167 FERC ¶ 61,208
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Neil Chatterjee, Chairman;
Cheryl A. LaFleur, Richard Glick,
and Bernard L. McNamee.

Golden Valley Electric Association, Inc. Docket Nos. EL19-53-000
Eco Green Generation LLC QF19-855-001

ORDER GRANTING PETITION AND REVOKING QUALIFYING FACILITY STATUS

(Issued June 5, 2019)

1. On March 5, 2019, pursuant to Rule 207(a) of the Commission's Rules of Practice and Procedure[1] and 18 C.F.R. § 292.207(d)(iii), Golden Valley Electric Association, Inc. (Golden Valley) filed a petition for declaratory order (Petition) challenging the qualifying facility (QF) status of Eco Green Generation LLC's (Eco Green) facility self-certified in Docket No. QF19-855-000. This order finds that Eco Green's facility does not meet the requirements for QF status under the Public Utility Regulatory Policies Act of 1978 (PURPA).[2] We therefore grant the Petition and revoke the self-certification for QF status without prejudice to Eco Green filing new Form No. 556s that address the deficiencies identified in this order.

I. Background

2. Golden Valley is a consumer-owned, electric utility located in Fairbanks, Alaska. Eco Green is a QF developer whose facility would interconnect with Golden Valley. On February 21, 2019, Eco Green filed a Form No. 556 with the Commission.[3] Item 1k of Eco Green's Form No. 556 designates the facility as a qualifying cogeneration facility. However, as described in the Form No. 556, the proposed facility is a "hybrid power project," consisting of a 37.8 MW wind farm that "has its power 'firmed' by the integration of 100 MW of cogen[eration] power produced by 20 separate 5 MW

[1] 18 C.F.R. § 385.207(a) (2018).

[2] 16 U.S.C. §§ 796(17)-(18), 824a-3 (2012).

[3] Eco Green, Form No. 556, Docket No. QF19-855-000 (filed Feb. 21, 2019) (Eco Green Form No. 556).

reciprocating engines that are duel fueled from 3 [percent] renewable diesel and 97 [percent] propane."[4] Eco Green describes its hybrid project as both a qualifying small power production facility and a qualifying cogeneration facility.[5] Eco Green lists fossil fuel as the project's primary fuel source.[6] Eco Green states that the 20 separate reciprocating engine cogeneration units produce 50 percent electricity and 50 percent heat. Eco Green adds that the cogeneration units produce hot water, which provides district heating and heat converted into chilled water for refrigeration. Eco Green states that the cogeneration units will be "co-located at schools, government buildings, grocery stores, retailers, hospital, rec centers, sports arena, pool, and waste/wastewater sites."[7]

3. Eco Green's proposed facility is located in and around Fairbanks, Alaska. Eco Green points out that the Fairbanks grid is small and lacks flexible generation and the addition of intermittent wind is a challenge. Eco Green states that, as a result, its cogeneration units "firm" the wind generation to accommodate the wind farm's intermittent electrical production, while also producing heat to eliminate the need for each host site to produce its own space heating or refrigeration.[8] Eco Green states that "[t]he net result is 100 MW of firm electricity is always generated for the [Golden Valley] grid."[9]

II. Petition

4. Golden Valley requests that the Commission find that Eco Green's proposed hybrid power project as described in Eco Green's Form No. 556 is not a QF, as defined by PURPA. Golden Valley also notes that Eco Green's hybrid facility, if built, would become Golden Valley's largest single generating resource because Eco Green's

[4] Eco Green Form No. 556 at 9 line 7h.

[5] *Id.* at 19. Eco Green states that the Form No. 556 did not allow it to designate the project as both types of facilities. *Id*. at 9 line 7h; Eco Green Answer at 3, 19; Eco Green Second Answer at 1.

[6] Eco Green Form No. 556 at 8 line 6a.

[7] *Id*. at 19.

[8] *Id*. at 14 line 12b.

[9] *Id*. at 9 line 7h.

nameplate capacity would be approximately equal to Golden Valley's average system load.[10]

5. More specifically, Golden Valley requests four declarations from the Commission. First, Golden Valley requests that the Commission find that Eco Green's hybrid facility fails to meet the requirements for a cogeneration facility because it fails: (1) the fundamental use test of 18 C.F.R. § 292.205(d)(2) and (3); (2) the requirement in 18 C.F.R. § 292.205(d)(1) that its thermal output is used in a productive and beneficial manner; and (3) the operating and efficiency standards of 18 C.F.R. § 292.205(a). Second, Golden Valley requests that the Commission find that Eco Green's hybrid facility fails to meet the requirements for a small power production QF because it relies largely on fossil fuels and is larger than the 80 MW limit in 18 C.F.R. § 292.204(a)(1). Third, Golden Valley requests that the Commission find that Eco Green's hybrid facility is not a single QF because it consists of over 20 geographically distinct wind and cogeneration projects that, according to Golden Valley, stretch over 170 miles. Fourth, Golden Valley requests that the Commission find that Eco Green's self-certification is incomplete and inconsistent.[11]

6. As for the fundamental use test for a cogeneration facility, Golden Valley argues that a cogeneration facility must use its electrical and thermal output "fundamentally for industrial, commercial, residential or institutional purposes," as opposed to being "intended fundamentally for sale to an electric utility."[12] Golden Valley asserts that Eco Green fails the fundamental use test because it admits that the central purpose of its cogeneration units is to generate electricity to replace Golden Valley's existing power plants and to firm the generation from its proposed wind turbines, rather than primarily to serve industrial or commercial customers with heat or power.[13]

7. Golden Valley states that a QF will be presumed to meet the fundamental use test for a cogeneration facility if: (1) its net output is less than or equal to 5 MW;[14] or (2) at least 50 percent of the facility's aggregate annual output is used for industrial,

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[10] Petition at 9.

[11] *Id*. at 6-7.

[12] *Id*. at 8 (citing 18 C.F.R. § 292.205(d)(2) (2018)).

[13] *Id*. (citing Eco Green Form No. 556 at 19).

[14] *Id*. (citing 18 C.F.R. § 292.205(d)(4)).

commercial, residential, or institutional purposes, and is not sold to a utility.[15] However, Golden Valley argues that Eco Green meets neither presumption. Regarding the first, Golden Valley argues, as with the productive and beneficial use test, Eco Green is not entitled to the 5 MW rebuttable presumption that it meets the fundamental use test because its hybrid facility has a net capacity of 99 MW.[16] Regarding the second, Golden Valley claims that Eco Green's unsupported and inconsistent claims in its Form No. 556 fail to demonstrate compliance with the fundamental use test.[17] Golden Valley notes that, because Eco Green incorrectly claimed that its cogeneration facility is less than 5 MW, Eco Green did not complete lines 11g to 11j, which are required to demonstrate that at least 50 percent of the annual energy output of the proposed QF will not be sold to a utility. Golden Valley asserts that, without that information, Eco Green cannot reasonably claim that 50 percent of its output will be used for commercial, industrial, or residential purposes.[18] Golden Valley avers that other information provided in Eco Green's Form No. 556 indicates that the Eco Green project will sell substantially more than 50 percent of its annual energy output to a utility.[19]

8. Golden Valley also contends that Eco Green fails to meet the fundamental use test because, under *Chugach*, its anticipated thermal customers are "simply too speculative."[20] Specifically, Golden Valley asserts that Eco Green has not identified any purchasers of its thermal output with any specificity and has assumed identical demand for each of its unidentified customers.[21]

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[15] *Id*. (citing 18 C.F.R. § 292.205(d)(3)).

[16] *Id*. at 11 (citing *Revised Regulations Governing Small Power Production and Cogeneration Facilities*, Order No. 671, 114 FERC ¶ 61,102, at PP 26, 60, 121, *order on reh'g*, Order No. 671-A, 115 FERC ¶ 61,225 (2006); FERC Form No. 556, l.11f, https://www.ferc.gov/docs-filing/forms/form-556/form-556.pdf; 18 C.F.R. § 292.205(d)(4)).

[17] *Id.* (citing 18 C.F.R. § 292.205(d)(3); Eco Green Form No. 556 at 9, line 7h).

[18] *Id*. at 12.

[19] *Id*.

[20] *Id*. at 10 (citing *Chugach Elec. Assoc. Inc.*, 121 FERC ¶ 61,287, at P 46 (2007) (*Chugach*)).

[21] *Id*. (citing Eco Green Form No. 556 at 14 line 12a).

9. As for the productive and beneficial use requirement for a cogeneration facility, Golden Valley states that, in *Chugach*, the Commission explained that a proposed QF cannot satisfy the beneficial use test where the "necessary end-users of the proposed output do not appear to currently exist" and the "record indicates that the infrastructure needed for getting the proposed thermal output to the market would be significant and expensive and does not currently exist."[22] Golden Valley argues that the information provided in Eco Green's Form No. 556 to support the claimed thermal use is insufficient to demonstrate compliance under *Chugach*.[23] Golden Valley also contends that Eco Green cannot qualify for the presumption of productive and beneficial use based on the 5 MW safe-harbor principle because Eco Green has aggregated its various projects into a single QF and the total nameplate capacity of that QF is well above 5 MW.[24] Regarding the operating and efficiency standards, Golden Valley argues that Eco Green fails to demonstrate that its facility meets these standards because the line items on the Form No. 556 that are meant to demonstrate compliance with these standards appear to be inaccurate and inconsistent with the information Eco Green supplied elsewhere in the form.[25]

10. Regarding its second request, Golden Valley argues that Eco Green's hybrid facility fails to meet the requirements for small power production facilities because its primary generating source is fossil fuel and it exceeds the 80 MW net capacity maximum facility size.[26]

11. Regarding its third request, Golden Valley argues that Eco Green's hybrid facility is not a single QF because it consists of over 20 geographically distinct wind and cogeneration facilities.[27] Golden Valley reasons that a "qualifying facility" (singular) cannot consist of over 20 different facilities in four different communities spanning over

[22] *Id*. at 14 (citing *Chugach*, 121 FERC ¶ 61,287 at P 39).

[23] *Id*.

[24] *Id*. at 15.

[25] *Id.* at 16.

[26] *Id*. at 17.

[27] *Id*. at 18.

170 miles.[28] Golden Valley also claims that the fuel and operational requirements of a small power production facility and a cogeneration facility are incompatible.[29]

12. Regarding its fourth request, Golden Valley argues that Eco Green's attempt to self-certify as a QF is facially inadequate because Eco Green's Form No. 556 is incomplete and internally inconsistent. Golden Valley notes that the instructions on the Form No. 556 state that incomplete forms will be rejected.[30] Golden Valley contends that Eco Green's Form No. 556 is incomplete because it fails to adequately identify the recipients of the cogeneration facilities' thermal output, in spite of the Form No. 556 requirement that a self-certifying QF: (1) name the entities that will be taking thermal output; (2) describe the thermal host's relationship to the proposed QF; and (3) specify the annual amount of thermal output each host will take.[31] Golden Valley also asserts that Eco Green's Form No. 556 is internally inconsistent because in one place Eco Green states that the "net power production capacity" of the cogeneration facility is less than or equal to 5 MW, but elsewhere it states that the QF includes 20 reciprocating engines, each with a net capacity of 4.95 MW, for a total net capacity of 99 MW for the cogeneration sites.[32]

13. In addition to these four requests, Golden Valley asks the Commission to require Eco Green to obtain Commission certification for all future QF projects that seek to interconnect with Golden Valley.[33]

III. Notice of Filing and Responsive Pleadings

14. Notice of the Petition was published in the *Federal Register*, 84 Fed. Reg. 9322 (2019), with protests or motions to intervene due on or before April 4, 2019. On

[28] *Id*.

[29] *Id*. at 19.

[30] *Id*. (citing FERC Form No. 556 at 1).

[31] *Id*. at 20 (citing FERC Form No. 556 at 14, line 12a).

[32] *Id*. at 20-21.

[33] *Id*. at 22.

March 15, 2019, Eco Green filed an answer (Eco Green Answer).[34] On April 4, 2019, as amended on April 5, 2019, Golden Valley filed an answer (Golden Valley Answer). On April 15, 2019, Eco Green filed a second answer and an untimely motion to intervene (Eco Green Second Answer).

A. Eco Green Answer

15. Eco Green asks the Commission to deny the Petition or, alternatively, grant Eco Green waiver for good cause to allow Eco Green to retain the project's QF status.[35]

16. In response to Golden Valley's argument that Eco Green must demonstrate that it has actual customers for its cogeneration units' heat, Eco Green contends that there is no such requirement for cogeneration units of less than 5 MW. Eco Green argues that Golden Valley misreads the finding in *Chugach*, because in that case the QF was larger than 5 MW.[36] Eco Green adds that, even if there were a requirement for a QF 5 MW or below to demonstrate that it has actual customers, the Fairbanks community not only wants the heat but also needs the heat to reduce air pollution, and that its proposed facility can help alleviate unusually unhealthy environmental conditions in Fairbanks.[37]

17. In response to Golden Valley's arguments that Eco Green's facility fails to meet the operating and efficiency standards for cogeneration QFs, Eco Green claims that its cogeneration units not only meet the QF operating standards but also are among the most efficient combined heat and power units in the industry.[38]

18. Eco Green asserts that the Petition is misleading. Specifically, Eco Green argues that its proposed hybrid project is in response to Golden Valley's own suggestion.[39] Eco Green asserts that, in response to a prior QF application for a wind farm on the same

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[34] Although Eco Green characterizes this submittal as an "answer," under the Commission's Rules of Practice and Procedure it is more properly considered a protest. *See* 18 C.F.R. § 385.211.

[35] Citing the air pollution in Fairbanks, Eco Green argues that "rarely is there a stronger policy reason for the introduction of a hybrid power project." Eco Green Answer at 11-16.

[36] *Id*. at 7.

[37] *Id*. at 2-3.

[38] *Id*. at 8.

[39] *Id*. at 1-2.

site Eco Green proposes to use in the instant proceeding, Golden Valley's experts explained to the Regulatory Commission of Alaska (Alaska Commission) that Golden Valley lacked flexible power production to integrate any new wind turbine production and suggested as a solution introducing new reciprocating engines to "firm" the power.[40] Eco Green therefore asks the Commission to use a show cause order to sanction Golden Valley at least $10,000 for asserting false facts and legal requirements in its Petition.[41]

19. Lastly, Eco Green states that it intends to make additional Form No. 556 filings:[42] (1) one Form No. 556 for a small power production facility consisting of 46.2 MW of: wind-powered generation;[43] (2) one Form No. 556 for the combined 20 5 MW cogeneration units; and (3) individual Form No. 556s for each 5 MW cogeneration unit.[44] Although Eco Green states that it is unclear whether any battery storage will be necessary to firm the intermittent wind power, Eco Green notes that it will nonetheless incorporate 5 MW of battery storage.[45]

B. Golden Valley Answer

20. Golden Valley's answer reiterates the arguments made in its Petition. Golden Valley also argues that Eco Green's admission that the cogeneration units are designed to firm the intermittent wind generation demonstrates that the cogeneration units' primary function is to generate electricity: their output will be determined by the level of wind generation as opposed to thermal demand.[46] In response to Eco Green's argument that it does not need to demonstrate that there is actual demand for thermal output because the project is less than 5 MW and therefore entitled to the presumption that its output is productive and beneficial, Golden Valley contends that every QF, regardless of size, must

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[40] *Id*.

[41] *Id*. at 3, 16-18.

[42] Eco Green Answer at 19. As of June 5, 2019, Eco Green has not yet amended its filing nor has it filed any additional Form No. 556s.

[43] Eco Green's Form No. 556 filed with the Commission described a 37.8 MW wind farm.

[44] Eco Green Answer at 19.

[45] *Id*.

[46] Golden Valley Answer at 2, 4-5.

have productive and beneficial thermal output, noting that, even if Eco Green's project were less than 5 MW, that presumption is rebuttable.[47]

21. Golden Valley asserts that Eco Green has made contradictory statements with respect to whether it is proposing a single project or multiple projects. Golden Valley argues that, on one hand, Eco Green filled out portions of the Form No. 556 as if the project were a single 5 MW cogeneration unit, ignoring the wind generation component of its hybrid facility, to take advantage of the rebuttable presumptions afforded to cogeneration facilities below 5 MW.[48] Golden Valley asserts that, on the other hand, Eco Green ignores its cogeneration units to satisfy the fuel-use requirements for small power production facilities.[49]

22. Golden Valley adds that Eco Green's plan to file multiple supplemental self-certification forms does not resolve Eco Green's underlying failure to meet the requirements for QF status. Golden Valley argues that additional forms will create even greater confusion and uncertainty. Golden Valley claims that Eco Green has substantially changed its project three times in less than 90 days, most recently to add 25 percent more wind generation and possibly include battery storage.[50] Golden Valley contends that these constant changes make it difficult to understand which project Eco Green proposes.[51] Golden Valley thus reiterates its request that the Commission require Eco Green to certify the QF status of this project (or any substantially similar variation of the project) under 18 C.F.R. § 292.207(b) to avoid continuing litigation over ever-changing projects.[52]

23. Golden Valley asks the Commission to deny Eco Green's request for waiver due to the size and complexity of Eco Green's project and Eco Green's failure to meet the requirements for QF status. Golden Valley also asks the Commission to deny

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[47] *Id*. at 8.

[48] *See* 18 C.F.R. § 292.205(d)(4).

[49] *See* Golden Valley Answer at 3.

[50] *Id*. at 3-4, 14-15.

[51] *Id*. at 15-18.

[52] *Id.* at 4.

Eco Green's request for a show cause order because Golden Valley's filings have been accurate and forthright and Golden Valley has engaged in good faith with Eco Green.[53]

C. Eco Green Second Answer

24. Eco Green reiterates its argument that it should not have to demonstrate thermal demand because its facility, which will produce district heat, is less than 5 MW. Eco Green asserts that district heat for an area as large as Fairbanks achieves greater heat efficiency if multiple distributed locations are employed, and that district heat as opposed to a single heat customer means that multiple businesses and residences can take advantage of receiving hot water. Eco Green argues that requiring individual customers to be fully contracted prior to filing for QF status ignores obvious pricing considerations, including that residential customers are very responsive to the cost of heat, and that the Commission should presume a 5 MW or less facility meets the heat utilization requirements.[54]

25. Eco Green reiterates that it will file 23 Form No. 556s, as described above. Eco Green states that it has amended its proposed project, from 55 MW to 100 MW, in response to the request of the cities of Fairbanks and North Pole for less expensive and cleaner heat options.[55] Eco Green explains that wind energy was formerly cost prohibitive due to the costly spinning reserves Golden Valley states that it needs to accept the intermittent wind. Eco Green notes, however, that, with the flexible reciprocating engine cogeneration units, it can firm the wind without any spinning reserves from Golden Valley.[56] In response to Golden Valley's arguments related to Eco Green's use of fossil fuel cogeneration units to firm wind power, Eco Green states that fossil fuel cogeneration units are used world-wide and that Golden Valley has suggested them as a solution in a previous QF application.[57] In Eco Green's view, the cogeneration production is not limited by PURPA. Eco Green adds that, although it could provide 100 MW of cogeneration plus 46.2 MW of wind cogeneration production, it is self-limiting the production to 100 MW.[58]

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[53] *Id*. at 18-21.

[54] Eco Green Second Answer at 2.

[55] *Id*.

[56] *Id*. at 3.

[57] *Id*. at 3-4. Eco Green does not provide the relevant citation(s).

[58] *Id*. at 4.

IV. Discussion

A. Procedural Matters

26. Pursuant to Rule 214(d) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214(d) (2018), the Commission will grant Eco Green's late-filed motion to intervene given its interest in the proceeding, the early stage of the proceeding, and the absence of undue prejudice or delay. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2018), prohibits an answer to a protest or to an answer unless otherwise ordered by the decisional authority. We accept Golden Valley's Answer and Eco Green's Second Answer because they have provided information that assisted us in our decision-making process.

B. Substantive Matters

27. We grant the Petition and revoke QF status for Eco Green's hybrid facility self-certified in Docket No. QF19-855-000, without prejudice to Eco Green filing new Form No. 556s that address the deficiencies identified in this order.

28. As an initial matter, although Eco Green has stated that it will make additional Form No. 556 filings, Eco Green has only submitted the single Form No. 556 for its proposed hybrid facility thus far. Therefore, we provide below our findings with respect to the proposed hybrid facility and the Form No. 556 before us.[59]

29. In order for a single facility to qualify as *both* a small power production and cogeneration QF, the facility *as a whole* must meet the requirements for both a small power production facility pursuant to 18 C.F.R. §§ 292.203(a) and 292.204 and a cogeneration facility pursuant to 18 C.F.R. §§ 292.203(b) and 292.205. That is, a facility

[59] We note that Eco Green's description of the facility has changed over time. In the initial Form No. 556 filed with the Alaska Commission and provided to Golden Valley, Eco Green described the project as 25.2 MW of wind-powered generation and 11 5 MW cogeneration units. In the Form No. 556 filed at this Commission that is at issue in this proceeding, Eco Green describes the project as 37.8 MW of wind-powered generation and 20 5 MW cogeneration units. In the Eco Green Answer, Eco Green states that the project could ultimately be 46.2 MW of wind-powered generation and 20 5 MW cogeneration units and also 5 MW of battery storage.

We note that QF status is based on the Form No. 556 filings submitted to this Commission. The Commission's regulations state that, if a QF "fails to conform with any material facts or representations" presented in its submittal, the certification "may no longer be relied upon." 18 C.F.R. § 292.207(d)(1)(i).

seeking to qualify as a small power production facility must meet the former requirements, a facility seeking to qualify as a cogeneration facility must meet the latter requirements, and a facility seeking to qualify as both would have to meet both the former requirements and the latter requirements.[60]

30. As explained below, Eco Green's hybrid facility does not qualify under either category.

1. Eco Green's hybrid facility does not qualify as a small power production QF

31. To qualify as a small power production QF, the facility must: (1) not exceed 80 MW in size; and (2) meet the fuel use criteria, including that its primary energy source be biomass, waste, renewable resources (such as wind or solar), geothermal resources, or any combination thereof, and 75 percent or more of the total energy input must be from these sources.[61] Furthermore, use of oil, natural gas, or coal is limited to the minimum amounts of fuel required for ignition, startup, testing, flame stabilization, and control uses, and the minimum amounts of fuel required to alleviate or prevent unanticipated equipment outages, and emergencies, directly affecting the public health, safety, or welfare, which would result from electric power outages. Such fuel use may not, in the 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 and any calendar year subsequent to the year in which the facility first produces electric energy.[62]

32. We find that Eco Green's hybrid facility does not satisfy these criteria. First, the hybrid facility is at least 100 MW,[63] which is greater than the 80 MW allowed for a small

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[60] In the past, the Commission has received self-certifications that claimed hybrid small power production and cogeneration QF status. *See, e.g.*, Rosenburg Forest Products Co., Form No. 556, Docket No. QF06-242-000 (filed May 31, 2006) (self-certifying its 9.6 MW biomass-fueled facility, which generates power and provides steam for wood conditioning, as both a small power production facility and a cogeneration facility).

[61] 18 C.F.R. § 292.204.

[62] *Id.* § 292.204(b)(2).

[63] The numerical fields in Eco Green's Form No. 556 list the gross power production capacity as 5.5 MW and the net power production capacity as 4.95 MW, both of which are based on a single cogeneration unit. However, the descriptive fields in its Form No. 556 indicate that the hybrid project consists of 37.8 MW of wind generation and 100 MW of cogeneration produced by 20 separate 5 MW reciprocating engines, for a

power production facility. Second, the 20 cogeneration units will burn 97 percent propane.[64] Propane is a by-product of natural gas processing and petroleum refining and thus is a fossil fuel. The use of propane as the predominant fuel consumed by the hybrid facility does not meet the fuel use requirements for a small power production QF, including with respect to the limitations on the amount and intended uses of such fuel. Therefore, Eco Green's hybrid facility does not qualify for QF status as a small power production facility.

2. Eco Green's hybrid facility does not qualify as a cogeneration QF

33. To qualify as a new cogeneration QF, the facility must: (1) meet the definition of a "cogeneration facility" (i.e., "equipment used to produce 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");[65] (2) meet certain operating and efficiency standards;[66] (3) demonstrate that its thermal output is used in a productive and beneficial manner;[67] and (4) demonstrate that its electrical and thermal output is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility.[68] To determine whether facilities meet this fourth requirement, the Commission created a safe harbor, referred to as "the fundamental use test," which provides that, if at least 50 percent of a cogeneration facility's output is used for industrial, commercial, residential, or institutional purposes, the total energy output will be considered fundamentally used for those purposes.[69]

34. The Commission also created a rebuttable presumption that a new cogeneration facility of 5 MW or smaller satisfies both the productive and beneficial use test and the

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total of 137.8 MW. Eco Green Form No. 556, Items 7a, 7g, and 7h. Eco Green states that its hybrid facility is "self-limited" to 100 MW. Eco Green Second Answer at 4, 5.

[64] Eco Green Form No. 556 at 9 line 7h.

[65] 18 C.F.R. § 292.202(c).

[66] *Id*. § 292.205(a)-(b).

[67] *Id*. § 292.205(d)(1)

[68] *Id*. § 292.205(d)(2).

[69] *Id*. § 292.205(d)(3); *see Chugach*, 121 FERC ¶ 61,287 at P 42.

fundamental use test.[70] Eco Green claims that it does not need to show that its thermal output is used in a productive and beneficial manner or that it passes the fundamental use test because its individual cogeneration units are each less than 5 MW.[71] However, Eco Green's hybrid facility, as described in the Form No. 556, i.e., self-certified as a single hybrid facility, is well over 5 MW and therefore does not qualify for this rebuttable presumption. To qualify as a cogeneration facility, Eco Green's hybrid facility therefore must show that it satisfies all four criteria.

a. Definition of a cogeneration facility

35. Eco Green's hybrid facility does not constitute "equipment used to produce 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."[72] Although it is arguable that the cogeneration components of the hybrid facility would produce thermal output through the sequential use of energy that would be useful for serving heating load in a cold environment like Fairbanks, the wind turbine portion of the hybrid facility will not be part of a sequential use of energy.[73] Accordingly, Eco Green's hybrid facility, as described in the Form No. 556, i.e., self-certified as a single hybrid facility, does not meet the definition of a cogeneration facility.

b. Operating and efficiency standards

36. We find that there is not enough information in the Form No. 556 to affirmatively demonstrate that Eco Green's hybrid facility would, in fact, satisfy the operating and efficiency standards in 18 C.F.R. § 292.205(a)-(b).

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[70] *Id*. § 292.205(d)(4); *see* Order No. 671, 114 FERC ¶ 61,102 at PP 26, 60, 121; FERC Form No. 556, l.11f, https://www.ferc.gov/docs-filing/forms/form-556/form-556.pdf.

[71] Eco Green Answer at 7-8.

[72] 18 C.F.R. § 292.202(c).

[73] In all cogeneration facilities, there is a *sequence* of electric power and useful thermal energy production. The wind turbines of Eco Green's hybrid facility produce only electric power and no useful thermal energy, and thus there is no "sequential use of energy."

c. Use of thermal output in a productive and beneficial manner

37. In *Chugach*, the Commission performed a detailed analysis of the criteria for qualifying cogeneration facilities, including the use in a productive and beneficial manner standard.[74] The Commission stated that a new cogeneration facility must provide sufficiently detailed information for the Commission to determine compliance with the use in a productive and beneficial manner standard.[75] The Commission stated that it would consider factors such as the need and market for thermal product and project-specific information, including the geographic location of the proposed QF.[76]

38. In *Chugach*, the self-certifications did not sufficiently identify the expected thermal hosts: the thermal energy was listed as going to unidentified customers at unknown locations for unknown purposes.[77] In addition, the facilities were located in a relatively unpopulated area.[78] The Commission found that there were insufficiently identified uses of the thermal energy for the Commission to conclude that the thermal output would be put to a productive and beneficial use when the end-users of the proposed output did not currently exist and the infrastructure needed for getting proposed thermal output to the market would be significant, expensive, and similarly did not currently exist.[79]

39. Here, Eco Green does not identify any specific thermal host on its Form No. 556, instead only indicating that it will provide service at various sites. Although Eco Green asserts that civic leaders asked Eco Green to "bring less expensive heat to schools and government buildings,"[80] Eco Green has not demonstrated that it has secured any thermal hosts or identified the actual thermal demand. Eco Green acknowledges that the

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[74] *Chugach*, 121 FERC ¶ 61,287 at P 39.

[75] *Id*.

[76] *Id*. (citing Order No. 671, 114 FERC ¶ 61,102 at P 17).

[77] *Id*. PP 33-34, 39, 46.

[78] *Id*. P 39.

[79] *Id*.

[80] Eco Green Second Answer at 2. Eco Green states that, as a result, it increased the number of cogeneration sites to 20 to cover as many schools and government buildings as possible.

20 cogeneration units do not have identified customers, and then adds "rather numerous nearby customers *will be sought*" (emphasis added).[81] As in *Chugach*, here, Eco Green's Form No. 556 does not sufficiently identify the expected thermal hosts and their thermal demand, and the thermal energy is thus essentially listed as going to unidentified customers for unknown purposes.[82] In sum, although the cogeneration units here are arguably located in a municipal setting as opposed to the rural setting in *Chugach*, and civic leaders allegedly have expressed at least some interest in "less expensive heat," Eco Green does not provide sufficient information for the Commission to determine compliance with the use in a productive and beneficial manner standard. Accordingly, we find that the thermal usage of the Eco Green facility is too speculative to be productive and beneficial.

40. Eco Green's argument that there is no requirement in the Commission's regulations to identify the thermal host is incorrect.[83] Although the regulations do not themselves include a specific provision to identify the thermal host, the regulations do require applicants to complete the Form No. 556, and Item 12a of the form requires the applicant to identify the name of the thermal host and the thermal host's relationship to the facility. Additionally, in *Chugach*, in response to a similar contention that neither PURPA nor the Commission's regulations require it to have definitely secured a thermal host, the Commission stated that the self-certification "must provide sufficiently detailed information for the Commission to determine compliance with the . . . 'productive and beneficial' standard."[84]

d. Not intended fundamentally for sale to an electric utility

41. Eco Green admits, as described below, that its facility's output is intended fundamentally for sale to an electric utility. Therefore, Eco Green's hybrid facility does

[81] *Id*.

[82] Eco Green argues that *Chugach* is distinguishable because it involved a single, large cogeneration facility, while Eco Green has 20 separate under 5 MW cogeneration facilities. *See* Eco Green Answer at 7; Eco Green Second Answer at 3. However, as explained above, the Commission must view the Eco Green facility as a single facility because Eco Green self-certified it as a single hybrid facility.

[83] Eco Green Answer at 8.

[84] *Chugach*, 121 FERC ¶ 61,287 at PP 38-39.

not satisfy the requirement that the total energy output of a cogeneration facility not be intended fundamentally for sale to an electric utility.[85]

42. Eco Green states that the principal purpose of its cogeneration facilities (100 MW of the total 137.8 MW hybrid facility) is "to 'firm' the wind generation and accommodate a large amount of new wind."[86] The purpose of "firming" the wind is, Eco Green indicates, to be able to sell it to the electric utility.[87] In *Chugach*, the Commission considered "the total electric load of the geographic area, and the size of the proposed cogeneration projects, (roughly one-third of the total)" in order to "find it impossible to conclude that the generation projects have been designed other than to produce electric energy to sell to the electric utilities."[88] Here, a similar conclusion can be drawn because, not only has Eco Green admitted as much, but also because Eco Green has proposed a project sized to provide an amount of electric energy, according to Golden Valley, roughly equal to Golden Valley's average system load.[89]

43. Additionally, the way in which Eco Green will dispatch its cogeneration units indicates the primacy of electric output, rather than the thermal output. Eco Green states that its hybrid facility will provide 100 MW of firm power "regardless of the actual production from the wind farm." Eco Green explains that, "when the wind blows at full capacity of the wind farm and say 37.8 MW is produced, then the reciprocating engines must be turned down to produce 61.2 MW, not the 99 MW of their combined net capacity."[90] This means that, when their electricity is not needed because it is being displaced by wind generation, the cogeneration units will be turned down, which will necessarily reduce their thermal output, apparently without regard to what the thermal demand may be at that time.[91] In other words, the electrical need drives the use of the cogeneration units, not the need for thermal output for industrial, commercial, residential, or institutional purposes.

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[85] *See* 18 C.F.R. § 292.205(d)(2)-(3).

[86] Eco Green Form No. 556 at 19.

[87] *Id*. at 9 line 7h; Eco Green Answer at 1-2.

[88] *Chugach*, 121 FERC ¶ 61,287 at P 46.

[89] Petition at 2.

[90] Eco Green Answer at 6.

[91] Golden Valley Answer at 6-7.

44. Because Eco Green has not secured let alone identified any thermal hosts and their thermal demand, the thermal uses of the output of the facilities are too speculative to justify finding that at least 50 percent of the total output of the facilities will be used fundamentally for industrial, commercial, residential, or institutional purposes. In *Chugach*, the Commission found that the thermal uses were too speculative when the thermal energy was listed as going to unidentified customers at unknown locations for unknown purposes.[92] Here, Eco Green argues that its hybrid facility falls within the 50 percent safe harbor of the fundamental use test.[93] Eco Green asserts that it specifically designed the cogeneration units to pass the fundamental use test by producing more heat than power, noting that its intent is to "supply heat in the form of district heat via hot-water that exceeds the net electrical energy output."[94] However, even if Eco Green *plans* that more than 50 percent of its output will supply district heat, as in *Chugach*, the thermal uses of the output are simply too speculative to justify finding that 50 percent of the total output of the facilities will indeed be used fundamentally for industrial, commercial, residential, or institutional purposes because the thermal hosts are not secured let alone identified;[95] in this regard, we also note that, as described above, the cogeneration units will be turned down as the wind turbines ramp up and thus we cannot affirmatively find on the record before us that the resulting thermal output will be at least 50 percent of the total energy output of the hybrid facility and thus qualify for the safe harbor.

3. Other Issues

45. Eco Green and Golden Valley made several other requests in this proceeding. We deny these requests, as discussed below.

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[92] *Chugach*, 121 FERC ¶ 61,287 at PP 34, 46.

[93] Eco Green states that "[t]he captured heat is slightly more than 50 [percent] of the remaining energy produced as the exact numbers are 48.4 [percent] energy to net power and 51.6 [percent] to heat per the specifications provided by the engine manufacturer to Eco Green." Eco Green Answer at 6.

[94] *Id*. at 2.

[95] *See Chugach*, 121 FERC ¶ 61,287 at P 46. In *Chugach*, the self-certifications did not name a large proportion of the expected thermal hosts, and the thermal energy was listed as going to unidentified customers at unknown locations for unknown purposes. *Id*. at P 34.

a. Requests by Eco Green

46. Eco Green asks the Commission to issue a show cause order, imposing sanctions on Golden Valley of at least $10,000 for including false facts and legal requirements in the Petition.[96] We cannot find on the record before us that the Petition was made in anything other than good faith and represents anything other than vigorous advocacy of Golden Valley's position. Accordingly, we deny this request.

47. If the Commission grants the Petition, Eco Green asks the Commission to grant waiver of unspecified regulations for good cause shown to allow Eco Green to retain QF status, asserting that the air pollution in Fairbanks is grounds for granting waiver.[97] However, Eco Green does not specify which particular regulations it requests the Commission to waive, nor does Eco Green provide a sufficient explanation why the Commission should waive such regulations. In addition, Eco Green does not cite to any prior instance in which the Commission found that a facility was not a QF but then granted waiver to allow that facility to be a QF nonetheless. Accordingly, we deny this request.

b. Request by Golden Valley

48. Golden Valley asks the Commission to require Eco Green to obtain Commission certification for all future QF projects that require interconnection with Golden Valley.[98] Golden Valley states that it is concerned that, even if the Commission rules that the current configuration is not a QF, Eco Green will simply attempt to modify its proposal and file more facially inadequate self-certifications, which will force Golden Valley to pay another filing fee for a declaratory order.[99] We deny this request because the regulations do not require an applicant to obtain Commission certification. Obtaining Commission certification is an optional procedure that a QF may use, if the QF so chooses.

The Commission orders:

(A) The Petition is hereby granted, as discussed in the body of this order.

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[96] Eco Green Answer at 3, 16-17.

[97] *Id*. at 2-3, 11-16; Eco Green Second Answer at 5.

[98] Petition at 3, 22.

[99] *Id*. at 3.

(B) The self-certification of the Eco Green facility in Docket No. QF19-855-000 is hereby revoked, without prejudice, as discussed in the body of this order.

By the Commission.

(S E A L)

Kimberly D. Bose,
Secretary.

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