EPAct 2005 cogeneration facility that is subject to this "fundamental use" requirement.

The Commission's regulations provide a two-pronged approach to demonstrating compliance with the requirements for fundamental use of the facility's energy output. First, the Commission has established in 18 C.F.R. § 292.205(d)(3) a "fundamental use test" that can be used to demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Under the fundamental use test, a facility is considered to comply with 18 C.F.R. § 292.205(d)(2) if at least 50 percent of the facility's total annual energy output (including electrical, thermal, chemical and mechanical energy output) is used for industrial, commercial, residential or institutional purposes.

Second, an applicant for a facility that does not pass the fundamental use test may provide a narrative explanation of and support for its contention that the facility nonetheless meets the requirement that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility.

Complete lines 11g through 11j below to determine compliance with the fundamental use test in 18 C.F.R. § 292.205(d)(3). Complete lines 11g through 11j even if you do not intend to rely upon the fundamental use test to demonstrate compliance with 18 C.F.R. § 292.205(d)(2).

11g Amount of electrical, thermal, chemical and mechanical energy output (net of internal	
generation plant losses and parasitic loads) expected to be used annually for industrial,	
commercial, residential or institutional purposes and not sold to an electric utility	MWh
11h Total amount of electrical, thermal, chemical and mechanical energy expected to be	
sold to an electric utility	MWh
11i Percentage of total annual energy output expected to be used for industrial, commercial, residential or institutional purposes and not sold to a utility	
= 100 * 11g /(11g + 11h)	0 %
= 100 * 11g /(11g + 11h)	0 %

11j Is the response in line 11i greater than or equal to 50 percent?

Yes. Your facility complies with 18 C.F.R. § 292.205(d)(2) by virtue of passing the fundamental use test
provided in 18 C.F.R. § 292.205(d)(3). Applicant certifies its understanding that, if it is to rely upon passing
the fundamental use test as a basis for complying with 18 C.F.R. § 292.205(d)(2), then the facility must
comply with the fundamental use test both in the 12-month period beginning with the date the facility first
produces electric energy, and in all subsequent calendar years.
No. Your facility does not pass the fundamental use test. Instead, you must provide in the Miscellaneous section starting on page 19 a narrative explanation of and support for why your facility meets the requirement that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration
facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not
intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a

intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a QF to its host facility. Applicants providing a narrative explanation of why their facility should be found to comply with 18 C.F.R. § 292.205(d)(2) in spite of non-compliance with the fundamental use test may want to review paragraphs 47 through 61 of Order No. 671 (accessible from the Commission's QF website at www.ferc.gov/QF), which provide discussion of the facts and circumstances that may support their explanation. Applicant should also note that the percentage reported above will establish the standard that that facility must comply with, both for the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years. See Order No. 671 at paragraph 51. As such, the applicant should make sure that it reports appropriate values on lines 11g and 11h above to serve as the relevant annual standard, taking into account expected variations in production conditions.



Information Required for Topping-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents topping-cycle cogeneration technology, then you must respond to the items on pages 14 and 15. Otherwise, skip pages 14 and 15.

The thermal energy output of a topping-cycle cogeneration facility is the net energy made available to an industrial or commercial process or used in a heating or cooling application. Pursuant to sections 292.202(c), (d) and (h) of the Commission's regulations (18 C.F.R. §§ 292.202(c), (d) and (h)), the thermal energy output of a qualifying topping-cycle cogeneration facility must be useful. In connection with this requirement, describe the thermal output of the topping-cycle cogeneration facility by responding to lines 12a and 12b below.

12a Identify and describe each thermal host, and specify the annual average rate of thermal output made available to each host for each use. For hosts with multiple uses of thermal output, provide the data for each use in separate rows. Average annual rate of thermal output attributable to use (net of Name of entity (thermal host) Thermal host's relationship to facility; heat contained in process taking thermal output Thermal host's use of thermal output return or make-up water) Select thermal host's relationship to facility 1) Select thermal host's use of thermal output Btu/h Select thermal host's relationship to facility 2) Select thermal host's use of thermal output Btu/h Select thermal host's relationship to facility 3) Select thermal host's use of thermal output Btu/h Select thermal host's relationship to facility 4) Select thermal host's use of thermal output Btu/h Select thermal host's relationship to facility 5) Select thermal host's use of thermal output Btu/h Select thermal host's relationship to facility 6) Select thermal host's use of thermal output Btu/h Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

12b Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each use of the thermal output identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's use of thermal output is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific use of thermal output related to the instant facility, then you need only provide a brief description of that use and a reference by date and docket number to the order certifying your facility with the indicated use. Such exemption may not be used if any change creates a material deviation from the previously authorized use.) If additional space is needed, continue in the Miscellaneous section starting on page 19.

Page 15 - Topping-Cycle Cogeneration Facilities Applicants for facilities representing topping-cycle technology must demonstrate compliance with the toppingcycle operating standard and, if applicable, efficiency standard. Section 292.205(a)(1) of the Commission's regulations (18 C.F.R. § 292.205(a)(1)) establishes the operating standard for topping-cycle cogeneration facilities: the useful thermal energy output must be no less than 5 percent of the total energy output. Section 292.205(a)(2) (18 C.F.R. § 292.205(a)(2)) establishes the efficiency standard for topping-cycle cogeneration facilities for which installation commenced on or after March 13, 1980: the useful power output of the facility plus one-half the useful thermal energy output must (A) be no less than 42.5 percent of the total energy input of natural gas and oil to the facility; and (B) if the useful thermal energy output is less than 15 percent of the total energy output of the facility, be no less than 45 percent of the total energy input of natural gas and oil to the facility. To demonstrate compliance with the topping-cycle operating and/or efficiency standards, or to demonstrate that your facility is exempt from the efficiency standard based on the date that installation commenced, respond to lines 13a through 13l below. If you indicated in line 10a that your facility represents both topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 13a through 13l below considering only the energy inputs and outputs attributable to the topping-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion (topping or bottoming) of the cogeneration system.

13a Indicate the annual average rate of useful thermal energy output made available to the host(s), net of any heat contained in condensate return or make-up water Btu/h **13b** Indicate the annual average rate of net electrical energy output kW 13c Multiply line 13b by 3,412 to convert from kW to Btu/h Btu/h 13d Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production (this value is usually zero) hp 13e Multiply line 13d by 2,544 to convert from hp to Btu/h 0 Btu/h 13f Indicate the annual average rate of energy input from natural gas and oil Btu/h **13g** Topping-cycle operating value = 100 * 13a / (13a + 13c + 13e)0 % **13h** Topping-cycle efficiency value = 100 * (0.5*13a + 13c + 13e) / 13f **13i** Compliance with operating standard: Is the operating value shown in line 13g greater than or equal to 5%? Yes (complies with operating standard) No (does not comply with operating standard) 13j Did installation of the facility in its current form commence on or after March 13, 1980? Yes. Your facility is subject to the efficiency requirements of 18 C.F.R. § 292.205(a)(2). Demonstrate compliance with the efficiency requirement by responding to line 13k or 13l, as applicable, below. No. Your facility is exempt from the efficiency standard. Skip lines 13k and 13l. 13k Compliance with efficiency standard (for low operating value): If the operating value shown in line 13g is less than 15%, then indicate below whether the efficiency value shown in line 13h greater than or equal to 45%: Yes (complies with efficiency standard) No (does not comply with efficiency standard) 13I Compliance with efficiency standard (for high operating value): If the operating value shown in line 13g is greater than or equal to 15%, then indicate below whether the efficiency value shown in line 13h is greater than or equal to 42.5%: Yes (complies with efficiency standard) No (does not comply with efficiency standard)

Page 16 - Bottoming-Cycle Cogeneration Facilities

Information Required for Bottoming-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents bottoming-cycle cogeneration technology, then you must respond to the items on pages 16 and 17. Otherwise, skip pages 16 and 17.

The thermal energy output of a bottoming-cycle cogeneration facility is the energy related to the process(es) from which at least some of the reject heat is then used for power production. Pursuant to sections 292.202(c) and (e) of the Commission's regulations (18 C.F.R. § 292.202(c) and (e)), the thermal energy output of a qualifying bottomingcycle cogeneration facility must be useful. In connection with this requirement, describe the process(es) from which at least some of the reject heat is used for power production by responding to lines 14a and 14b below. 14a Identify and describe each thermal host and each bottoming-cycle cogeneration process engaged in by each host. For hosts with multiple bottoming-cycle cogeneration processes, provide the data for each process in separate rows. Has the energy input to the thermal host been Name of entity (thermal host) performing the process from augmented for purposes which at least some of the of increasing power reject heat is used for power production capacity? Thermal host's relationship to facility; production Thermal host's process type (if Yes, describe on p. 19) Select thermal host's relationship to facility Yes No 1) Select thermal host's process type Select thermal host's relationship to facility Yes No 2) Select thermal host's process type Select thermal host's relationship to facility Yes No 3) Select thermal host's process type Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed 14b Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each process identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's process is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific bottoming-cycle process related to the instant facility, then you need only provide a brief description of that process and a reference by date and docket number to the order certifying your facility with the indicated process. Such exemption may not be used if any material changes to the process have been made.) If additional space is needed, continue in the Miscellaneous section starting on page 19.



Page 17 - Bottoming-Cycle Cogeneration Facilities

Applicants for facilities representing bottoming-cycle technology and for which installation commenced on or after March 13, 1990 must demonstrate compliance with the bottoming-cycle efficiency standards. Section 292.205(b) of the Commission's regulations (18 C.F.R. § 292.205(b)) establishes the efficiency standard for bottoming-cycle cogeneration facilities: the useful power output of the facility must be no less than 45 percent of the energy input of natural gas and oil for supplementary firing. To demonstrate compliance with the bottoming-cycle efficiency standard (if applicable), or to demonstrate that your facility is exempt from this standard based on the date that installation of the facility began, respond to lines 15a through 15h below.

If you indicated in line 10a that your facility represents *both* topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 15a through 15h below considering only the energy inputs and outputs attributable to the bottoming-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion of the cogeneration system (topping or bottoming).

15a Did installation of the facility in its current form commence on or after March 13, 1980?				
Yes. Your facility is subject to the efficiency requirement of 18 C.F.R. § 292.205(b). Demonstrate compliance with the efficiency requirement by responding to lines 15b through 15h below.				
No. Your facility is exempt from the efficiency standard. Skip the rest of page	17.			
15b Indicate the annual average rate of net electrical energy output				
	kW			
15c Multiply line 15b by 3,412 to convert from kW to Btu/h				
	0 Btu/h			
15d Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production				
(this value is usually zero)	hp			
15e Multiply line 15d by 2,544 to convert from hp to Btu/h				
	0 Btu/h			
15f Indicate the annual average rate of supplementary energy input from natural gas				
or oil	Btu/h			
15g Bottoming-cycle efficiency value = 100 * (15c + 15e) / 15f	4			
	0 %			
15h Compliance with efficiency standard: Indicate below whether the efficiency value shown in line 15g is greater than or equal to 45%:				
Yes (complies with efficiency standard) No (does not comply wi	th efficiency standard)			

Commission Staff Use Only:

Certificate of Completeness, Accuracy and Authority

Applicant must certify compliance with and understanding of filing requirements by checking next to each item below and signing at the bottom of this section. Forms with incomplete Certificates of Completeness, Accuracy and Authority will be rejected by the Secretary of the Commission.

Signer identified below certifies the following: (check all items and applicable subitems) He or she has read the filing, including any information contained in any attached documents, such as cogeneration mass and heat balance diagrams, and any information contained in the Miscellaneous section starting on page 19, and knows its contents. He or she has provided all of the required information for certification, and the provided information is true as stated, to the best of his or her knowledge and belief. He or she possess full power and authority to sign the filing; as required by Rule 2005(a)(3) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(a)(3)), he or she is one of the following: (check one) ☐ The person on whose behalf the filing is made An officer of the corporation, trust, association, or other organized group on behalf of which the filing is made An officer, agent, or employe of the governmental authority, agency, or instrumentality on behalf of which the filing is made A representative qualified to practice before the Commission under Rule 2101 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2101) and who possesses authority to sign He or she has reviewed all automatic calculations and agrees with their results, unless otherwise noted in the Miscellaneous section starting on page 19. He or she has provided a copy of this Form 556 and all attachments to the utilities with which the facility will interconnect and transact (see lines 4a through 4d), as well as to the regulatory authorities of the states in which the facility and those utilities reside. See the Required Notice to Public Utilities and State Regulatory Authorities section on page 3 for more information. Provide your signature, address and signature date below. Rule 2005(c) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(c)) provides that persons filing their documents electronically may use typed characters representing his or her name to sign the filed documents. A person filing this document electronically should sign (by typing his or her name) in the space provided below. Your address Your Signature Date 600 University Street, Suite 3600 Seattle, WA 98101 Jennifer L. Mersing 10/8/2018 **Audit Notes**

Miscellaneous

Use this space to provide any information for which there was not sufficient space in the previous sections of the form to provide. For each such item of information *clearly identify the line number that the information belongs to.* You may also use this space to provide any additional information you believe is relevant to the certification of your facility.

Your response below is not limited to one page. Additional page(s) will automatically be inserted into this form if the length of your response exceeds the space on this page. Use as many pages as you require.

Line 5a: sPower Development Company, LLC is not currently an electric utility as defined under section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), but will become an electric utility on the date the facility first generates test power.

U-20500 - March 19, 2019 Complaint by sPower Development Company, LLC Attachment N

FEDERAL ENERGY REGULATORY COMMISSION WASHINGTON, DC

OMB Control # 1902-0075 Expiration 06/30/2019

Form 556 Certification of Qualifying Facility (QF) Status for a Small Power Production or Cogeneration Facility

General

Questions about completing this form should be sent to Form556@ferc.gov. Information about the Commission's QF program, answers to frequently asked questions about QF requirements or completing this form, and contact information for QF program staff are available at the Commission's QF website, www.ferc.gov/QF. The Commission's QF website also provides links to the Commission's QF regulations (18 C.F.R. § 131.80 and Part 292), as well as other statutes and orders pertaining to the Commission's QF program.

Who Must File

Any applicant seeking QF status or recertification of QF status for a generating facility with a net power production capacity (as determined in lines 7a through 7g below) greater than 1000 kW must file a self-certification or an application for Commission certification of QF status, which includes a properly completed Form 556. Any applicant seeking QF status for a generating facility with a net power production capacity 1000 kW or less is exempt from the certification requirement, and is therefore not required to complete or file a Form 556. See 18 C.F.R. § 292.203.

How to Complete the Form 556

This form is intended to be completed by responding to the items in the order they are presented, according to the instructions given. If you need to back-track, you may need to clear certain responses before you will be allowed to change other responses made previously in the form. If you experience problems, click on the nearest help button () for assistance, or contact Commission staff at Form556@ferc.gov.

Certain lines in this form will be automatically calculated based on responses to previous lines, with the relevant formulas shown. You must respond to all of the previous lines within a section before the results of an automatically calculated field will be displayed. If you disagree with the results of any automatic calculation on this form, contact Commission staff at Form556@ferc.gov to discuss the discrepancy before filing.

You must complete all lines in this form unless instructed otherwise. Do not alter this form or save this form in a different format. Incomplete or altered forms, or forms saved in formats other than PDF, will be rejected.

How to File a Completed Form 556

Applicants are required to file their Form 556 electronically through the Commission's eFiling website (see instructions on page 2). By filing electronically, you will reduce your filing burden, save paper resources, save postage or courier charges, help keep Commission expenses to a minimum, and receive a much faster confirmation (via an email containing the docket number assigned to your facility) that the Commission has received your filing.

If you are simultaneously filing both a waiver request and a Form 556 as part of an application for Commission certification, see the "Waiver Requests" section on page 3 for more information on how to file.

Paperwork Reduction Act Notice

This form is approved by the Office of Management and Budget. Compliance with the information requirements established by the FERC Form No. 556 is required to obtain or maintain status as a QF. See 18 C.F.R. § 131.80 and Part 292. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The estimated burden for completing the FERC Form No. 556, including gathering and reporting information, is as follows: 3 hours for self-certification of a small power production facility, 8 hours for self-certifications of a cogeneration facility, 6 hours for an application for Commission certification of a small power production facility, and 50 hours for an application for Commission certification of acility. Send comments regarding this burden estimate or any aspect of this collection of information, including suggestions for reducing this burden, to the following: Information Clearance Officer, Office of the Executive Director (ED-32), Federal Energy Regulatory Commission, 888 First Street N.E., Washington, DC 20426 (DataClearance@ferc.gov); and Desk Officer for FERC, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503 (oira_submission@omb.eop.gov). Include the Control No. 1902-0075 in any correspondence.

Electronic Filing (eFiling)

To electronically file your Form 556, visit the Commission's QF website at www.ferc.gov/QF and click the eFiling link.

If you are eFiling your first document, you will need to register with your name, email address, mailing address, and phone number. If you are registering on behalf of an employer, then you will also need to provide the employer name, alternate contact name, alternate contact phone number and and alternate contact email.

Once you are registered, log in to eFiling with your registered email address and the password that you created at registration. Follow the instructions. When prompted, select one of the following QF-related filing types, as appropriate, from the Electric or General filing category.

Filing category	Filing Type as listed in eFiling	Description
	(Fee) Application for Commission Cert. as Cogeneration QF	Use to submit an application for Commission certification or Commission recertification of a cogeneration facility as a QF.
	(Fee) Application for Commission Cert. as Small Power QF	Use to submit an application for Commission certification or Commission recertification of a small power production facility as a QF.
	Self-Certification Notice (QF, EG, FC)	Use to submit a notice of self- certification of your facility (cogeneration or small power production) as a QF.
Electric	Self-Recertification of Qualifying Facility (QF)	Use to submit a notice of self- recertification of your facility (cogeneration or small power production) as a QF.
	Supplemental Information or Request	Use to correct or supplement a Form 556 that was submitted with errors or omissions, or for which Commission staff has requested additional information. Do not use this filing type to report new changes to a facility or its ownership; rather, use a self- recertification or Commission recertification to report such changes.
General	(Fee) Petition for Declaratory Order (not under FPA Part 1)	Use to submit a petition for declaratory order granting a waiver of Commission QF regulations pursuant to 18 C.F.R. §§ 292.204(a) (3) and/or 292.205(c). A Form 556 is not required for a petition for declaratory order unless Commission recertification is being requested as part of the petition.

You will be prompted to submit your filing fee, if applicable, during the electronic submission process. Filing fees can be paid via electronic bank account debit or credit card.

During the eFiling process, you will be prompted to select your file(s) for upload from your computer.

Filing Fee

No filing fee is required if you are submitting a self-certification or self-recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(a).

A filing fee is required if you are filing either of the following:

(1) an application for Commission certification or recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(b), or (2) a petition for declaratory order granting waiver pursuant to 18 C.F.R. §§ 292.204(a)(3) and/or 292.205(c).

The current fees for applications for Commission certifications and petitions for declaratory order can be found by visiting the Commission's QF website at www.ferc.gov/QF and clicking the Fee Schedule link.

You will be prompted to submit your filing fee, if applicable, during the electronic filing process described on page 2.

Required Notice to Utilities and State Regulatory Authorities

Pursuant to 18 C.F.R. § 292.207(a)(ii), you must provide a copy of your self-certification or request for Commission certification to the utilities with which the facility will interconnect and/or transact, as well as to the State regulatory authorities of the states in which your facility and those utilities reside. Links to information about the regulatory authorities in various states can be found by visiting the Commission's QF website at www.ferc.gov/QF and clicking the Notice Requirements link.

What to Expect From the Commission After You File

An applicant filing a Form 556 electronically will receive an email message acknowledging receipt of the filing and showing the docket number assigned to the filing. Such email is typically sent within one business day, but may be delayed pending confirmation by the Secretary of the Commission of the contents of the filing.

An applicant submitting a self-certification of QF status should expect to receive no documents from the Commission, other than the electronic acknowledgement of receipt described above. Consistent with its name, a self-certification is a certification by the applicant itself that the facility meets the relevant requirements for QF status, and does not involve a determination by the Commission as to the status of the facility. An acknowledgement of receipt of a self-certification, in particular, does not represent a determination by the Commission with regard to the QF status of the facility. An applicant self-certifying may, however, receive a rejection, revocation or deficiency letter if its application is found, during periodic compliance reviews, not to comply with the relevant requirements.

An applicant submitting a request for Commission certification will receive an order either granting or denying certification of QF status, or a letter requesting additional information or rejecting the application. Pursuant to 18 C.F.R. § 292.207(b)(3), the Commission must act on an application for Commission certification within 90 days of the later of the filing date of the application or the filing date of a supplement, amendment or other change to the application.

Waiver Requests

18 C.F.R. § 292.204(a)(3) allows an applicant to request a waiver to modify the method of calculation pursuant to 18 C.F.R. § 292.204(a)(2) to determine if two facilities are considered to be located at the same site, for good cause. 18 C.F.R. § 292.205(c) allows an applicant to request waiver of the requirements of 18 C.F.R. §§ 292.205(a) and (b) for operating and efficiency upon a showing that the facility will produce significant energy savings. A request for waiver of these requirements must be submitted as a petition for declaratory order, with the appropriate filing fee for a petition for declaratory order. Applicants requesting Commission recertification as part of a request for waiver of one of these requirements should electronically submit their completed Form 556 along with their petition for declaratory order, rather than filing their Form 556 as a separate request for Commission recertification. Only the filing fee for the petition for declaratory order must be paid to cover both the waiver request and the request for recertification *if such requests are made simultaneously*.

18 C.F.R. § 292.203(d)(2) allows an applicant to request a waiver of the Form 556 filing requirements, for good cause. Applicants filing a petition for declaratory order requesting a waiver under 18 C.F.R. § 292.203(d)(2) do not need to complete or submit a Form 556 with their petition.

Geographic Coordinates

If a street address does not exist for your facility, then line 3c of the Form 556 requires you to report your facility's geographic coordinates (latitude and longitude). Geographic coordinates may be obtained from several different sources. You can find links to online services that show latitude and longitude coordinates on online maps by visiting the Commission's QF webpage at www.ferc.gov/QF and clicking the Geographic Coordinates link. You may also be able to obtain your geographic coordinates from a GPS device, Google Earth (available free at http://earth.google.com), a property survey, various engineering or construction drawings, a property deed, or a municipal or county map showing property lines.

Filing Privileged Data or Critical Energy Infrastructure Information in a Form 556

The Commission's regulations provide procedures for applicants to either (1) request that any information submitted with a Form 556 be given privileged treatment because the information is exempt from the mandatory public disclosure requirements of the Freedom of Information Act, 5 U.S.C. § 552, and should be withheld from public disclosure; or (2) identify any documents containing critical energy infrastructure information (CEII) as defined in 18 C.F.R. § 388.113 that should not be made public.

If you are seeking privileged treatment or CEII status for any data in your Form 556, then you must follow the procedures in 18 C.F.R. § 388.112. See www.ferc.gov/help/filing-quide/file-ceii.asp for more information.

Among other things (see 18 C.F.R. § 388.112 for other requirements), applicants seeking privileged treatment or CEII status for data submitted in a Form 556 must prepare and file both (1) a complete version of the Form 556 (containing the privileged and/or CEII data), and (2) a public version of the Form 556 (with the privileged and/or CEII data redacted). Applicants preparing and filing these different versions of their Form 556 must indicate below the security designation of this version of their document. If you are *not* seeking privileged treatment or CEII status for any of your Form 556 data, then you should not respond to any of the items on this page.

Non-Public: Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines indicated below. This non-public version of the applicant's Form 556 contains all data, including the data that is redacted in the (separate) public version of the applicant's Form 556.
 Public (redacted): Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines indicated below. This public version of the applicants's Form 556 contains all data except for data from the lines indicated below, which has been redacted.
Privileged : Indicate below which lines of your form contain data for which you are seeking privileged treatment
Critical Energy Infrastructure Information (CEII): Indicate below which lines of your form contain data for which you are seeking CEII status

The eFiling process described on page 2 will allow you to identify which versions of the electronic documents you submit are public, privileged and/or CEII. The filenames for such documents should begin with "Public", "Priv", or "CEII", as applicable, to clearly indicate the security designation of the file. Both versions of the Form 556 should be unaltered PDF copies of the Form 556, as available for download from www.ferc.gov/QF. To redact data from the public copy of the submittal, simply omit the relevant data from the Form. For numerical fields, leave the redacted fields blank. For text fields, complete as much of the field as possible, and replace the redacted portions of the field with the word "REDACTED" in brackets. Be sure to identify above all fields which contain data for which you are seeking non-public status.

The Commission is not responsible for detecting or correcting filer errors, including those errors related to security designation. If your documents contain sensitive information, make sure they are filed using the proper security designation.

FEDERAL ENERGY REGULATORY COMMISSION WASHINGTON, DC

OMB Control # 1902-0075 Expiration 06/30/2019

Form 556 Certification of Qualifying Facility (QF) Status for a Small Power Production or Cogeneration Facility

1b Applicant street a 2180 South 13	odress 00 East, Suite 600		
1c City		1d State/provi	ince
Salt Lake Cit	У	Utah	
1e Postal code 84106	1f Country (if not United States)		1g Telephone number 801–679–3500
1h Has the instant fa	cility ever previously been certified as a Q	F? Yes N	No 🗵
1i If yes, provide the	docket number of the last known QF filin	g pertaining to th	nis facility: QF
1i Under which certi		nis filina?	
Notice of self-ce		J	ommission certification (requires filing e" section on page 3)
QF status. A noti notice of self-cer	If-certification is a notice by the applicant ce of self-certification does not establish a tification to verify compliance. See the "V 3 for more information.	a proceeding, an	d the Commission does not review a
1k What type(s) of Q	F status is the applicant seeking for its fac	ility? (check all th	nat apply)
Qualifying small	I power production facility status 🔲 C	Qualifying cogene	eration facility status
	se and expected effective date(s) of this fi		
Original certific	ation; facility expected to be installed by	9/30/19 a	nd to begin operation on 12/31/19
	previously certified facility to be effective		
) of change(s) below, and describe chang	e(s) in the Miscel	laneous section starting on page 19)
	ge and/or other administrative change(s)		
☐ Change in o	wnersnip fecting plant equipment, fuel use, power	production cana	ocity and/or cogonoration thormal outn
			icity and/or cogeneration thermal outp
	orrection to a previous filing submitted o pplement or correction in the Miscellaned		ng on page 19)
1m If any of the follo	wing three statements is true, check the l sible, explaining any special circumstance	pox(es) that desc es in the Miscella	ribe your situation and complete the foneous section starting on page 19.
\square previously gra	cility complies with the Commission's QF inted by the Commission in an order date Miscellaneous section starting on page 19	ed	(specify any other relevant waiver
	cility would comply with the Commission with this application is granted	's QF requiremer	nts if a petition for waiver submitted
employment	cility complies with the Commission's reg of unique or innovative technologies not ation of compliance via this form difficult	contemplated by	the structure of this form, that make

	2a Name of contact person			2b Telephone number	1
	Sean McBride			801-679-3506	
	2c Which of the following describes the contact person's relationship to the applicant? (check one)				
		•		zed to represent the applicant	
on	Employee of a company affilia	•		•	
ati			·	• •	
Lawyer, consultant, or other representative authorized to represent the applicant on this matter 2d Company or organization name (if applicant is an individual, check here and skip to line 2e)					
Joju	FTP Power LLC	(ii applicant is an inalvida	ai, cricci nere ani	a stap to line 2c,	
Employee of a company affiliated with the applicant authorized to represent the applicant on this matter Lawyer, consultant, or other representative authorized to represent the applicant on this matter 2d Company or organization name (if applicant is an individual, check here and skip to line 2e) FTP Power LLC 2e Street address (if same as Applicant, check here and skip to line 3a)					
Ŭ	2f City		2g State/provi	ince	1
			29 State, p. 64.		
	2h Postal code	2i Country (if not United	States)		1
	an rostarcode	Zi country (ii not officed	Jedecs)		
	3a Facility name				1
u	Letts Creek Solar Facili	Lty			
Facility Identification and Location	3b Street address (if a street address	s does not exist for the fac	ility, check here a	nd skip to line 3c)⊠	A
ÖÖ	Street address (if a street address	s does not exist for the fac	mey, erreen riere a	sup toe 50/	t
7					
anc	36 Goographic coordinates: If you in	adicated that no street ad	dross ovists for vo	our facility by checking the box in line 3b,	-
<u> </u>				in degrees (to three decimal places). Use	
ıţi				and seconds: decimal degrees = es" section on page 4 for help. If you	
<u>[]</u>			•	graphic coordinates below is optional.	
)ţi	 East (+)	1 126 1		North (+) 42, 275 1	
ger	Longitude West (-)	1.136 degrees	Latitude		
<u>></u>	3d City (if unincorporated, check he	re and enter nearest city)	3e State/p	rovince	
<u></u>	Grass Lake Charter Town	ship	Michigan		
-ac	3f County (or check here for indepe	ndent city) 🗌 39	g Country (if not	United States)	A
	Jackson				•
	Identify the electric utilities that are o	contemplated to transact v	with the facility.		
es	4a Identify utility interconnecting with the facility				
ı <u>≡</u>	Consumers Energy				
Ŭ.	4b Identify utilities providing wheel	ing service or check here i	f none		7
) g					•
<u>;</u>	4c Identify utilities purchasing the u	seful electric power outpu	ıt or check here it	f none	7
sac	Consumers Energy				•
Transacting Utilities	4d Identify utilities providing suppl	ementary power, backup r	oower, maintenai	nce power, and/or interruptible power	e
∸	service or check here if none			and the second s	7
	Consumers Energy				

FEI

Ownership and Operation

sPower Development Company, LLC

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5a Direct ownership as of effective date or operation date: Identify all direct owners of the percent equity interest. For each identified owner, also (1) indicate whether that own defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or a holding compact (1262(8)) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)), and (1262(8)) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)), and (1262(8)) or holding companies, provide the percentage of equity interest in the facility, then provide the two direct owners with the largest equity interest in the facility.	ner is an ele mpany, as de 2) for owner ry held by th	ctric utilite efined in s s which a at owner	ty, as section are electric r. If no
two direct owners with the largest equity interest in the facility.	Electric u	itility or	If Yes,
	hold	•	% equity
Full legal names of direct owners	comp	•	interest
1) sPower Development Company, LLC	Yes 🔀	No 🗌	100%
2)	Yes	No 🗌	%
3)	Yes 🗌	No 🗌	~~~~~~°
4)	Yes 🗌	No 🗌	%
5)	Yes 🗌	No 🗌	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
6)	Yes 🗌	No 🗌	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
7)	Yes 🗌	No 🗌	%
8)	Yes 🗌	No 🗌	%
9)	Yes 🗌	No 🗌	%
10)	Yes	No 🗌	%
Check here and continue in the Miscellaneous section starting on page 19 if add	litional spac	e is need	ed
of the facility that both (1) hold at least 10 percent equity interest in the facility, and defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or holding comp 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)). Also equity interest in the facility held by such owners. (Note that, because upstream own another, total percent equity interest reported may exceed 100 percent.) Check here if no such upstream owners exist.	panies, as de provide the	efined in s percenta	section age of
eneek here ii no sach apstream owners exist.			% equity
Full legal names of electric utility or holding company upstream own	ers		interest
1) FTP Power LLC			8
2) AES Lumos Holdings, LLC			50%
3) AES Corporation			50%
4) PIP5 Lumos LLC			50%
5) Alberta Investment Management Corporation			50 %
6)			%
7)			%
8)			~~~~~~ <u></u> %
9)			~~~~~°
10)			~~~~~°
Check here and continue in the Miscellaneous section starting on page 19 if addi	tional space	is neede	:d
5c Identify the facility operator			



U-20500 - March 19, 2019 Complaint by sPower Development Company, LLC Attachment N Page 8 - All Facilities

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	6a	Describe th	ne primary energy input: (ch	neck one mai	in category and, if ap	plicable,	one subcategory)	
		Biomas	s (specify)	⊠ Re	newable resources (specify)	☐ Geothermal	
		□ L	andfill gas		☐ Hydro power - ri	ver	Fossil fuel (spec	ify)
		□ N	Nanure digester gas		☐ Hydro power - ti	dal	☐ Coal (not	waste)
		□ N	Nunicipal solid waste		☐ Hydro power - w	ave	☐ Fuel oil/d	iesel
		□ S	ewage digester gas		⊠ Solar - photovol	taic	☐ Natural g	as (not waste)
		□ V	Vood		☐ Solar - thermal		Other fos	
			Other biomass (describe on	page 19)	☐ Wind			on page 19)
		☐ Waste (specify type below in line 6	b)	Other renewable (describe on page		Other (describe	on page 19)
	6b	If you spec	ified "waste" as the primary	energy inpu	ıt in line 6a, indicate	the type o	of waste fuel used: (che	eck one)
		☐ Waste	e fuel listed in 18 C.F.R. § 29	2.202(b) (spe	ecify one of the follo	wing)		
			Anthracite culm produced	prior to July	23, 1985			
			Anthracite refuse that has ash content of 45 percent		eat content of 6,000) Btu or les	ss per pound and has a	n average
			Bituminous coal refuse tha average ash content of 25			9,500 Btu	per pound or less and	has an
nput			Top or bottom subbitumin determined to be waste by (BLM) or that is located on the applicant shows that the	the United non-Federal	States Department o or non-Indian lands	of the Inter outside o	rior's Bureau of Land N f BLM's jurisdiction, pr	lanagement ovided that
Energy Input			Coal refuse produced on F BLM or that is located on n applicant shows that the la	on- Federal	or non-Indian lands	outside of	BLM's jurisdiction, pro	•
Ш			Lignite produced in associated as a result of such a mining		e production of mo	ntan wax a	and lignite that becom	es exposed
			Gaseous fuels (except natu	ıral gas and s	synthetic gas from co	oal) (descr	ibe on page 19)	
			Waste natural gas from gas C.F.R. § 2.400 for waste nat compliance with 18 C.F.R.	tural gas; inc			-	
			Materials that a governme	nt agency ha	s certified for dispos	sal by com	bustion (describe on p	page 19)
			Heat from exothermic read	tions (descri	be on page 19)		Residual heat (describ	e on page 19)
			Used rubber tires] Plastic ma	terials 🗌 F	Refinery of	f-gas 🗌 Petr	oleum coke
		facilit	r waste energy input that ha y industry (describe in the I of commercial value and exi	Miscellaneou	ıs section starting or	n page 19;	include a discussion o	
	6c Provide the average energy input, calculated on a calendar year basis, in terms of Btu/h for the following fossil fuel energy inputs, and provide the related percentage of the total average annual energy input to the facility (18 C.F.R. 9292.202(j)). For any oil or natural gas fuel, use lower heating value (18 C.F.R. § 292.202(m)).					-		
			F 1		ual average energy		Percentage of total	
			Fuel Natural gas	inp	ut for specified fuel	- D: "	annual energy input]
			Oil-based fuels			Btu/h	0 %	-
			Coal			Btu/h	0 %	-

Indicate the maximum gross and maximum net electric power production capacity of the facility at the point(s) of delivery by completing the worksheet below. Respond to all items. If any of the parasitic loads and/or losses identified in lines 7b through 7e are negligible, enter zero for those lines.

7a The maximum gross power production capacity at the terminals of the individual generator(s) under the most favorable anticipated design conditions	19,500 kW
7b Parasitic station power used at the facility to run equipment which is necessary and integral to the power production process (boiler feed pumps, fans/blowers, office or maintenance buildings directly related to the operation of the power generating facility, etc.). If this facility includes non-power production processes (for instance, power consumed by a cogeneration facility's thermal host), do not include any power consumed by the non-power production activities in your reported parasitic station power.	
reported parasitic station power.	0 kW
7c Electrical losses in interconnection transformers	0 kW
7d Electrical losses in AC/DC conversion equipment, if any	
	4,500 kW
7e Other interconnection losses in power lines or facilities (other than transformers and AC/DC conversion equipment) between the terminals of the generator(s) and the point of interconnection	
with the utility	0 kW
7f Total deductions from gross power production capacity = 7b + 7c + 7d + 7e	
	4,500.0 kW
7g Maximum net power production capacity = 7a - 7f	
	15,000.0 kW

7h Description of facility and primary components: Describe the facility and its operation. Identify all boilers, heat recovery steam generators, prime movers (any mechanical equipment driving an electric generator), electrical generators, photovoltaic solar equipment, fuel cell equipment and/or other primary power generation equipment used in the facility. Descriptions of components should include (as applicable) specifications of the nominal capacities for mechanical output, electrical output, or steam generation of the identified equipment. For each piece of equipment identified, clearly indicate how many pieces of that type of equipment are included in the plant, and which components are normally operating or normally in standby mode. Provide a description of how the components operate as a system. Applicants for cogeneration facilities do not need to describe operations of systems that are clearly depicted on and easily understandable from a cogeneration facility's attached mass and heat balance diagram; however, such applicants should provide any necessary description needed to understand the sequential operation of the facility depicted in their mass and heat balance diagram. If additional space is needed, continue in the Miscellaneous section starting on page 19.

The facility will be comprised of 55,713 solar modules with a nameplate DC rating of 350W each. The modules will be attached to single-axis tracker racking. The facility will use 7 inverters with a nameplate AC output of 2,000 kW each and 1 inverter with a nameplate AC output of 1,000 kW.

The facility includes all generator interconnection equipment necessary to deliver output from the facility to the grid.



with Fuel Use Reguirements

Information Required for Small Power Production Facility

If you indicated in line 1k that you are seeking qualifying small power production facility status for your facility, then you must respond to the items on this page. Otherwise, skip page 10.

Pursuant to 18 C.F.R. § 292.204(a), the power production capacity of any small power production facility, together with the power production capacity of any other small power production facilities that use the same energy resource, are owned by the same person(s) or its affiliates, and are located at the same site, may not exceed 80 megawatts. To demonstrate compliance with this size limitation, or to demonstrate that your facility is exempt from this size limitation under the Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Pub. L. 101-575, 104 Stat. 2834 (1990) as amended by Pub. L. 102-46, 105 Stat. 249 (1991)), respond to lines 8a through 8e below (as applicable). 8a Identify any facilities with electrical generating equipment located within 1 mile of the electrical generating equipment of the instant facility, and for which any of the entities identified in lines 5a or 5b, or their affiliates, holds at least a 5 percent equity interest. Certification of Compliance Check here if no such facilities exist. Root docket # **Facility location** Maximum net power with Size Limitations (city or county, state) (if any) Common owner(s) production capacity 1) QF kW 2) QF kW OF kW Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed 8b The Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Incentives Act) provides exemption from the size limitations in 18 C.F.R. § 292.204(a) for certain facilities that were certified prior to 1995. Are you seeking exemption from the size limitations in 18 C.F.R. § 292.204(a) by virtue of the Incentives Act? Yes (continue at line 8c below) No (skip lines 8c through 8e) 8c Was the original notice of self-certification or application for Commission certification of the facility filed on or before December 31, 1994? Yes No **8d** Did construction of the facility commence on or before December 31, 1999? Yes 8e If you answered No in line 8d, indicate whether reasonable diligence was exercised toward the completion of the facility, taking into account all factors relevant to construction? Yes No If you answered Yes, provide a brief narrative explanation in the Miscellaneous section starting on page 19 of the construction timeline (in particular, describe why construction started so long after the facility was certified) and the diligence exercised toward completion of the facility. Pursuant to 18 C.F.R. § 292.204(b), qualifying small power production facilities may use fossil fuels, in minimal Certification of Compliance amounts, for only the following purposes: ignition; start-up; testing; flame stabilization; control use; alleviation or prevention of unanticipated equipment outages; and alleviation or prevention of emergencies, directly affecting the public health, safety, or welfare, which would result from electric power outages. The amount of fossil fuels used for these purposes may not exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter. 9a Certification of compliance with 18 C.F.R. § 292.204(b) with respect to uses of fossil fuel: Applicant certifies that the facility will use fossil fuels *exclusively* for the purposes listed above. 9b Certification of compliance with 18 C.F.R. § 292.204(b) with respect to amount of fossil fuel used annually: Applicant certifies that the amount of fossil fuel used at the facility will not, in aggregate, exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter.

Information Required for Cogeneration Facility

If you indicated in line 1k that you are seeking qualifying cogeneration facility status for your facility, then you must respond to the items on pages 11 through 13. Otherwise, skip pages 11 through 13.

to the it	cins on pages in unough	13. Otherwise, skip pages 11 tillough 13.
	energy (such as heat or suse of energy. Pursuant cycle cogeneration facilithermal application or put	22.202(c), a cogeneration facility produces electric energy and forms of useful thermal team) used for industrial, commercial, heating, or cooling purposes, through the sequential to 18 C.F.R. § 292.202(s), "sequential use" of energy means the following: (1) for a toppingty, the use of reject heat from a power production process in sufficient amounts in a rocess to conform to the requirements of the operating standard contained in 18 C.F.R. § ottoming-cycle cogeneration facility, the use of at least some reject heat from a thermal r power production.
		eneration technology does the facility represent? (check all that apply)
	Topping-cycle	cogeneration Bottoming-cycle cogeneration
	other requirements balance diagram de meet certain requir	te the sequential operation of the cogeneration process, and to support compliance with such as the operating and efficiency standards, include with your filing a mass and heat epicting average annual operating conditions. This diagram must include certain items and ements, as described below. You must check next to the description of each requirement tyou have complied with these requirements.
	Check to certify	
	compliance with	
	indicated requirement	Requirement
ration ر		Diagram must show orientation within system piping and/or ducts of all prime movers, heat recovery steam generators, boilers, electric generators, and condensers (as applicable), as well as any other primary equipment relevant to the cogeneration process.
gene natior		Any average annual values required to be reported in lines 10b, 12a, 13a, 13b, 13d, 13f, 14a, 15b, 15d and/or 15f must be computed over the anticipated hours of operation.
General Cogeneration Information		Diagram must specify all fuel inputs by fuel type and average annual rate in Btu/h. Fuel for supplementary firing should be specified separately and clearly labeled. All specifications of fuel inputs should use lower heating values.
ene		Diagram must specify average gross electric output in kW or MW for each generator.
U		Diagram must specify average mechanical output (that is, any mechanical energy taken off of the shaft of the prime movers for purposes not directly related to electric power generation) in horsepower, if any. Typically, a cogeneration facility has no mechanical output.
		At each point for which working fluid flow conditions are required to be specified (see below), such flow condition data must include mass flow rate (in lb/h or kg/s), temperature (in °F, R, °C or K), absolute pressure (in psia or kPa) and enthalpy (in Btu/lb or kJ/kg). Exception: For systems where the working fluid is <i>liquid only</i> (no vapor at any point in the cycle) and where the type of liquid and specific heat of that liquid are clearly indicated on the diagram or in the Miscellaneous section starting on page 19, only mass flow rate and temperature (not pressure and enthalpy) need be specified. For reference, specific heat at standard conditions for pure liquid water is approximately 1.002 Btu/(lb*R) or 4.195 kJ/(kg*K).
		Diagram must specify working fluid flow conditions at input to and output from each steam turbine or other expansion turbine or back-pressure turbine.
		Diagram must specify working fluid flow conditions at delivery to and return from each thermal application.
		Diagram must specify working fluid flow conditions at make-up water inputs.

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	EPAct 2005 cogeneration facilities: The Energy Policy Act of 2005 (EPAct 2005) established a new section 210(n) of the Public Utility Regulatory Policies Act of 1978 (PURPA), 16 USC 824a-3(n), with additional requirements for any qualifying cogeneration facility that (1) is seeking to sell electric energy pursuant to section 210 of PURPA and (2) was either not a cogeneration facility on August 8, 2005, or had not filed a self-certification or application for Commission certification of QF status on or before February 1, 2006. These requirements were implemented by the Commission in 18 C.F.R. § 292.205(d). Complete the lines below, carefully following the instructions, to demonstrate whether these additional requirements apply to your cogeneration facility and, if so, whether your facility complies with such requirements.	
	11a Was your facility operating as a qualifying cogeneration facility on or before August 8, 2005? Yes No	E
	11b Was the initial filing seeking certification of your facility (whether a notice of self-certification or an application for Commission certification) filed on or before February 1, 2006? Yes No	•
s S	If the answer to either line 11a or 11b is Yes, then continue at line 11c below. Otherwise, if the answers to both lines 11a and 11b are No, skip to line 11e below.	
2005 Requirements for Fundamental Use ergy Output from Cogeneration Facilities	11c With respect to the design and operation of the facility, have any changes been implemented on or after February 2, 2006 that affect general plant operation, affect use of thermal output, and/or increase net power production capacity from the plant's capacity on February 1, 2006?	•
me n F	Yes (continue at line 11d below)	
s for Fundam ogeneration	No. Your facility is not subject to the requirements of 18 C.F.R. § 292.205(d) at this time. However, it may be subject to to these requirements in the future if changes are made to the facility. At such time, the applicant would need to recertify the facility to determine eligibility. Skip lines 11d through 11j.	
s tor oger	11d Does the applicant contend that the changes identified in line 11c are not so significant as to make the facility a "new" cogeneration facility that would be subject to the 18 C.F.R. § 292.205(d) cogeneration requirements?	•
ement from C	Yes. Provide in the Miscellaneous section starting on page 19 a description of any relevant changes made to the facility (including the purpose of the changes) and a discussion of why the facility should not be considered a "new" cogeneration facility in light of these changes. Skip lines 11e through 11j.	
2005 Requirements ergy Output from C	No. Applicant stipulates to the fact that it is a "new" cogeneration facility (for purposes of determining the applicability of the requirements of 18 C.F.R. § 292.205(d)) by virtue of modifications to the facility that were initiated on or after February 2, 2006. Continue below at line 11e.	
05 y O	11e Will electric energy from the facility be sold pursuant to section 210 of PURPA?	E
	Yes. The facility is an EPAct 2005 cogeneration facility. You must demonstrate compliance with 18 C.F.R. § 292.205(d)(2) by continuing at line 11f below.	
EPACT of En	No. Applicant certifies that energy will <i>not</i> be sold pursuant to section 210 of PURPA. Applicant also certifies its understanding that it must recertify its facility in order to determine compliance with the requirements of 18 C.F.R. § 292.205(d) <i>before</i> selling energy pursuant to section 210 of PURPA in the future. Skip lines 11f through 11j.	
	11f Is the net power production capacity of your cogeneration facility, as indicated in line 7g above, less than or equal to 5,000 kW?	E
	Yes, the net power production capacity is less than or equal to 5,000 kW. 18 C.F.R. § 292.205(d)(4) provides a rebuttable presumption that cogeneration facilities of 5,000 kW and smaller capacity comply with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2). Applicant certifies its understanding that, should the power production capacity of the facility increase above 5,000 kW, then the facility must be recertified to (among other things) demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Skip lines 11g through 11j.	
	No, the net power production capacity is greater than 5,000 kW. Demonstrate compliance with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2) by continuing on the next page at line 11g.	

Lines 11g through 11k below guide the applicant through the process of demonstrating compliance with the requirements for "fundamental use" of the facility's energy output. 18 C.F.R. § 292.205(d)(2). Only respond to the lines on this page if the instructions on the previous page direct you to do so. Otherwise, skip this page.

18 C.F.R. § 292.205(d)(2) requires that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility. If you were directed on the previous page to respond to the items on this page, then your facility is an EPAct 2005 cogeneration facility that is subject to this "fundamental use" requirement.

The Commission's regulations provide a two-pronged approach to demonstrating compliance with the requirements for fundamental use of the facility's energy output. First, the Commission has established in 18 C.F.R. § 292.205(d)(3) a "fundamental use test" that can be used to demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Under the fundamental use test, a facility is considered to comply with 18 C.F.R. § 292.205(d)(2) if at least 50 percent of the facility's total annual energy output (including electrical, thermal, chemical and mechanical energy output) is used for industrial, commercial, residential or institutional purposes.

Second, an applicant for a facility that does not pass the fundamental use test may provide a narrative explanation of and support for its contention that the facility nonetheless meets the requirement that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility.

Complete lines 11g through 11j below to determine compliance with the fundamental use test in 18 C.F.R. § 292.205(d)(3). Complete lines 11g through 11j even if you do not intend to rely upon the fundamental use test to demonstrate compliance with 18 C.F.R. § 292.205(d)(2).

11g Amount of electrical, thermal, chemical and mechanical energy output (net of internal	
generation plant losses and parasitic loads) expected to be used annually for industrial,	
commercial, residential or institutional purposes and not sold to an electric utility	MWh
11h Total amount of electrical, thermal, chemical and mechanical energy expected to be	
sold to an electric utility	MWh
11i Percentage of total annual energy output expected to be used for industrial,	
commercial, residential or institutional purposes and not sold to a utility	
= 100 * 11g /(11g + 11h)	0 %

11j Is the response in line 11i greater than or equal to 50 percent?

[Yes. Your facility complies with 18 C.F.R. § 292.205(d)(2) by virtue of passing the fundamental use test provided in 18 C.F.R. § 292.205(d)(3). Applicant certifies its understanding that, if it is to rely upon passing the fundamental use test as a basis for complying with 18 C.F.R. § 292.205(d)(2), then the facility must comply with the fundamental use test both in the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years.
	No. Your facility does not pass the fundamental use test. Instead, you must provide in the Miscellaneous section starting on page 19 a narrative explanation of and support for why your facility meets the requirement that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not
	intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a
	QF to its host facility. Applicants providing a narrative explanation of why their facility should be found to
	comply with 18 C.F.R. § 292.205(d)(2) in spite of non-compliance with the fundamental use test may want to
	review paragraphs 47 through 61 of Order No. 671 (accessible from the Commission's QF website at

www.ferc.gov/QF), which provide discussion of the facts and circumstances that may support their

that facility must comply with, both for the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years. *See* Order No. 671 at paragraph 51. As such, the applicant should make sure that it reports appropriate values on lines 11g and 11h above to serve as the

relevant annual standard, taking into account expected variations in production conditions.

explanation. Applicant should also note that the percentage reported above will establish the standard that



Information Required for Topping-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents topping-cycle cogeneration technology, then you must respond to the items on pages 14 and 15. Otherwise, skip pages 14 and 15.

The thermal energy output of a topping-cycle cogeneration facility is the net energy made available to an industrial or commercial process or used in a heating or cooling application. Pursuant to sections 292,202(c), (d) and (h) of the

2a		mal host, and specify the annual average rate of the nosts with multiple uses of thermal output, providence of the male of the male output, providence of the male of the male output, providence of the male output, providence out	e the data for each use <i>in</i> Average annual rate of
	Name of entity (thermal host) taking thermal output	Thermal host's relationship to facility; Thermal host's use of thermal output	thermal output attributable to use (net of heat contained in process return or make-up water)
)		Select thermal host's relationship to facility	
,		Select thermal host's use of thermal output	Btu/h
)		Select thermal host's relationship to facility	
		Select thermal host's use of thermal output	Btu/h
		Select thermal host's relationship to facility	
		Select thermal host's use of thermal output	Btu/h
		Select thermal host's relationship to facility	
		Select thermal host's use of thermal output	Btu/h
		Select thermal host's relationship to facility	
		Select thermal host's use of thermal output	Btu/h
		Select thermal host's relationship to facility	
		Select thermal host's use of thermal output	Btu/h
_	Check here and continue in	the Miscellaneous section starting on page 19 if a	
er ot p m	mal output identified above. In vever, if your facility's use of ther reasonably clear, then you must lication may be rejected and/or a ade. (Exception: If you have pre- out related to the instant facility, e and docket number to the orde	f thermal output: At a minimum, provide a brief description is sufficient to description is sufficient to description is sufficient to description is not common, and/or if the usefulness provide additional details as necessary to demonstadditional information may be required if an insufficient of the sufficient of the suffing sufficient of the sufficient of the sufficient of the sufficie	emonstrate usefulness. ss of such thermal output is strate usefulness. Your ficient showing of usefulness ving a specific use of thermal that use and a reference by uch exemption may not be

No (does not comply with efficiency standard)

equal to 42.5%:

Yes (complies with efficiency standard)

Page 15 - Topping-Cycle Cogeneration Facilities Applicants for facilities representing topping-cycle technology must demonstrate compliance with the toppingcycle operating standard and, if applicable, efficiency standard. Section 292.205(a)(1) of the Commission's regulations (18 C.F.R. § 292.205(a)(1)) establishes the operating standard for topping-cycle cogeneration facilities: the useful thermal energy output must be no less than 5 percent of the total energy output. Section 292.205(a)(2) (18 C.F.R. § 292.205(a)(2)) establishes the efficiency standard for topping-cycle cogeneration facilities for which installation commenced on or after March 13, 1980: the useful power output of the facility plus one-half the useful thermal energy output must (A) be no less than 42.5 percent of the total energy input of natural gas and oil to the facility; and (B) if the useful thermal energy output is less than 15 percent of the total energy output of the facility, be no less than 45 percent of the total energy input of natural gas and oil to the facility. To demonstrate compliance with the topping-cycle operating and/or efficiency standards, or to demonstrate that your facility is exempt from the efficiency standard based on the date that installation commenced, respond to lines 13a through 13l below. If you indicated in line 10a that your facility represents both topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 13a through 13l below considering only the energy inputs and outputs attributable to the topping-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion (topping or bottoming) of the cogeneration system. 13a Indicate the annual average rate of useful thermal energy output made available to the host(s), net of any heat contained in condensate return or make-up water Btu/h **13b** Indicate the annual average rate of net electrical energy output kW 13c Multiply line 13b by 3,412 to convert from kW to Btu/h Btu/h 13d Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production (this value is usually zero) hp 13e Multiply line 13d by 2,544 to convert from hp to Btu/h 0 Btu/h 13f Indicate the annual average rate of energy input from natural gas and oil Btu/h **13g** Topping-cycle operating value = 100 * 13a / (13a + 13c + 13e)0 % **13h** Topping-cycle efficiency value = 100 * (0.5*13a + 13c + 13e) / 13f **13i** Compliance with operating standard: Is the operating value shown in line 13g greater than or equal to 5%? Yes (complies with operating standard) No (does not comply with operating standard) 13j Did installation of the facility in its current form commence on or after March 13, 1980? Yes. Your facility is subject to the efficiency requirements of 18 C.F.R. § 292.205(a)(2). Demonstrate compliance with the efficiency requirement by responding to line 13k or 13l, as applicable, below. No. Your facility is exempt from the efficiency standard. Skip lines 13k and 13l. 13k Compliance with efficiency standard (for low operating value): If the operating value shown in line 13g is less than 15%, then indicate below whether the efficiency value shown in line 13h greater than or equal to 45%: Yes (complies with efficiency standard) No (does not comply with efficiency standard) 13I Compliance with efficiency standard (for high operating value): If the operating value shown in line 13g is greater than or equal to 15%, then indicate below whether the efficiency value shown in line 13h is greater than or

Page 16 - Bottoming-Cycle Cogeneration Facilities

Information Required for Bottoming-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents bottoming-cycle cogeneration technology, then you must respond to the items on pages 16 and 17. Otherwise, skip pages 16 and 17.

The thermal energy output of a bottoming-cycle cogeneration facility is the energy related to the process(es) from which at least some of the reject heat is then used for power production. Pursuant to sections 292.202(c) and (e) of the Commission's regulations (18 C.F.R. § 292.202(c) and (e)), the thermal energy output of a qualifying bottomingcycle cogeneration facility must be useful. In connection with this requirement, describe the process(es) from which at least some of the reject heat is used for power production by responding to lines 14a and 14b below. 14a Identify and describe each thermal host and each bottoming-cycle cogeneration process engaged in by each host. For hosts with multiple bottoming-cycle cogeneration processes, provide the data for each process in separate rows. Has the energy input to the thermal host been Name of entity (thermal host) performing the process from augmented for purposes which at least some of the of increasing power reject heat is used for power production capacity? Thermal host's relationship to facility; production Thermal host's process type (if Yes, describe on p. 19) Select thermal host's relationship to facility Yes No 1) Select thermal host's process type Select thermal host's relationship to facility Yes No 2) Select thermal host's process type Select thermal host's relationship to facility Yes No 3) Select thermal host's process type Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed 14b Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each process identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's process is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific bottoming-cycle process related to the instant facility, then you need only provide a brief description of that process and a reference by date and docket number to the order certifying your facility with the indicated process. Such exemption may not be used if any material changes to the process have been made.) If additional space is needed, continue in the Miscellaneous section starting on page 19.

Page 17 - Bottoming-Cycle Cogeneration Facilities

Applicants for facilities representing bottoming-cycle technology and for which installation commenced on or after March 13, 1990 must demonstrate compliance with the bottoming-cycle efficiency standards. Section 292.205(b) of the Commission's regulations (18 C.F.R. § 292.205(b)) establishes the efficiency standard for bottoming-cycle cogeneration facilities: the useful power output of the facility must be no less than 45 percent of the energy input of natural gas and oil for supplementary firing. To demonstrate compliance with the bottoming-cycle efficiency standard (if applicable), or to demonstrate that your facility is exempt from this standard based on the date that installation of the facility began, respond to lines 15a through 15h below.

If you indicated in line 10a that your facility represents *both* topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 15a through 15h below considering only the energy inputs and outputs attributable to the bottoming-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion of the cogeneration system (topping or bottoming).

15a Did installation of the facility in its current form commence on or after March 13,	1980?	
Yes. Your facility is subject to the efficiency requirement of 18 C.F.R. § 292.205(b). Demonstrate compliance with the efficiency requirement by responding to lines 15b through 15h below.		
No. Your facility is exempt from the efficiency standard. Skip the rest of page	17.	
15b Indicate the annual average rate of net electrical energy output	kW	
15c Multiply line 15b by 3,412 to convert from kW to Btu/h	0 Btu/h	
15d Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production (this value is usually zero)	hp	
15e Multiply line 15d by 2,544 to convert from hp to Btu/h	0 Btu/h	
15f Indicate the annual average rate of supplementary energy input from natural gas or oil	Btu/h	
15g Bottoming-cycle efficiency value = 100 * (15c + 15e) / 15f	0 %	
15h Compliance with efficiency standard: Indicate below whether the efficiency value shown in line 15g is greater than or equal to 45%:		
Yes (complies with efficiency standard) No (does not comply w	ith efficiency standard)	

Commission Staff Use Only:

Certificate of Completeness, Accuracy and Authority

Applicant must certify compliance with and understanding of filing requirements by checking next to each item below and signing at the bottom of this section. Forms with incomplete Certificates of Completeness, Accuracy and Authority will be rejected by the Secretary of the Commission.

Signer identified below certifies the following: (check all items and applicable subitems) He or she has read the filing, including any information contained in any attached documents, such as cogeneration mass and heat balance diagrams, and any information contained in the Miscellaneous section starting on page 19, and knows its contents. He or she has provided all of the required information for certification, and the provided information is true as stated, to the best of his or her knowledge and belief. He or she possess full power and authority to sign the filing; as required by Rule 2005(a)(3) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(a)(3)), he or she is one of the following: (check one) ☐ The person on whose behalf the filing is made An officer of the corporation, trust, association, or other organized group on behalf of which the filing is made An officer, agent, or employe of the governmental authority, agency, or instrumentality on behalf of which the filing is made A representative qualified to practice before the Commission under Rule 2101 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2101) and who possesses authority to sign He or she has reviewed all automatic calculations and agrees with their results, unless otherwise noted in the Miscellaneous section starting on page 19. He or she has provided a copy of this Form 556 and all attachments to the utilities with which the facility will interconnect and transact (see lines 4a through 4d), as well as to the regulatory authorities of the states in which the facility and those utilities reside. See the Required Notice to Public Utilities and State Regulatory Authorities section on page 3 for more information. Provide your signature, address and signature date below. Rule 2005(c) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(c)) provides that persons filing their documents electronically may use typed characters representing his or her name to sign the filed documents. A person filing this document electronically should sign (by typing his or her name) in the space provided below. Your address Your Signature Date 600 University Street, Suite 3600 Seattle, WA 98101 Jennifer L. Mersing 10/8/2018 **Audit Notes**

Miscellaneous

Use this space to provide any information for which there was not sufficient space in the previous sections of the form to provide. For each such item of information *clearly identify the line number that the information belongs to.* You may also use this space to provide any additional information you believe is relevant to the certification of your facility.

Your response below is not limited to one page. Additional page(s) will automatically be inserted into this form if the length of your response exceeds the space on this page. Use as many pages as you require.

Line 5a: sPower Development Company, LLC is not currently an electric utility as defined under section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), but will become an electric utility on the date the facility first generates test power.

STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the Matter of the Complaint of sPower)	
Development Company, LLC against)	Case No. U-20500
Consumers Energy Company for violations)	
of the Public Utility Regulatory Policies Act)	
of 1978 and related Commission orders)	

AFFIDAVIT OF MAKARAND NAGLE IN SUPPORT OF SPOWER DEVELOPMENT COMPANY, LLC'S FORMAL COMPLAINT AGAINST CONSUMERS ENERGY COMPANY

- 1. I am Senior Director, Origination at sPower. sPower's priniciple office is located at 2180 South 1300 East, Suite 600, Salt Lake City, UT 84106-2749.
- 2. I have personal knowledge of the allegations in sPower's Formal Complaint Against Consumers Energy Company, Michigan Public Service Commission Case No. U-20500.
 - 3. The allegations in this petition are true to the best of my knowledge, information,

and belief.

Date: March 19, 2019

Makarand Nagle

Saler Full

STATE OF UTAH

CITY OF GALT LAKE

Signed and sworn to me on March 17, 2019, by Makarand Nagle.

SABRINA FULLER
Notary Public
State of Utah
COMMISSION # 695614
My Commission Expires June 16, 2021

Notary Public

STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the Complaint of sPower Development Company, LLC against Consumers Energy Company for violations of the Public Utility Regulatory Policies Act of 1978 and related Commission orders.

U-20500

ALJ

PROOF OF SERVICE

On the date below, an electronic copy of the sPower Development Company, LLC's Complaint Against Consumers Energy Company, Attachments A through N and Affidavit of Makarand Nagle was served on the following:

Name/Party	E-mail Address
Counsel for Consumers Energy Co. Robert W. Beach	mpscfilings@cmsenergy.com robert.beach@cmsenergy.com
Counsel for MPSC Staff Spencer Sattler	sattlers@michigan.gov

The statements above are true to the best of my knowledge, information and belief.

OLSON, BZDOK & HOWARD, P.C. Counsel for sPower Development Company, LLC

Date: March 19, 2019

By: _____

Kimberly Flynn, Legal Assistant Karla Gerds, Legal Assistant Breanna Thomas, Legal Assistant

420 E. Front St.

Traverse City, MI 49686 Phone: 231/946-0044

Email: kimberly@envlaw.com

<u>karla@envlaw.com</u> breanna@envlaw.com