172 FERC ¶ 61,194 UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Neil Chatterjee, Chairman;

Richard Glick, Bernard L. McNamee,

and James P. Danly.

Broadview Solar, LLC

Docket Nos. QF17-454-004

QF17-454-005

ORDER DENYING APPLICATION FOR CERTIFICATION AND REVOKING STATUS AS A QUALIFYING SMALL POWER PRODUCTION FACILITY

(Issued September 1, 2020)

1. On September 11, 2019, in Docket No. QF17-454-004, Broadview Solar, LLC (Broadview) filed an application (Application) seeking Commission recertification as a small power production qualifying facility (QF) pursuant to the Public Utility Regulatory Policies Act of 1978 (PURPA)¹ and section 292.207(b) of the Commission's regulations.² On January 29, 2020, while Broadview's Application was pending before the Commission, in Docket No. QF17-454-005, Broadview filed a Form No. 556 self-certification of QF status identical to its Application. As discussed below, we deny the Application and revoke QF status for Broadview's duplicate self-certification.

I. <u>Filing</u>

2. Broadview states that it is developing a combined solar photovoltaic and battery storage facility in Yellowstone County, Montana that will interconnect to NorthWestern Corporation's (NorthWestern) transmission system.¹ In December 2016, Broadview self-certified this facility as a small power production QF with a gross capacity of 104.25 MW and a net capacity of 80 MW.² In March 2019, Broadview revised its Form No. 556 to reflect a gross capacity of 160 MW, while maintaining the net capacity of

1 16 U.S.C. §§ 796(17), 824a-3 (2018).

2 18 C.F.R. § 292.207(b) (2019).

1 Broadview states that it has entered into a standard Large Generator Interconnection Agreement (LGIA) with NorthWestern for 80 MW of interconnection service. Transmittal at n.3.

2 Form No. 556, Application, Docket No. QF17-454-000, at 9 (filed Dec. 19, 2016).

80 MW.³ In the instant Application, Broadview proposes to revise the facility's gross capacity from 160 MW to 82.5 MW to reflect the facility's design capabilities, including limiting elements, while again maintaining the previously documented net capacity of 80 MW.⁴ Broadview explains that the terminals of the 160 MW solar array and 50 MW battery storage system will both connect directly to 20 4.2 megavolt ampere (MVA) DC-to-AC inverters, which will convert the DC power produced by the solar array or discharged from the battery storage system to AC power. According to Broadview, solar arrays and battery storage facilities generate and store electricity as DC power, and the grid generally operates using AC power.⁵ Broadview states that, without the DC-to-AC inverters, the power is not in a form that can be transmitted onto the grid.⁶

- 3. Broadview claims that these inverters are the "gateway" between the DC power provided by the solar array and battery storage system and the AC grid because the amount that the 20 inverters can deliver limits the maximum gross power capacity of the facility (i.e., power that can be delivered to the AC grid). Broadview explains that, if the solar array produces more DC power than can be converted to AC power through the inverters or stored in the battery storage system, the inverters will cause the solar array to produce less power.⁷ Broadview states that the maximum gross output of the facility at any given time will be 82.5 MW and that, after deducting facility loads and losses, the maximum net capacity of the facility will be 80 MW.⁸
- 4. Broadview indicates that its facility is configured to optimize MWh production from the solar array and battery storage system within the 80 MW capacity limit specified in PURPA. Broadview further explains that oversizing the solar array and

3 Form No. 556, Docket No. QF17-454-003, at 9 (March 13, 2019).

4 Form No. 556, Application, Docket No. QF17-454-004, at 9 (filed Sept. 11, 2019) (updating Broadview's Form No. 556 and requesting Commission certification of the facility that Broadview originally self-certified as an 80 MW solar facility in December 2016.)

5 Broadview Aff. at 2-4 (Pasley Aff.).

6 Id.

7 Broadview explains that: (1) the solar inverters are current-limited devices where the current limit is set by the safe operating temperature of the power electronics used to convert DC power to AC power; and (2) the capacity limitations imposed by the solar inverter are physical and the only way to increase the AC output of the facility is by adding additional inverters. *See id.* at 8, 9.

8 Transmittal at 7-8.

9 *Id*. at 4.

combining it with battery storage increases the facility's capacity factor from a typical 25% for solar facilities to nearly 40%. Broadview states that, therefore, regardless of how the facility is operated, the facility is physically incapable of exceeding the 80 MW limit because of the presence of the 20 inverters.¹⁰

- 5. Broadview asserts that the Commission's finding in *Occidental Geothermal, Inc.* that "a facility's power production capacity is not necessarily determined by the nominal rating of even a key component of the facility" supports Broadview's claim that the facility is within the 80 MW limit.¹¹ Broadview also points to the Commission's determination in *Malacha Power Project, Inc.*, which states that "the electric power production capacity of the facility is the capacity that the electric power production equipment delivers to the point of interconnection with the purchasing utility's transmission system." Based on this precedent, Broadview argues that the size and capability of the individual components that will comprise the facility, including the solar array and the battery storage system, are not relevant to the determination of the facility's capacity but rather it is the facility's configuration (together, the solar array, battery storage system, and inverters), which limits the potential output to 80 MW.¹³
- 6. Broadview states that its facility is different from a configuration that relies on SCADA or other automated generation control to limit the net power production of a facility. Broadview asserts that the inverters are unable to convert any more than 82.5 MW from DC power to AC power. Broadview explains that the only way to increase the facility's capacity would be to physically install additional inverters. ¹⁴ Broadview states that 2.5 MW of output is consumed by parasitic station power (primarily cooling for the battery storage system as well as the substation electrical

¹⁰ *See id.* at 3-5, 8-9. Broadview notes that the facility will be capable of sustaining its maximum output for additional hours in the day.

¹¹ *Id.* at 3-5 (citing *Occidental Geothermal, Inc.,* 17 FERC ¶ 61,231, at 61,445 (1981) (*Occidental*)). Broadview notes that, in *Conn. Valley Elec. Co. v. Wheelabrator Claremont Co.*, the Commission defined net capacity as "the maximum net output that the facility can safely and reliably achieve at the point of interconnection under the most favorable operating conditions likely to occur over a period of several years." *Id.* at n.5 (citing *Conn. Valley Elec. Co. v. Wheelabrator Claremont Co.*, 82 FERC ¶ 61,116, at 61,421 n.25 (1998) (*Connecticut Valley*)).

¹² *Id.* at 8 (quoting *Malacha Power Project, Inc.*, 41 FERC ¶ 61,350 (1987)) (Malacha).

¹³ *Id*. at 2-5.

¹⁴ *Id*. at 7.

enclosure), electrical losses, and interconnection losses.¹⁵ Broadview explains that, when the solar array produces more DC energy than the inverters can convert to AC energy, that excess energy is stored in the battery and not delivered to the point of interconnection.¹⁶

7. Broadview states that its battery storage system qualifies as part of a QF because the solar array will provide all of the charging energy used for the battery storage system.¹⁷ Broadview contends that viewing its facility's solar array and battery storage system instead as two separate QFs, so that their power production capacities would be subject to aggregation, would artificially inflate the aggregate capacity of the facility components.¹⁸ Broadview claims that, because both the solar array and the battery storage system are behind the inverters and the inverters can convert no more than 82.5 MW of energy from the facility, the maximum gross power production capacity of the combined solar array and battery storage system is properly viewed as 82.5 MW, and, with the various losses, the maximum net power production capacity is 80 MW.¹⁹

II. Notice and Pleadings

8. Notice of the Application was published in the *Federal Register*, 84 Fed. Reg. 49,291 (Sept. 19, 2019), with interventions and protests due on or before October 2, 2019. Edison Electric Institute (EEI) and NorthWestern filed timely motions to intervene and protests. NorthWestern and Broadview filed answers.

15 *Id.* at 7-8; Pasley Aff. at 5-7.

16 Transmittal at 7.

17 *Id.* at 5 (citing *Luz Dev. and Finance Corp.*, 51 FERC ¶ 61,078, at 61,171 (1990) (*Luz*) (finding that battery storage qualifies as a QF if it is charged at least 75% by a qualifying fuel source)).

18 *Id*. at 5-6.

19 Id.

1 Section 292.207(b)(3) of the Commission's regulations requires the Commission to act within 90 days of the filing of an application for Commission certification of QF status. 18 C.F.R. § 292.207(b)(3). In order to allow sufficient time for due consideration of the matters raised, on December 6, 2019, the Commission issued a notice tolling the time for issuance of an order in Docket No. QF17-454-004. *Broadview Solar, LLC*, 169 FERC ¶ 61,189 (2019).

A. Protests

- 9. NorthWestern argues that Broadview's facility is not a single QF and thus exceeds the 80 MW limit in PURPA.² NorthWestern asserts that, contrary to Broadview's interpretation of *Occidental*, a facility's individual components are relevant to the calculation of net capacity.³ NorthWestern contends that, in *Occidental*, the Commission found that, if a facility has the potential to produce more than 80 MW for limited periods of time due to circumstances outside of the facility's control, the facility can still qualify as a QF.⁴
- 10. NorthWestern argues that the solar array and battery storage system should be considered two distinct small power production facilities at the same site because the 160 MW solar array exceeds the 80 MW net capacity limit and, consistent with Luz, the battery storage system also qualifies separately as a small power QF.⁵ NorthWestern asserts that Broadview's reliance on *Connecticut Valley* is misplaced because that proceeding did not involve the combination of multiple small power production facilities as a single QF nor did the Commission's determination overrule or otherwise support a reading of section 292.204(a)(1) of the Commission's regulations implementing the 80 MW limit that is contrary to the plain terms of that regulation. NorthWestern points to Northern Laramie Range Alliance, where the Commission rejected the concept that two separate QFs should be treated as a single QF if they use the same line to deliver energy from their facilities to a single point on the transmission system. Based on that precedent, NorthWestern argues that Broadview's facility should not be considered a single QF because the solar array and battery storage system utilize the same point of interconnection.8 NorthWestern asserts that, instead, the net output of the solar array and battery storage system should be calculated individually and then aggregated to determine if the combined system is within the 80 MW limit. 9 NorthWestern contends that, under that analysis, Broadview cannot be a QF because its capacity exceeds the

² NorthWestern Protest at 6.

³ *Id.* at 12-13.

⁴ *Id.* at 13 (citing *Occidental*, 17 FERC ¶ 61,231 at 61,445).

⁵ *Id.* 6-7, 10-11 (citing *Luz*, 51 FERC ¶ 61,078 at 61,170, 61,172).

⁶ *Id.* at 9 (citing 18 C.F.R. § 292.204(a)(1)) (2019).

⁷ *Id.* at 10 (citing Northern Laramie Range Alliance, 138 FERC ¶ 61,171, at PP 15-16 (2012) (Northern Laramie)).

⁸ Id. at 10.

⁹ *Id*. at 9.

80 MW limit.¹⁰ NorthWestern argues that treating Broadview's battery storage facility as part of the overall facility instead of as a separate power production facility would have far-reaching impacts because the Commission currently treats storage facilities as primary generation resources and does not treat them as ancillary or secondary to the generation process.¹¹

11. EEI argues that the Commission should not allow resource providers to artificially limit the output from their facilities at a single location in order to stay within the 80 MW limit. With the growth of new technologies, such as batteries, and the increased sophistication of resources, EEI asks the Commission to reconsider whether it is still appropriate to measure QF power production capacity based on net capacity as established in *Occidental*, rather than the rated capacity test that EEI asserts was initially intended by Congress. EEI states that, under a rated capacity test, the Commission would only assess the rated capacity of all devices capable of delivering power to the grid and ignore the use of artificial devices that prevent the rated capacity from ultimately reaching the electric utility's system. EEI argues against permitting batteries or other storage devices paired with renewable facilities located at the same site to qualify as a QF if the combined rated capacity of all devices is above 80 MW. EEI asserts that Congress' use of the term "power production capacity" means that Congress did not intend to allow such arrangements.

B. Answers

12. Broadview argues that, contrary to NorthWestern's description, the solar array and battery storage system will operate as a single, integrated hybrid facility interconnected

10 Id. at 6, 9.

11 *Id.* at 11-12 (citing *Electric Storage Participation in Markets Operated by Regional Transmission Organizations and Independent System Operators*, Order No. 841, 162 FERC ¶ 61,127 (2018), *order on reh'g*, Order No. 841-A, 167 FERC ¶ 61,154 (2019); *Reform of Generator Interconnection Procedures and Agreements*, Order No. 845, 163 FERC ¶ 61,043, at P 275 (2018), *order on reh'g*, Order No. 845-A, 166 FERC ¶ 61,137 (2019), *errata notice*, 167 FERC ¶ 61,123, *order on reh'g*, Order No. 845-B, 168 FERC ¶ 61,092 (2019)).

12 EEI Protest at 2.

13 *Id*. at 6.

14 Id.

15 *Id*. at 7.

16 Id. at 6-7.

at a single interconnection point pursuant to a single interconnection agreement.¹⁷ Broadview explains that, while the planned solar array is sized greater than 80 MW to increase the facility's capacity factor, the aggregate capacity of the solar array and battery storage system cannot exceed 80 MW net capacity due to the DC-to-AC inverters.¹⁸ Broadview further notes that, because the facility's components that exceed the 80 MW to improve the facility's capacity factor exist only behind the inverters, they do not affect the facility's maximum net output of 80 MW.¹⁹

- 13. In response to EEI's argument for determining a small power production facility's production capacity based on its rated capacity, Broadview argues that EEI ignores the fact that the physical limitations of the inverters and the LGIA with NorthWestern ensure that the net output of the facility will not be greater than 80 MW. Broadview adds that, in *Occidental*, the Commission rejected the argument that a QF's power production capacity should be its rated capacity because the actual output of the facility's equipment will often be different than its rated capacity.²⁰
- 14. Broadview notes that the Commission has also rejected the argument that the net output rule in *Occidental* allows a QF to artificially limit the power production capacity of its facility.²¹ Broadview adds that there is nothing artificial about measuring a facility's power production capacity as the net output of its physical inverters because an inverter is an equally integral component of the facility like a boiler or generator that may be of lower capacity than another facility component that is used to determine a facility's output.²² Broadview contends that the Commission's adoption of EEI's rated capacity proposal would disrupt markets and contracts for untold numbers of facilities already in operation because developers have relied upon Commission precedent to develop solar QFs with nameplate capacities that exceed 80 MW but with power production capacities (i.e., net output) that do not exceed 80 MW.²³

¹⁷ Answer at 3-6.

¹⁸ Broadview adds that, in order to remain within the manufacturer's warranty, it cannot use the inverters to convert additional power from the facility. *Id.* at 5.

¹⁹ *Id*. at 6.

²⁰ *Id.* at 7 (citing *Occidental*, 17 FERC ¶ 61,231 at 61,445).

²¹ *Id.* at 8 (citing *Lyonsdale Biomass*, *LLC*, 116 FERC ¶ 61,133 (2006); *Maryland Solar*, *LLC*, 146 FERC ¶ 61,071 (2014)).

²² Id. at 9.

²³ Id. at 8.

- 15. NorthWestern argues that Broadview's answer is not responsive to NorthWestern's assertions that the solar array and battery storage system are separate QFs and that their combined capacity exceeds 80 MW. NorthWestern claims that neither Broadview's LGIA nor shared interconnection point support Broadview's claim that it is a single QF because, in Order No. 2003, the Commission stated that a "Generation Facility" under the Large Generator Interconnection Process could consist of multiple generating units and that Commission precedent permits multiple QFs to interconnect at a single point.²⁴
- 16. In response, Broadview reiterated its claim that, despite whether the solar array and battery storage are separate facilities, their aggregate capacities do not exceed 80 MW because the facility's inverters and interconnection facilities ensure that the delivery at the point of interconnection cannot exceed 80 MW.²⁵

III. Commission Determination

- 17. As discussed below, we deny Broadview's Application. We find that its facility exceeds the 80 MW statutory limit for small power production QFs that Congress imposed in PURPA.
- 18. PURPA and the Commission's regulations limit small power production QFs to a "power production capacity" of 80 MW.¹ In *Occidental*, the Commission discussed its interpretation of the term "power production capacity" as it applies to QFs.² In that order, the Commission emphasized that the facility's "send out," not the size of individual components, was determinative. The Commission stated that it would consider the "power production capacity" of a facility to be the maximum net output of the facility that can be safely and reliably achieved under the most favorable operating conditions likely to occur over a period of several years. The Commission further specified that "[t]he net output of the facility is its send out after subtraction of the power used to operate auxiliary equipment in the facility necessary for power generation (such as pumps, blowers, fuel preparation machinery, and exciters) and for other essential electricity uses in the facility from the gross generator output."³

²⁴ NorthWestern Answer at 2-3 (citing *Standardization of Generator Interconnection Agreements and Procedures*, Order No. 2003, 104 FERC ¶ 61,103 at P 46 (2003); *Gamma Mariah*, *Inc.*, 44 FERC ¶ 61,442 (1988)).

²⁵ Broadview Second Answer at 2-3.

^{1 16} U.S.C. § 796(17)(A)(ii) (2018); 18 C.F.R. § 292.204(a)(1).

² *Occidental*, 17 FERC ¶ 61,231 at 61,445.

³ *Id.* at 61,445.

- 19. In *Malacha*,⁴ the Commission determined that, because the switchyards and transmission lines should be considered part of the facility, the facility's capacity should be measured at the end of such switchyards and lines. The Commission found that the facility's net electric power production capacity should be determined at the point of interconnection and not within the facility itself (i.e., after consideration of losses, etc.).⁵
- In American Ref-Fuel Co., the Commission granted American Ref-Fuel Company of Bergen County's (American Ref-Fuel) application for recertification of its small power production biomass facility as a QF. American Ref-Fuel proposed to replace two turbines with a single turbine with a maximum gross output of 91 MW and a maximum net output of 80 MW, after accounting for auxiliary loads but acknowledged that its net output would often exceed 80 MW due to the substantial variation in the heat content of the solid waste that the facility burned as fuel. The facility was equipped with an automatic control system that would restore net generation at the 80-MW level, on average, over any 60-minute span measured at any point in time. The Commission stated that the issue was "whether the small power production facility, as reconfigured, continue[d] to satisfy the requirement of both [PURPA] and the Commission's regulations that a small power production facility have a power production capacity that is not greater than 80 MW." The Commission found that American Ref-Fuel's facility did not exceed the 80 MW limit, explaining that, although PURPA and the Commission's regulations limit the power production capacity of a qualifying small power production facility to 80 MW, PURPA and the Commission's regulations do not offer guidance on how to compute the maximum size. The Commission accepted that the control system would limit the maximum net output to 80 MW in any rolling onehour period and concluded that QF status was appropriate.⁸
- 21. Through PURPA, Congress sought to encourage small power production facilities of not more than 80 MW capacity and, in fact, specified that such facilities should have a "power production capacity" of not greater than 80 MW.⁹ Prior Commission precedent sometimes allowed facilities with greater power production capacities to be certified as QFs when the net output was no more than 80 MW and also sometimes allowed

⁴ Malacha, 41 FERC ¶ 61,350.

⁵ *Id*.

⁶ American Ref-Fuel Co. of Bergen County, 54 FERC \P 61,287 (1991) (American Ref-Fuel).

⁷ *Id.* at 61,816.

⁸ Id. at 61,817.

^{9 16} U.S.C. §§ 796(17)(A)(ii), 824a-3(a).

intermittent net outputs slightly in excess of 80 MW. We find, however, there is a significant difference between (i) design capabilities that may incidentally or occasionally cross PURPA's 80 MW threshold due to certain components or variances, such as fuel or ambient temperature and (ii) a facility purposefully designed with a 160 MW solar array. 11

- 22. Broadview's proposal represents a significant departure from any project that the Commission has previously considered under a QF application. That such a project arguably could satisfy the "send out" analysis the Commission applied in *Occidental* compels us to reconsider whether it is a facility's "send out" that is determinative of whether the facility complies with the 80 MW threshold established in PURPA.
- 23. Based on such reconsideration, we find that the Commission's statement in *Occidental* that "'the power production capacity' of a facility is 'the maximum net output of the facility,' which is 'its send out,'"¹² is not consistent with the 80 MW "power production capacity" limit expressly specified by the statute and regulations. Re-examining *Occidental* and the potential such an analysis creates for the approval of projects that do not comply with the plain language of PURPA, we conclude that we have improperly focused on "output" and "send out," instead of on "power production capacity," which is the standard established both in the statute and our regulations. ¹³ In circumstances such as the factual context before us in this proceeding, the two are not the same. Therefore, on further consideration, we find that the "send out" analysis applied in *Occidental* is inconsistent with the 80 MW "power production capacity" limitation in PURPA for small power production QFs, based on our reading of the statute and regulations.

10 Occidental, 17 FERC ¶ 61,231 at 61,445.

11 In this order, because the 160 MW solar array is double the 80 MW statutory limit for power production capacity, we do not need to address whether the associated battery storage system is a separate facility or whether and how the battery storage system should be considered in determining the facility's power production capacity.

12 *Occidental*, 17 FERC ¶ 61,231 at 61,445.

13 16 U.S.C. § 796(17)(A)(ii); 18 C.F.R. § 292.204(a)(1). The dissent argues that allowing 160 MW of solar array along with a 50 MW battery improves the facility's capacity factor. Dissent at P 2. But the applicable statutory standard considers a facility's power production capacity, not its capacity factor. This argument proves no more than that the ability of the facility to increase its capacity factor is dependent on having a power production capacity that exceeds 80 MW; hence, the necessity for the Commission to return to the statutory language and limit set forth in PURPA.

- 24. We note, in this regard, that Form No. 556 starts with the facility's maximum gross power production capacity at line 7a and then subtracts certain parasitic loads and losses to yield the facility's maximum net power production capacity, that is, the facility's ultimate certified capacity. Such parasitic loads and losses—and only those amounts—can be recorded in lines 7b through 7e, as deductions, with the total deductions reflected in line 7f. Line 7g reflects the difference between the maximum gross power production capacity provided in line 7a minus the total deductions allowed in line 7f. Consistent with the application of the statute and regulation noted above, the amount in line 7g, the net power production capacity, cannot exceed the 80 MW statutory and regulatory limit.
- 25. Here, Broadview's facility exceeds the 80 MW statutory limit for "power production capacity." We find that Broadview cannot meet the statutory limit by relying on inverters as a limiting element on a QF's output. As Broadview acknowledges, the solar array has the capability to produce 160 MW of DC power. The inverters are capable of converting only 80 MW into AC power, but that is a conversion limit, not a limit on the facility's power production capacity. Thus, line 7a of Form No. 556 records the "maximum gross power production capacity at the terminals of the individual generator(s) under the most favorable anticipated design conditions" and does not include adjustments for inverters or other output-limiting devices. Utilizing inverters to limit the output of an otherwise above-80 MW power production facility to 80 MW is, we believe, inconsistent with the type of facility that Congress specified can qualify as a small power production facility (i.e., a facility sized 80 MW or less). ¹⁶
- 26. We clarify that our findings here related to the measure of a QF's certified capacity, that is, its maximum net power production capacity, will not change the way in which maximum net power production capacity is reported on Form No. 556. That is, on the Form No. 556, the maximum gross power production capacity shall still be reduced for load and line losses to calculate the "maximum net power production capacity."¹⁷

¹⁴ Therefore, we find that Broadview incorrectly filled out the Form No. 556 by entering 82.5 MW for line 7a. We clarify that, to the extent it was not already clear, lines 7b through 7e of Form No. 556 may record only the parasitic loads and losses that occur independent of the output limiting function of inverters or other output limiting devices.

¹⁵ As we noted above, we do not address the associated battery storage system in this order. *See supra* note 57.

¹⁶ Consistent with the Commission's determination in *Malacha* regarding allowable deductions, load and line losses may still be deducted from a QF's gross power production capacity to determine net power production capacity. *Malacha*, 41 FERC ¶ 61,350.

- 27. In response to Broadview's comments regarding industry disruption, this finding is prospective and does not affect QFs that have self-certified or have been granted Commission certification prior to the date of this order. If a QF that has listed a maximum net power production capacity of 80 MW or less has a Form No. 556 on file with the Commission prior to the date of this order, even if it may have included adjustments for inverters or other output-limiting devices to calculate its maximum net power production capacity as 80 MW or less, then it will be grandfathered with regard to the holding in *Occidental*. In other words, those previously certified QFs will still be considered to be small power production facilities for purposes of PURPA. Moreover, procurement of a legally enforceable obligation, by itself, is insufficient; given the nature of our ruling today, explaining how we now see that the requisite Form No. 556 must be completed, it is appropriate that the grandfathering adopted here for existing QFs be tied to such QFs having submitted a Form No. 556.
- 28. For the same reasons discussed herein, we also revoke QF status of Broadview's facility based on its January 29, 2020 Form No. 556 self-certification, in Docket No. QF17-454-005, which is identical to the Form No. 556 filed in the instant Application and was filed while the Application was before the Commission.¹⁸

The Commission orders:

- (A) Broadview's Application in Docket No. QF17-454-004 is hereby denied, as discussed in the body of this order.
- (B) Broadview's self-certification of QF status in Docket No. QF17-454-005 is hereby revoked, as discussed in the body of this order.

By the Commission. Commissioner Glick is dissenting with a separate statement attached.

(SEAL)

Nathaniel J. Davis, Sr., Deputy Secretary.

¹⁷ See supra note 57.

¹⁸ Form No. 556, Application, Docket No. QF17-454-005 (filed Jan. 29, 2020).

UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Broadview Solar, LLC Docket Nos. QF17-454-004

QF17-454-005

(Issued September 1, 2020)

GLICK, Commissioner, dissenting:

- 1. I dissent from today's order denying Broadview Solar LLC's (Broadview) application for Qualifying Facility (QF) status under the Public Utility Regulatory Policies Act of 1978 (PURPA). Under any fair reading of the statute or Commission precedent, Broadview's power production capacity is 80 MW, making it eligible for QF status. The Commission's contrary determination will make QF status turn on the capacity of any one component of the facility, rather than the actual power production capacity of the facility itself. That conclusion finds no support in the statute, our precedent, or common sense.
- 29. Broadview's facility is a hybrid resource that is made up of, among other things, a 160 MW solar array and a 50 MW battery storage resource. Critically, however, the inverters that convert the DC electricity generated by the solar panels into AC electricity that can be delivered to the grid have a net capacity of only 80 MW. That means that Broadview's facility is physically incapable of producing more than 80 MW of electricity for any subsequent use. Instead of increasing the *power production capacity* of Broadview's facility, the large solar array enhances its *capacity factor*, meaning that the facility will, all else equal, generate a higher fraction of its total 80 MW capacity than it would with a smaller array. That makes the system more efficient—a result I

19 Pub. L. No. 95-617, 92 Stat. 3117 (1978).

20 Broadview Solar, LLC, 172 FERC ¶ 61,194, at P 2 (2020) (Order).

21 Broadview states that the 20 inverters would be capable of converting only 82.5 MW of capacity from DC to AC power, with a maximum net capacity of 80 MW after accounting for on-site parasitic load of 2.5 MW. Broadview October 17, 2019 Answer at 4 ("[P]ower generated by the Solar PV Arrays or discharged from the [battery energy storage system] must be converted by inverters from dc to ac power before being sent out for injection into the ac transmission grid.").

22 Lending further support to that conclusion, the interconnection studies executed by NorthWestern Corporation, the interconnecting utility, identify Broadview's summer and winter output as 80 MW, and the interconnection agreement, provides that the total size of the "Project will be 80 MW based on the max output of the inverters." *Id.* at 4.

would have thought the Commission would be eager to encourage. In addition, Broadview's 50 MW battery system cannot "produce" power in any conventional sense of that term. ²³ Instead, the electricity discharged by the battery is produced exclusively by the solar array. As with the solar array, the battery increases the capacity factor of the facility, not the facility's actual power production capacity. The bottom line is that while Broadview's configuration may allow it to more predictably produce electricity, that configuration does not give it a power production capacity greater than 80 MW.

30. And that is what matters under PURPA. The statute provides that QF status is available to a "small power production facility," which is defined as, among other things, a "facility" that produces power from one of a series of enumerated resource types and has a "power production capacity" of not more than 80 MW.²⁴ It is hard for me to understand how the term "facility" could mean anything other than the power plant as a whole. After all, as used in this context, the term "facility" typically refers to an entire building or structure, not its component parts.²⁵ For that reason, when someone uses the terms "transportation facilities" or "educational facilities" no one would think those terms refer to the engine of a train or the books in a school, even though they are utterly essential to serving those facilities' respective purposes. The same goes when it comes to defining the power production capacity of a small power production facility: the term "facility" indicates that QF status should turn on the actual power production capacity of the resource as a whole, not the capacity of its largest individual component part.²⁷

²³ Although today's order does not address the battery storage resource because it disqualifies Broadview on the basis of its solar array alone, *see* Order, 172 FERC ¶ 61,194 at n.57, I must address the battery as part of my reasoning for why Broadview qualifies as a QF.

^{24 16} U.S.C. § 796(17).

²⁵ *See*, *e.g.*, *facility*, Merriam Webster Dictionary, https://www.merriam-webster.com/dictionary/facility (last visited Sept. 1, 2020) (defining a facility, for these purposes, as "something (such as a hospital) that is built, installed, or established to serve a particular purpose").

²⁶ Both are listed as examples of a facility. *See facility*, Dictionary.com, https://www.dictionary.com/browse/facility (last visited Sept. 1, 2020).

²⁷ And there is every reason to believe that is what Congress had in mind. The conference report accompanying PURPA describes a small power production facility by referring to, for example, "solar electric systems." H.R. Rep. No. 95-1750, at 89 (1978). As with facility, "system" would seem to contemplate the power plant as a whole, not just its photovoltaic panels. That understanding is also consistent with contemporary terminology: The North American Electric Reliability Corporation's definition of bulk

- 31. Commission precedent is consistent with that common-sense understanding. In order after order, the Commission has conducted a straightforward examination of the power production capacity of the facility as a whole, rather than nitpicking the capability of each component. That approach makes sense for several reasons, including, as the Commission explained in *Occidental Geothermal*, *Inc.*, the commercial reality that "it is not uncommon for smaller facilities to find it most economic to employ commercially available components some of which have individual capabilities significantly exceeding the overall facility capabilities." Looking to the size of each component would upset that otherwise straightforward inquiry and cause the Commission to insert itself unnecessarily into commercial decisions that are better made by project developers than federal regulators. Perhaps that is why the Commission has, until today, consistently taken a pragmatic approach to defining the power production capacity²⁹—one that is consistent with Congress's directive that the Commission should "encourage" QF development.³⁰ Those interpretations have been settled policy for decades at this point.
- 32. Nevertheless, in a break from precedent, today's order denies Broadview's application for QF status. The Commission concludes that Broadview's power production capacity exceeds the 80-MW ceiling for qualifying as a QF based entirely on the fact that its solar array is rated at 160 MW. But the Commission makes no effort to explain why it is appropriate to determine a qualifying *facility*'s power production

power system equipment describes solar "power producing resources" as, together, the photovoltaic panels *and* the associated inverters. *See* N. Am. Elec. Reliability Corp., *Bulk Electric System Definition Reference Document* at 18-20 (Aug. 2018), *available at* www.nerc.com/pa/Stand/2018%20Bulk%20Electric% 20System%20Definition%20Reference/BES_Reference_Doc_08_08_2018_Clean_for_Posting.pdf.

28 17 FERC ¶ 61,231, 61,445 (1981) (expressly rejecting the idea that a facility's "power production capacity" should be "determined by the nominal rating of even a key component of the facility").

29 See, e.g., American Ref-Fuel Co., 54 FERC ¶ 61,287, 61,816-17 (1991) (finding that a waste-to-energy facility's power production capacity was 80 MW because it had a control system that would restore net generation to an average of no more than 80 MW over any 60-minute span measured at any point in time, even though the installed nameplate capacity of the facility exceeded 80 MW and the minute-to-minute output might vary with the energy content of the waste being burned); Malacha Power Project, Inc., 41 FERC ¶ 61,350 (1987) (finding that "electric power production capacity of the facility is the capacity that the electric power production equipment delivers to the point of interconnection with the purchasing electric utility's transmission system"); Occidental, 17 FERC ¶ 61,231 at 61,444 (looking to the power production capacity of a facility as a whole rather than any single component).

capacity based on that facility's component parts rather than looking to the power production capacity of the facility as a whole. As noted above, Broadview's inverters prevent the facility from ever providing more than 80 MW of electricity to the grid and focusing on that figure—*i.e.*, the potential output of the facility as a whole, not its subcomponents—is far more consistent with the PURPA's text, purpose, and legislative history.³¹ The Commission's failure to wrestle with those arguments is arbitrary and capricious.

- 33. Making matters worse, in order to reach its preferred outcome, the Commission throws overboard *Occidental*, a 40-year old precedent.³² *Occidental* focused the QF determination on a facility's "send out" capacity, expressly rejecting the component-by-component approach adopted in today's order.³³ The Commission justifies its abandonment of that precedent by asserting that focusing on "send out" capacity might allow a facility whose power production capacity exceeds 80 MW to qualify as a QF.³⁴
- 34. But that just takes us back to square one. The problem that purportedly justifies jettisoning *Occidental* arises only as a result of the Commission's misguided component-by-component approach to determining power production capacity. If the Commission were to instead continue to look to the power production capacity of a facility as a whole, as advocated for above, its stated concerns about *Occidental* would evaporate. Finally, on a broader level, I cannot help but express my concern that so casually upending settled precedent creates unnecessary uncertainty, making it hard for developers to know which precedents they can count on and which they cannot.

³¹ See supra PP 3-4.

³² Order, 172 FERC ¶ 61,194 at PP 22-23.

³³ Supra P 4 & n.10.

³⁴ Order, 172 FERC ¶ 61,194 at P 23.

For these reasons	. I	respe	ectfully	v dissent	[.

Richard Glick

Commissioner