

United States Court of Appeals
FOR THE DISTRICT OF COLUMBIA CIRCUIT

Argued December 6, 2005

Decided March 24, 2006

No. 04-1396

SOUTHERN CALIFORNIA EDISON COMPANY,
PETITIONER

v.

FEDERAL ENERGY REGULATORY COMMISSION,
RESPONDENT

ORMESA LLC,
INTERVENOR

On Petition for Review of Orders of the
Federal Energy Regulatory Commission

Catherine E. Stetson argued the cause for petitioner. With her on the briefs were *Kevin J. Lipson*, *Douglas L. Beresford*, *Jessica L. Ellsworth*, and *J. Eric Isken*.

Robert H. Solomon, Deputy Solicitor, Federal Energy Regulatory Commission argued the cause for respondent. With him on the brief were *Cynthia A. Marlette*, General Counsel, and *Dennis Lane*, Former Solicitor.

Before: GARLAND, BROWN and GRIFFITH, *Circuit Judges*.

Opinion for the Court filed by *Circuit Judge* BROWN.

BROWN, *Circuit Judge*: The Federal Energy Regulatory Commission certified intervenor Ormesa LLC (Ormesa) as a qualifying geothermal small power production facility, entitling it to certain privileges pursuant to Section 210 of the Public Utility Regulatory Policies Act of 1978 (PURPA), 16 U.S.C. § 824a-3. In particular, the certification permitted Ormesa to compel traditional utilities to purchase Ormesa’s net power output. Southern California Edison Co. (Edison), a utility that has a power purchase agreement with Ormesa, petitions for review, arguing the Commission acted arbitrarily and capriciously by permitting Ormesa to sell capacity in excess of its net output and by distinguishing between brine extraction and brine reinjection in calculating the net output in the first place. Finding no basis for upsetting the Commission’s order, we deny the petition for review.

I

Congress enacted Section 210 of PURPA, 16 U.S.C. § 824a-3, to encourage the development of cogeneration and small power production facilities. *FERC v. Mississippi*, 456 U.S. 742, 750 (1982); *Conn. Valley Elec. Co. v. FERC*, 208 F.3d 1037, 1039 (D.C. Cir. 2000). A “cogeneration facility” produces both electric energy and either steam or some other form of usable energy, 16 U.S.C. § 796(18)(A); a “small power production facility” produces no more than 80 megawatts of electricity using only biomass, waste, renewable resources, or geothermal resources as the primary energy source, *id.* § 796(17)(A).

To counter traditional electric utilities’ reluctance to deal with these nontraditional facilities, the PURPA charges the Commission with implementing mandatory purchase and sell obligations, requiring electric utilities to purchase electric power from, and sell power to, qualifying cogeneration and small

power production facilities (collectively, “qualifying facilities” or “QFs”). *See id.* § 824a-3(a)(1)-(2); *FERC v. Mississippi*, 456 U.S. at 750-51.¹ A qualifying small power production facility must “meet[] such requirements (including requirements respecting fuel use, fuel efficiency, and reliability) as the Commission may, by rule, prescribe.” 16 U.S.C. § 796(17)(C); *cf. id.* § 796(18)(B) (covering qualifying cogeneration facilities).

Hewing to the PURPA’s mandate, the Commission enacted regulations requiring a utility to purchase “any energy and capacity which is made available from a [QF],” 18 C.F.R. § 292.303(a), and to sell “any energy and capacity requested by the [QF],” *id.* § 292.303(b). While the utility must sell electricity to a QF at regulated tariff rates, the utility must buy electricity from the QF at a rate equal to the utility’s full “avoided cost.” *See Conn. Valley Elec.*, 208 F.3d at 1040 (citing 18 C.F.R. §§ 292.303-.305); 18 C.F.R. § 292.304(b)(2). The utility’s avoided cost (also called the “incremental cost of alternative electric energy”) is “the cost to the electric utility of the electric energy which, but for the purchase from such [QF], such utility would generate or purchase from another source.” 16 U.S.C. § 824a-3(d); *see* 18 C.F.R. § 292.101(b)(6); *Am. Paper Inst., Inc. v. Am. Elec. Power Serv. Corp.*, 461 U.S. 402, 405-06 (1983); *Conn. Valley Elec.*, 208 F.3d at 1040 n.*. As a practical matter, “the rate that a QF can require a utility to pay [i.e. the avoided-cost rate] is almost always higher than the regulated tariff rate at which the QF can purchase from the utility electricity for its internal operating needs.” *Conn. Valley Elec.*, 208 F.3d at 1040 n.*.

¹ Congress also sought to relieve some of the regulatory burdens that discouraged development of such facilities by exempting QFs from certain state and federal laws. *See* 16 U.S.C. § 824a-3(e); *FERC v. Mississippi*, 456 U.S. at 750-51.

The Commission certifies the amount of power (“qualifying output” or “qualifying power”) that a QF can require a utility to purchase. The Commission determines a QF’s qualifying output by looking to the QF’s net output rather than its gross output. *Penntech Papers, Inc.*, 48 F.E.R.C. ¶ 61,120, at 61,423 (1989); *Power Developers, Inc.*, 32 F.E.R.C. ¶ 61,101, at 61,276 (1985); *Occidental Geothermal, Inc.*, 17 F.E.R.C. ¶ 61,231, at 61,445 (1981). A QF’s gross output is the total amount of electric energy that it can produce. The net output is the gross output minus the “auxiliary load,” which is electricity the QF itself consumes during the production process. *See Penntech Papers*, 48 F.E.R.C. at 61,423 (“[T]he facility must consume some electric power for auxiliary equipment such as pumps, blowers, fans, etc.”). The Commission defined the auxiliary load as power that is a “necessary and integral’ part of the power production process.” *GEO East Mesa Ltd. P’ship*, 55 F.E.R.C. ¶ 61,255, at 61,813 (1991).

By only certifying a QF’s net output (rather than gross output) as qualifying output, the Commission prevents a QF from purchasing power for its auxiliary load from one utility at retail rates and then attempting to sell its entire gross output to another utility at avoided cost rates. *Penntech Papers*, 48 F.E.R.C. at 61,423. This accords with the purposes behind the PURPA, as the Commission thus certifies the amount of output that the QF actually contributes to the system—the amount that will displace electricity produced by traditional means. *Id.* The Commission has cautioned that “[a]llowing [a QF] to sell the gross output at one utility’s avoided cost rates while the [QF] purchases the auxiliary power at another utility’s retail rates may very well result in an economic distortion.” *Id.*

Until recently, a QF had to be “owned by a person not primarily engaged in the generation or sale of electric power (other than electric power solely from cogeneration facilities or small power production facilities).” 16 U.S.C. § 796(17)(C)(ii)

(2000) (qualifying small power production facility); *id.* § 796(18)(B)(ii) (qualifying cogeneration facility); *see also* 18 C.F.R. § 292.206 (2005).² The Commission construed this ownership restriction to mean that a QF could not itself be in the business of selling electric power in excess of its net output, unless the incremental power fell within the ambit of the parenthetical exception. *See Conn. Valley Elec. Co. v. Wheelabrator Claremont Co.*, 82 F.E.R.C. ¶ 61,116, at 61,418 (1998) (*Connecticut Valley*); *Turners Falls Ltd. P'ship*, 55 F.E.R.C. ¶ 61,487, at 62,671-72 (1991). The penalty for selling such nonqualifying power was loss of QF status. *Turners Falls*, 55 F.E.R.C. at 62,672.

This changed, however, with the Energy Policy Act of 2005 (the Act), Pub. L. No. 109-58, § 1253(b), 119 Stat. 594, 970 (amending 16 U.S.C. § 796(17)(C) & (18)(B)), which eliminated the statutory ownership limitation.³ Consequently, the

²This regulation read:

(a) *General Rule.* A cogeneration facility or small power production facility may not be owned by a person primarily engaged in the generation or sale of electric power (other than electric power solely from cogeneration facilities or small power production facilities).

(b) *Ownership test.* For purposes of this section, a cogeneration or small power production facility shall be considered to be owned by a person primarily engaged in the generation or sale of electric power, if more than 50 percent of the equity interest in the facility is held by an electric utility or utilities

18 C.F.R. § 292.206 (2005).

³We offer no comment on the Act's amendments to 16 U.S.C. § 824a-3, which added new subsection (m), allowing for the mandatory purchase and sell requirements to be lifted in certain

Commission removed the corresponding regulation, noting that “[r]emoval of the ownership prohibition removes the bar to a QF selling non-QF electric energy while retaining QF status.” *Revised Regulations Governing Small Power Production and Cogeneration Facilities*, 71 Fed. Reg. 7852, 7864 (Feb. 15, 2006) (deleting 18 C.F.R. § 292.206).

II

Ormesa is a geothermal small power production facility located in Imperial County, California, with a gross capacity of 19.95 megawatts (MW). Ormesa was originally certified as a QF by the Commission in 1986. *Ormesa Geothermal II*, 36 F.E.R.C. ¶ 62,030 (1986). The facility utilizes several wells extending into underground reservoirs that are close enough to the surface and hot enough to be useful in generating electricity. As relevant to the present case, the electricity production process consists of (i) using pumps to extract brine from the geothermal production wells and transport it to the facility; (ii) various in-facility activities, such as moving the hot brine through a vaporizer to vaporize the “working fluid”—isopentane—which, in gaseous form, then flows into the turbines, generating electric power; and (iii) reinjecting the used brine back into the geothermal reservoir. Ormesa obtains the power necessary to perform steps (i) and (iii)—requiring 3.24 MW and 1.35 MW, respectively—from another geothermal QF. The 3.38 MW needed to

circumstances, and new subsection (n), directing the Commission to revise the criteria in 18 C.F.R. § 292.205 for new qualifying cogeneration facilities seeking to make sales pursuant to Section 210 of PURPA. *See* Pub. L. No. 109-58, § 1253(a), 119 Stat. at 967-70; *see also* *New PURPA Section 210(m) Regulations Applicable to Small Power Production and Cogeneration Facilities*, 71 Fed. Reg. 4532 (Jan. 27, 2006) (proposing amendments to 18 C.F.R. pt. 292 in accordance with 16 U.S.C. § 824a-3(m)); 71 Fed. Reg. at 7852-60, 7865 (implementing 16 U.S.C. § 824a-3(n)).

perform the in-facility functions, such as the activities described in step (ii) above, comes from Ormesa itself.

Edison is an investor-owned electric utility that generates and purchases electric energy and resells it to consumers in Southern California. Edison purchases power from Ormesa under a power purchase agreement consistent with Commission regulations, *see* 18 C.F.R. § 292.101 *et seq.* The agreement requires Ormesa to maintain its QF status at all times.

On February 3, 2004, Ormesa filed an application for recertification as a QF. Ormesa argued the auxiliary load consisted solely of the in-facility activities, such as moving the brine directly into the generating equipment. Ormesa thus sought certification at a capacity of 16.57 MW.⁴ The Commission permitted Edison to intervene and protest Ormesa's application. Edison argued the power for brine extraction/transportation and brine reinjection (that is, steps (i) and (iii) as described above) should also be considered part of the auxiliary load and, accordingly, excluded from the certified net output. Edison thus would calculate the net output at 11.98 MW.⁵

The Commission agreed in part with each party. *See Ormesa LLC*, 107 F.E.R.C. ¶ 61,043 (2004) (*Certification Order*). Relying on *GEO East Mesa*, 55 F.E.R.C. ¶ 61,255, the Commission concluded brine extraction and transportation were not “necessary and integral” to the power production process. The corresponding power consumption was excluded from the auxiliary load and, in turn, included in Ormesa's net output. Conversely, the Commission concluded power for brine reinjection *was* “necessary and integral.” It was thus included

⁴19.95 (Gross) – 3.38 (ii) = 16.57 (Net).

⁵19.95 (Gross) – 3.24 (i) – 3.38 (ii) – 1.35 (iii) = 11.98 (Net).

in the auxiliary load and excluded from net output. Accordingly, the Commission calculated the net output to be 15.22 MW⁶ and certified that amount as qualifying output.

In a footnote, however, the Commission granted Ormesa permission to sell an additional 1.35 MW of power in excess of its net output without imperiling its QF status, notwithstanding the ownership limitation.⁷ *Certification Order*, 107 F.E.R.C. at 61,151 n.10. The Commission made this allowance insofar as “the 1.35 MW will be purchased from another QF,” and pointed to *Connecticut Valley*, 82 F.E.R.C. at 61,418 & n.17, for the proposition that “a sale in excess of net output would deprive a facility of its QF status unless the incremental sale consisted of power solely from cogeneration or small power production facilities.” *Certification Order*, 107 F.E.R.C. at 61,151 n.10.

Ormesa and Edison each unsuccessfully requested rehearing. *See Ormesa LLC*, 108 F.E.R.C. ¶ 61,299 (2004) (*Rehearing Order*). Edison now brings a timely petition for review.

III

We address Edison’s challenge to the Commission’s decision under the deferential arbitrary and capricious standard set forth in the Administrative Procedure Act. 5 U.S.C. § 706(2)(A); *Exxon Mobil Corp. v. FERC*, 430 F.3d 1166, 1172 (D.C. Cir. 2005); *Mo. Pub. Serv. Comm’n v. FERC*, 215 F.3d 1,

⁶19.95 (Gross) – 3.38 (ii) – 1.35 (iii) = 15.22 (Net).

⁷The Commission nowhere stated whether Edison was necessarily compelled to buy this additional amount, only that Ormesa was permitted to sell it without losing QF status. *Cf. Connecticut Valley*, 82 F.E.R.C. at 61,418 (“[T]he requirement of [18 C.F.R. §] 292.303(a), that an electric utility purchase any energy and capacity made available from a QF, is limited to the energy and capacity a QF actually has available, which is its net energy and capacity.”).

3 (D.C. Cir. 2000). Our role is “limited to assuring that the Commission’s decisionmaking is reasoned, principled, and based upon the record.” *Williston Basin Interstate Pipeline Co. v. FERC*, 165 F.3d 54, 60 (D.C. Cir. 1999) (internal quotation marks and citation omitted). “The Commission must consider the relevant factors and draw a rational connection between the facts found and the choice made.” *Mo. Pub. Serv. Comm’n*, 215 F.3d at 3 (internal quotation marks and citation omitted).

A

Edison first challenges the Commission’s application of the ownership limitation—specifically, the decision to grant Ormesa permission to sell more than its net output while maintaining QF status. As a preliminary matter, we must determine whether the Act and the subsequent Commission rule changes, which delete the statutory and regulatory ownership constraints, moot the petition for review with respect to this issue. *See Honig v. Doe*, 484 U.S. 305, 317 (1988); *Beethoven.com LLC v. Librarian of Congress*, 394 F.3d 939, 950 (D.C. Cir. 2005). We have little difficulty concluding they do not. Although the Act eliminated the statutory ownership limitation in 2005 and the Commission amended its regulations accordingly in early 2006, the question of whether the Commission acted arbitrarily and capriciously back in 2004 remains very much live. Given that whatever harm accrued as a result of the Commission’s order did not suddenly vanish when the ownership limitation was excised, this is not a case where the events have “outrun the controversy such that the court can grant no meaningful relief.” *McBryde v. Comm. to Review*, 264 F.3d 52, 55 (D.C. Cir. 2001).

We turn now to the merits, examining the Commission’s order in light of the ownership limitation as it existed at that time. Edison argues the Commission acted arbitrarily and capriciously in permitting Ormesa to sell, over and above its net output, an additional 1.35 MW—corresponding to an amount purchased from another QF to cover Ormesa’s brine-reinjection

auxiliary load—without Ormesa’s jeopardizing its QF status. We disagree.

Per the now-defunct statutory ownership restriction, a QF had to be “owned by a person not primarily engaged in the generation or sale of electric power (other than electric power solely from cogeneration facilities or small power production facilities).” 16 U.S.C. § 796(17)(C)(ii) (2000); *id.* § 796(18)(B)(ii). In *Turners Falls*, the Commission construed this language to bar a QF from selling nonqualifying power over and above its certified net output, and held that such a sale would result in the loss of QF status altogether. 55 F.E.R.C. at 62,671-72. In that case, the Commission had certified the QF’s net output (gross less auxiliary load) as qualifying power. *Id.* at 61,665. However, the QF, which received its auxiliary load from a local utility, sought to sell the nonqualifying incremental amount (gross less net) as a nonqualifying facility seller. *Id.* at 62,666. According to the Commission, such sales of nonqualifying power by QFs are prohibited because the QF would be selling electric power that does not fall within the parenthetical “other than” exception, despite the colorable argument that even the incremental power—which after all was generated by the QF itself—was “electric power solely from cogeneration facilities or small power production facilities.” *Id.* at 62,667-68 (citation omitted). The Commission emphasized that, in analyzing whether the incremental sale transgresses the statutory ownership restriction, “the most important fact is that the incremental output of the Turners Falls facility . . . is not . . . qualifying output eligible for the regulatory exemptions.” *Id.* at 62,671 (emphasis added). Later, in *Connecticut Valley*, the Commission, reiterating the statutory ownership restriction (including the exception thereto) and citing *Turners Falls*, stated that “a sale in excess of net output would deprive a facility of its QF status, unless the incremental sale was of power solely from cogeneration or small power production facilities [i.e., QFs].” 82 F.E.R.C. at 61,418 & n.17.

In the present case, citing *Connecticut Valley*, the Commission determined that, although the 1.35 MW was not part of Ormesa’s net output, Ormesa could nonetheless sell it, provided it would be purchased from another QF. *Certification Order*, 107 F.E.R.C. at 61,151 n.10. The explanation given, as set forth in a footnote, is as follows:

Ormesa indicates that here the 1.35 MW will be purchased from another QF. In [*Connecticut Valley*, 82 F.E.R.C. at 61,418 & n.17], the Commission found that a sale in excess of net output would deprive a facility of its QF status unless the incremental sale consisted of power solely from cogeneration or small power production facilities. Therefore, notwithstanding the discussion above, given that 1.35 MW will be purchased from another QF, Ormesa is permitted to sell an additional 1.35 MW from its facility without jeopardizing its QF status.

Certification Order, 107 F.E.R.C. at 61,151 n.10.

We are not persuaded this footnote represents an improper expansion of the exception to the statutory ownership requirement, as applied in Commission precedent. In citing to *Connecticut Valley* (which in turn cites *Turners Falls*), we understand the Commission to have extended permission to sell an additional 1.35 MW only insofar as Ormesa purchases a corresponding amount of power from the other QF’s supply of qualifying output.⁸ *Turners Falls* highlighted that the

⁸Although Ormesa never explicitly claimed in its recertification application that it would *purchase* the capacity from another QF, *see, e.g.*, Joint Appendix 15-16 (Ormesa “uses power *from* another geothermal QF” for reinjection (emphasis added)); *id.* at 20 (power for reinjection “is *provided* by another geothermal QF” (emphasis added)); *id.* at 22 (power for reinjection is “*supplied* by another QF” (emphasis added)), the Commission’s permission, by its own terms, only extends “*if* that additional 1.35 MW were purchased from another

touchstone is whether the incremental power is “qualifying output,” and in that case, unlike the present one, the sale of incremental power was prohibited precisely because it was *not* qualifying power. 55 F.E.R.C. at 62,671. Similar to Ormesa’s ability to sell its own *qualifying* power, the Commission reasonably permitted Ormesa to, in essence, sell another QF’s *qualifying* power without putting Ormesa’s QF status at risk. That is, consistent with Commission precedent, the Commission reasonably found that such a sale would not run afoul of the statutory ownership restriction but would instead fall within the exception thereto. Whether Ormesa subsequently exceeded the bounds of the Commission’s permission—by selling *nonqualifying* power—is not a matter before us.

B

Edison next argues the Commission acted arbitrarily and capriciously in making a distinction between power for brine extraction (which it determined is not part of the auxiliary load) and brine reinjection (which it determined is part of auxiliary load). Edison would adopt the Commission’s conclusion as to reinjection, while rejecting the conclusion as to extraction. Accordingly, Edison contends the Commission must reassess its *GEO East Mesa* precedent, which directly controlled the categorization of brine extraction. We again disagree.

In *GEO East Mesa*, the Commission held the auxiliary load includes power for those functions that are a “‘necessary and integral’ part of the power production process.” 55 F.E.R.C. at 61,813. The Commission found this criterion met in the case of “essential fuel handling activity”—i.e., “mov[ing] the geothermal fuels directly into the generating equipment”—but not in the case of “extraction and transportation functions.” *Id.* The Commission employed an analogy to coal mining, originally

QF,” *Rehearing Order*, 108 F.E.R.C. at 62,514 (emphasis added).

suggested by the geothermal plant in that case. *Id.* at 61,813-14. Brine extraction (like coal mining) and brine transportation to the geothermal facility (like transporting coal to a power plant) are not “necessary and integral” to the power production process and thus are not part of the auxiliary load. *Id.* On the other hand, essential fuel handling activity at the geothermal facility, such as moving the geothermal fuels directly into the generating equipment (like preparing and moving coal for entry into the boiler), *is* part of the auxiliary load. *Id.*

Applying *GEO East Mesa* in the present case, the Commission concluded that Ormesa’s extraction and transportation activities were not part of the auxiliary load. Edison urges here, as it did before the Commission, that the Commission erred in not overturning *GEO East Mesa*. However, the Commission has adequately explained why it declined to do so, rejecting Edison’s contention that the brine should more properly be seen as “working fluid” (which presumably would have brought all extraction and transportation within the ambit of the auxiliary load), rather than as the “fuel” (for which only “essential fuel handling” functions are part of the auxiliary load). *See Certification Order*, 107 F.E.R.C. at 61,151. The Commission determined the “brine itself is not the working fluid of the facility”; rather, the “working fluid is isopentane.” *Id.* “The brine heats the isopentane and the isopentane functions as the facility’s working fluid, turning the turbines and generators.” *Id.* In short, the Commission offered a reasonable explanation for adhering to *GEO East Mesa*. *Cf. Southwest Gas Corp. v. FERC*, 145 F.3d 365, 370 (D.C. Cir. 1998) (“The Commission need not revisit the reasoning of a general order every time it applies it to a specific circumstance.”).

Edison’s argument that it would be more appropriate to analogize to nuclear and steam power production rather than to coal is unavailing. It is within agency discretion to reasonably analogize to one set of facts rather than another. *See New Charleston Power I, L.P. v. FERC*, 56 F.3d 1430, 1431, 1433

(D.C. Cir. 1995) (concluding it was “well within bounds” for the agency to conclude that “rain-soaked cow manure” fueling a particular QF should be treated more like a “golf ball that knocks out a high-voltage transformer” than a “volcanic eruption in the Philippines”).

Having thus determined, per *GEO East Mesa*, that brine extraction was not part of Ormesa’s auxiliary load, the Commission then explained its rationale for treating brine reinjection differently:

Following the removal of heat from the brine (to heat the isopentane), the brine is no longer fuel, but is effectively spent fuel. It is undisputed that spent fuel must be disposed of, and here is disposed of by reinjection[. We find that given the type of QF and its configuration such disposal is “necessary and integral” to this QF’s power production process.

Certification Order, 107 F.E.R.C. at 61,151.⁹ While the Commission’s reasoning is perhaps less than robust, we are not persuaded that its distinction between extraction and reinjection is so deficient as to warrant our intervention. In categorizing the used brine as “spent fuel,” the Commission has reasonably included reinjection in the category of “necessary and integral” “essential fuel handling” activities. *Id.* Just as the Commission finds moving the fuel (brine) directly into the generating equipment to be necessary and integral, it is not irrational to similarly conclude disposing of the spent fuel (used brine)—moving it out of the generating equipment—is also necessary and integral. The spent fuel, after all, must go somewhere in order to allow more fuel to be brought in; as the

⁹ Although Ormesa argued in its motion for rehearing before the Commission that the Commission’s distinction between extraction and reinjection was unsound, Ormesa has not sought our review of the Commission’s conclusion that power for reinjection is part of the auxiliary load.

Commission noted, the spent fuel “must be disposed of, and here is disposed of by reinjection.” *Id.* Although it might also be reasonable to conclude, as Edison urges, that reinjection is more closely aligned with the activity of extraction, this is a matter left to agency discretion. In sum, the Commission acted neither arbitrarily nor capriciously in adhering to *GEO East Mesa* in assessing brine extraction while treating brine reinjection differently.

IV

For the foregoing reasons, Edison’s petition for review is

Denied.