

170 FERC ¶ 61,175
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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

Eco Green Generation LLC

Docket Nos. QF20-9-000
QF20-10-000
QF20-11-000
QF20-12-000
QF20-28-000
QF20-29-000
QF20-45-000
QF20-46-000
QF20-56-000
QF20-57-000
QF20-169-000
QF20-170-000
QF20-181-000
QF20-182-000
QF20-201-000
QF20-202-000

ORDER REVOKING QUALIFYING FACILITY STATUS

(Issued March 2, 2020)

1. Between October 2, 2019 and November 1, 2019, Eco Green Generation LLC (Eco Green) filed eight Form No. 556s with the Commission to self-certify eight facilities as qualifying facilities (QF) under the Public Utility Regulatory Policies Act of 1978 (PURPA).¹ This order finds that, due to deficiencies in each of the eight Form No. 556s, the eight proposed hybrid facilities do not meet the requirements for QF status. As discussed below, we revoke QF status for Eco Green's eight, proposed hybrid facilities, without prejudice to Eco Green filing new Form No. 556s that address the deficiencies identified in this order.

¹ 16 U.S.C. § 796(17)-(18) (2018).

I. Background

2. Eco Green is a QF developer whose facilities would interconnect with Golden Valley Electric Association, Inc. (Golden Valley), a consumer-owned electric utility located in Fairbanks, Alaska. On February 21, 2019, Eco Green filed a Form No. 556 with the Commission seeking to self-certify its facilities as a single QF.² Line 1k of Eco Green's Original Form No. 556 designated the proposed facility as a cogeneration QF. However, as further described in the Form No. 556, Eco Green explained that its proposed facility was a "hybrid power project" that was both a small power production QF and a cogeneration QF.³ Eco Green thus self-certified its hybrid facility as a single facility, 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 reciprocating engines that are dual fueled from 3 [percent] renewable diesel and 97 [percent] propane."⁴ Eco Green listed fossil fuel as the project's primary fuel source.⁵ Eco Green stated that the 20 separate reciprocating engine cogeneration units (cogeneration units) produce 50 percent electricity and 50 percent heat. Eco Green explained that the cogeneration units produce hot water, which provides district heating and heat converted into chilled water for refrigeration. Eco Green stated that the cogeneration units would be "co-located at schools, government buildings, grocery stores, retailers, hospital, rec centers, sports arena, pool, and waste/wastewater sites."⁶

3. On March 5, 2019, Golden Valley filed a petition for declaratory order (Golden Valley Petition) that challenged Eco Green's facility's self-certified QF status. Golden Valley asserted that Eco Green's hybrid facility did not qualify for QF status because Eco Green's hybrid facility (1) failed to meet the requirements of a cogeneration facility under the Commission's regulations; (2) did not satisfy the requirements of a small power production QF because it relied on fossil fuels and exceeded the 80 MW size limit;⁷ (3) was not a single QF because it would consist of 20 geographically distinct

² Eco Green, Form No. 556, Docket No. QF19-855-000 (filed Feb. 21, 2019) (Eco Green's Original Form No. 556).

³ *Id.* at 19. Eco Green noted that the Form No. 556 did not allow it to designate the project as both types of facilities. *Id.* at 9, line 7h.

⁴ *Id.*

⁵ *Id.* at 8, line 6a.

⁶ *Id.* at 19.

⁷ 18 C.F.R. § 292.204(a)(1) (2019).

projects; and (4) could not be self-certified because its certification was incomplete and inconsistent with the Commission's regulations.⁸

4. On June 5, 2019, the Commission granted Golden Valley's Petition and revoked the Eco Green facility's self-certified QF status without prejudice, finding that Eco Green's hybrid facility did not qualify as either a small power production QF or a cogeneration QF.⁹

II. Eight New Form No. 556 Filings

5. Between October 2, 2019 and November 1, 2019, Eco Green filed eight, new Form No. 556s (Eco Green Form No. 556s) to self-certify eight, proposed hybrid facilities as QFs.¹⁰

6. Each of the eight Form No. 556s is substantively identical. In each self-certification, line 1k of the Form No. 556 designates the facility as a small power production QF. However, as described in each Form No. 556, the proposed facility consists of a 4.2 MW wind turbine that will have its "intermittent power regulated to create firm power by a companion" 4.95 MW cogeneration facility that is "duel fueled from 3 [percent] renewable

⁸ Golden Valley Petition at 6-7.

⁹ *Golden Valley Elec. Assoc.*, 167 FERC ¶ 61,208, at PP 1, 27, 29 (2019) (June 5 Order), *reh'g denied*, 170 FERC ¶ 61,025 (2020).

¹⁰ Each filing was assigned a small power production docket and cogeneration QF docket, and notice was issued for the cogeneration QFs. *See* Eco Green Oct. 2, 2019 Form No. 556, Docket Nos. QF20-9-000 (Clean Power #1 small power production), QF20-10-000 (Clean Power #1 cogeneration); Eco Green Oct. 3, 2019 Form No. 556, Docket Nos. QF20-11-000 (Clean Power #2 small power production), QF20-12-000 (Clean Power #2 cogeneration); Eco Green Oct. 8, 2019 Form No. 556, Docket Nos. QF20-28-000 (Clean Power #3 small power production), QF20-29-000 (Clean Power #3 cogeneration); Eco Green Oct. 11, 2019 Form No. 556, Docket Nos. QF20-45-000 (Clean Power #4 small power production), QF20-46-000 (Clean Power #4 cogeneration); Eco Green Oct. 15, 2019 Form No. 556, Docket Nos. QF20-56-000 (Clean Power #5 small power production), QF20-57-000 (Clean Power #5 cogeneration); Eco Green Oct. 30, 2019 Form No. 556, Docket Nos. QF20-169-000 (Clean Power #6 small power production), QF20-170-000 (Clean Power #6 cogeneration); Eco Green Oct. 31, 2019 Form No. 556, Docket Nos. QF20-181-000 (Clean Power #7 small power production), QF20-182-000 (Clean Power #7 cogeneration); Eco Green Nov. 1, 2019 Form No. 556, Docket Nos. QF20-201-000 (Clean Power #8 small power production), QF20-202-000 (Clean Power #8 cogeneration).

diesel and 97 [percent] propane.”¹¹ Eco Green lists wind as each project’s primary fuel source.¹² In each Form No. 556, Eco Green states that the 4.95 MW cogeneration facility has heat recovery and produces energy in the ratio of 49 percent electricity and 51 percent heat.¹³ Eco Green states that the cogeneration unit will provide both host and district heat to nearby commercial and residential buildings in the form of hot water provided via insulated in-ground pipes.¹⁴

7. Eco Green asserts that the purpose of each facility is to help reduce air pollution in Fairbanks, Alaska.¹⁵ Eco Green identifies Fairbanks North Star Borough as each facility’s thermal host, and contends that Fairbanks North Star Borough suffers from the worst air pollution in the United States during the winter and that using this hybrid mix of cogeneration and wind energy will reduce that pollution.¹⁶

III. Notice of Filings

8. Notice of Eco Green’s filing in Docket Nos. QF20-10-000 and QF20-12-000 was published in the *Federal Register*, 84 Fed. Reg. 54,897 (2019); Docket No. QF20-29-000 was published in the *Federal Register*, 84 Fed. Reg. 55,312 (2019); Docket No. QF20-46-000 was published in the *Federal Register*, 84 Fed. Reg. 55,947 (2019); Docket No. QF20-57-000 was published in the *Federal Register*, 84 Fed. Reg. 56,452 (2019); Docket No. QF20-170-000 was published in the *Federal Register*, 84 Fed. Reg. 59,796 (2019); Docket No. QF20-180-000 was published in the *Federal Register*, 84 Fed. Reg. 60,387 (2019); Docket No. QF20-202-000 was published in the *Federal Register*, 84 Fed. Reg. 60,387 (2019).

¹¹ Eco Green Form No. 556s at 1-2, 19.

¹² *Id.* at 8, line 6a.

¹³ *Id.* at 9, line 7h.

¹⁴ *Id.* at 14, line 12b.

¹⁵ *Id.* at 19.

¹⁶ *Id.* at 14, line 12b.

IV. Discussion

A. Substantive Matters

9. As discussed below, we revoke QF status for Eco Green's proposed facilities in the above-captioned dockets, without prejudice to Eco Green filing new Form No. 556s that address the deficiencies identified in this order.

10. Eco Green's eight proposed hybrid facilities each consist of both a wind-powered facility and a cogeneration facility. As explained further below, we find that Eco Green's eight facilities do not address the problems identified in the June 5 Order. Therefore, like the Form No. 556 addressed in the June 5 Order, these new Form No. 556s do not meet the necessary requirements for QF status for the eight facilities as either small power production or cogeneration QFs.

11. As explained in the June 5 Order, for a single facility to qualify as *both* a small power production QF and cogeneration QF, the facility *as a whole* must meet the requirements for both a small power production facility contained in sections 292.203(a) and 292.204 of the Commission's regulations¹⁷ and the requirements for a cogeneration facility contained in sections 292.203(b) and 292.205 of the Commission's regulations.¹⁸ That is, a facility seeking QF status as a small power production QF must meet the former requirements, a facility seeking to qualify as a cogeneration QF must meet the latter requirements, and a facility seeking to qualify as both must meet both the former and the latter requirements.¹⁹

12. As explained below, Eco Green's eight hybrid facilities do not qualify under either category.

¹⁷ 18 C.F.R. §§ 292.203(a), 292.204.

¹⁸ 18 C.F.R. §§ 292.203(b), 292.205.

¹⁹ In the past, the Commission has received self-certifications that claimed hybrid small power production and cogeneration QF status. *See, e.g.*, Rosenberg Forest Products Co., Form No. 556, Docket No. QF06-242-000 (filed May 31, 2006) (self-certifying its 9.6 MW biomass-fueled facility as both a small power production facility and a cogeneration facility). These facilities met the Commission's small power production QF requirements and cogeneration QF requirements.

1. **Eco Green's eight hybrid facilities do not qualify as small power production QFs**

13. To qualify as a small power production QF, a 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 (3) 75 percent or more of the total energy input must be from these sources.²⁰ 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.²¹

14. We find that Eco Green's hybrid facilities do not satisfy these criteria. While Eco Green lists wind as each facility's primary fuel source, the eight cogeneration units that make up more than half of the total nameplate capacity of each hybrid facility will burn 97 percent propane.²² Propane is therefore the primary fuel source for each hybrid facility. Because propane is a by-product of natural gas processing and petroleum refining, it is a fossil fuel.²³ The use of propane as the predominant fuel consumed by the hybrid facilities does not meet the fuel use criteria 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 eight proposed hybrid facilities do not qualify for QF status as small power production facilities.

2. **Eco Green's hybrid facilities do not qualify as cogeneration QFs**

15. To qualify as a 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

²⁰ 18 C.F.R. § 292.204.

²¹ *Id.* § 292.204(b)(2).

²² Eco Green Form No. 556s at 9 line 7h.

²³ June 5 Order, 167 FERC ¶ 61,208 at P 32.

cooling purposes, through the sequential use of energy”);²⁴ (2) meet certain operating and efficiency standards;²⁵ (3) demonstrate that its thermal output is used in a productive and beneficial manner;²⁶ 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.²⁷ To determine whether facilities meet this fourth requirement, the Commission has 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.²⁸

16. The Commission has created a rebuttable presumption that a new cogeneration facility of 5 MW or smaller satisfies both the productive and beneficial use test and the fundamental use test.²⁹ As described in each of the Form No. 556s, each of the eight proposed hybrid facilities is over nine MW and therefore does not qualify for this rebuttable presumption. To qualify as a cogeneration facility, Eco Green must show that each of its proposed hybrid facilities satisfies the relevant criteria.

a. Definition of a cogeneration facility

17. Eco Green’s proposed hybrid facilities do 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.”³⁰ Although the cogeneration components of the hybrid facilities may produce thermal output through the sequential use of energy that would be useful for serving

²⁴ 18 C.F.R. § 292.202(c).

²⁵ *Id.* § 292.205(a)-(b).

²⁶ *Id.* § 292.205(d)(1).

²⁷ *Id.* § 292.205(d)(2).

²⁸ *Id.* (citing 18 C.F.R. § 292.205(d)(3)); *see Chugach Elec. Assoc.*, 121 FERC ¶ 61,287, at P 42 (2007) (*Chugach*).

²⁹ June 5 Order, 167 FERC ¶ 61,208 at P 34 (citing 18 C.F.R. § 292.205(d)(4)); *see also Revised Regulations Governing Small Power Production and Cogeneration Facilities*, Order No. 671, 114 FERC ¶ 61,102, at PP 26, 60, 121 (2006), *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>).

³⁰ 18 C.F.R. § 292.202(c).

heating load, the wind turbine portion of each hybrid facility will not be part of a sequential use of energy.³¹ Accordingly, none of Eco Green's eight proposed hybrid facilities described in the Form No. 556s meet the definition of a cogeneration facility.

b. Operating and efficiency standards

18. The operating and efficiency standards define minimum requirements for thermal energy output and thermal energy efficiency for a qualifying cogeneration facility. We find that there is not enough information in the Form No. 556s to affirmatively demonstrate that Eco Green's eight proposed hybrid facilities would satisfy the operating and efficiency standards in 18 C.F.R. § 292.205(a)-(b) (2019). Because Eco Green's showing with respect to these standards ignores the electrical output of the wind component of each hybrid facility, there is insufficient information to calculate these values for each hybrid facility.

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

19. In *Chugach*,³² the Commission stated that a new cogeneration facility must provide sufficiently detailed information for the Commission to determine compliance with the requirement that the thermal energy output be used in a productive and beneficial manner standard.³³ 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.³⁴

20. In *Chugach*, the self-certification Form No. 556 did not sufficiently identify the expected thermal hosts: the thermal energy was listed as going to unidentified customers at unknown locations for unknown purposes.³⁵ In addition, the facilities were located in

³¹ In all cogeneration facilities, there is a *sequence* of electric power and useful thermal energy production. The wind turbines of Eco Green's hybrid facilities produce only electric power and no useful thermal energy, and thus there is no "sequential use of energy." See 18 C.F.R. § 292.202(c).

³² *Chugach*, 121 FERC ¶ 61,287 at P 39.

³³ *Id.*

³⁴ *Id.* (citing Order No. 671, 114 FERC ¶ 61,102 at P 17).

³⁵ *Id.* PP 33-34, 39, 46.

a relatively unpopulated area.³⁶ 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.³⁷

21. Here, Eco Green identifies the specific thermal host on each of the eight Form No. 556s as Fairbanks North Star Borough.³⁸ Fairbanks North Star Borough has a land area of thousands of square miles.³⁹ Eco Green has not demonstrated that it has identified, let alone secured, any particular thermal hosts for the facilities or identified their actual thermal demand. As in *Chugach*, here, Eco Green's Form No. 556s do 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. In sum, Eco Green does not provide sufficient information for the Commission to determine compliance with the requirement that the thermal energy be used in a productive and beneficial manner. Accordingly, we find that the thermal uses of the eight proposed hybrid facilities are too speculative to be considered productive and beneficial.

d. Not intended fundamentally for sale to an electric utility

22. Eco Green's eight proposed hybrid facilities also do not satisfy the requirement that the total energy output of a cogeneration facility not be intended fundamentally for sale to an electric utility.⁴⁰ Eco Green states that the cogeneration units of each facility provide required flexible load-following production to regulate the wind turbines' intermittent electrical production. Eco Green explains that the "net result is 4.95 MW of firm electricity is always generated for the [Golden Valley] grid no matter the amount of wind production."⁴¹ The purpose of "firming" the wind, therefore, appears to be that

³⁶ *Id.* P 39.

³⁷ *Id.*

³⁸ Eco Green's Form No. 556s at 14 line 12a.

³⁹ The United States Census Bureau lists the land area as 7,338 square miles. <https://www.census.gov/quickfacts/fairbanksnorthstarboroughalaska>.

⁴⁰ *See* 18 C.F.R. § 292.205(d)(2)-(3).

⁴¹ Eco Green Form No. 556s at 9 line 7h.

Eco Green can sell the electric energy output to the electric utility.⁴² 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.”⁴³ 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.⁴⁴

23. The facts here point toward a similar conclusion. Because Eco Green has not identified any thermal hosts and their respective thermal demands, the uses of the thermal 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.⁴⁵

3. Conclusion

24. Section 292.207(d)(1)(iii) of the Commission’s regulations provides that “[t]he Commission may, on its own motion or on the motion of any person, revoke the qualifying status of a self-certified or self-recertified qualifying facility if it finds that the self-certified or self-recertified facility does not meet the applicable requirements for qualifying facilities.” As discussed above, we find that Eco Green’s eight proposed hybrid facilities, as described in their Form No. 556s, do not meet the applicable requirements for QF status. Accordingly, we revoke QF status for Eco Green’s proposed facilities in the above-captioned dockets, without prejudice to Eco Green filing new Form No. 556s that address the deficiencies identified in this order.

⁴² *Id.* at 9 line 7h.

⁴³ *Chugach*, 121 FERC ¶ 61,287 at P 46.

⁴⁴ *Id.* PP 34, 46.

⁴⁵ *See* 18 C.F.R. § 292.205(d)(2)-(3).

The Commission orders:

QF status of each of the Eco Green facilities in the above-captioned dockets is hereby revoked, without prejudice to re-filing, as discussed in the body of this order.

By the Commission.

(S E A L)

Kimberly D. Bose,
Secretary.