

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Pat Wood, III, Chairman;
Nora Mead Brownell, Joseph T. Kelliher,
and Suedeem G. Kelly.

Calpine King City Cogen, LLC

Docket No. QF85-735-006

ORDER GRANTING APPLICATION FOR RECERTIFICATION AS A QUALIFYING
COGENERATION FACILITY BUT DENYING REQUEST FOR DECLARATION

(Issued May 6, 2005)

1. In this order the Commission grants recertification of Calpine King City Cogen, LLC's (Calpine King City) cogeneration facility. The Commission finds that the facility will sell sufficient thermal output from its cogeneration facility to an unaffiliated purchaser to satisfy the Commission's operating and efficiency standards.¹ The grant of Calpine King City's application for recertification is conditioned on Calpine King City's

¹ The operating and efficiency standards are contained in section 292.205 of the Commission's regulations. *See* 18 C.F.R. § 292.205 (2004). For any qualifying topping-cycle cogeneration facility, the operating standard requires that the useful thermal energy output of the facility (*i.e.*, the thermal energy made available to the host) must, during the applicable period, be no less than five percent of the total energy output. The Commission's operating standard ensures that the facility's thermal host meets a certain threshold level of heat utilization. *See Everett Energy Corp.*, 45 FERC ¶ 61,314 (1988).

Section 292.205(a)(2) of the Commission's regulations establishes an efficiency standard for topping-cycle cogeneration facilities for which any of the energy input is natural gas or oil. The useful power output of the facility plus one-half the useful thermal energy output during the applicable period must be no less than 42.5 percent of the total energy input of natural gas or oil. If the useful thermal energy output is less than 15 percent of the total energy output of the facility, the useful power output of the facility plus one-half of the useful energy output must be no less than 45 percent, rather than 42.5 percent. 18 C.F.R. § 292.205(a)(2) (2004). The Commission's efficiency standard ensures that the facility operates at or above a certain level of performance when it uses natural gas or oil.

not counting as “useful thermal output” any of the thermal output used by CAG 45, Inc. (CAG) to produce distilled water that is in turn purchased back by Calpine King City.

2. This order benefits customers because it clarifies that what would, in essence, be a sham transaction is insufficient for a facility to satisfy the standards that a cogeneration facility must meet for QF status.

Background

Factual Background

3. Calpine King City owns and operates a 120 MW natural gas-fired topping-cycle cogeneration facility located in King City, California. Calpine King City sells the electric output of the facility to Pacific Gas and Electric Company (PG&E) pursuant to a long term power sales contract. Calpine King City sells the thermal output of the facility to CAG). Calpine King City states that CAG is a subsidiary of ConAgra Foods, Inc., which has used the steam it purchases from Calpine King City for drying agricultural products; CAG is not affiliated with Calpine King City. Calpine King City states that CAG is obligated by contract to purchase a sufficient amount of steam to permit Calpine King City to maintain its QF status. The Commission first certified the Calpine King City facility as a QF on February 26, 1986, in Docket No. QF85-735-000.²

4. On May 12, 2004, Calpine King City filed a request for a limited waiver³ of the Commission's operating standard for QFs because CAG had advised Calpine King City that it would curtail its food processing operations and that, as a result, CAG's steam take might not be sufficient to enable Calpine King City to satisfy the Commission's operating standard for calendar year 2004. CAG also had informed Calpine King City that it intended to install a water distillation system on site and purchase steam to produce distilled water in place of the steam formerly used in the food processing operations. Once CAG's water distillation system was operating, Calpine King City represented that it would meet the Commission's operating standard. Calpine King City sought limited waiver of the Commission's operating standard to allow sufficient time for CAG to construct the water distillation system and to finalize contractual arrangements related to construction and operations. On August 5, 2004, the Commission granted Calpine King

² *Basic American Foods*, 34 FERC ¶ 62,411 (1986). Commission recertification due to change in upstream ownership was granted in *BAF Energy*, 41 FERC ¶ 62,070 (1987). Notices of self-recertification were filed on April 15, 1988, June 11, 1996 and May 30, 2003 to reflect changes in ownership.

³ Docket Nos. QF85-735-005 and EL04-101-000.

City's request for temporary waiver of the operating standard for calendar years 2004 and 2005.⁴

Request for Recertification

5. On November 16, 2004, as amended on February 24, 2005, Calpine King City filed an application seeking Commission recertification of its cogeneration facility as a QF. The application describes Calpine King City's sale of steam to be used in CAG's water distillation facility. In addition to recertification, and as particularly relevant here, Calpine King City seeks confirmation that it may purchase all or a portion of the distilled water produced in CAG's distillation facility without jeopardizing its QF status.

6. Calpine King City explains that following issuance of the waiver of the operating standard, Calpine King City and CAG engaged in extensive, arms length negotiations and finalized the contractual arrangements related to the construction and operation of the water distillation system. Pursuant to these agreements, CAG will construct and own, and Calpine King City will operate, a water distillation facility on the site of CAG's existing steam host facility. Calpine King City states that the distillation facility will be designed to consume, together with CAG's other operations at the existing steam host facility, an amount of steam sufficient to maintain compliance with applicable QF criteria.

7. Calpine King City states a portion of the steam purchased by CAG may continue to be used in CAG's existing steam host facilities for the drying of agricultural products. The balance of the steam purchased by CAG will be used in CAG's new water distillation facility to produce distilled water, which will be used by CAG or transferred to others. Applicant further states that Calpine King City and CAG have agreed that Calpine King City may purchase the distilled water to be produced by CAG's distillation facility, provided that such purchases do not jeopardize the QF status of the cogeneration facility. Calpine King City states that its proposal to purchase back the distilled water is consistent with Commission precedent.⁵

Commission Request for Additional Information

8. On January 25, 2005, by delegated authority, the Commission issued a letter advising Calpine King City its application for recertification was deficient and directed it to file additional information in order for the Commission to have sufficient information

⁴ *Calpine King City Cogen, LLC*, 108 FERC ¶ 61,149 (2004).

⁵ Calpine King City cites to *EcoEléctrica, L.P.*, 77 FERC ¶ 61,117 at 61,511, *reh'g denied*, 77 FERC ¶ 61,344 (1996) (*EcoEléctrica*), and *Wilbur Power LLC*, 103 FERC ¶ 61,183, *order on clarification*, 104 FERC ¶ 61,055 (2003) (*Wilbur Power*).

to process the filing. Calpine King City was directed to provide detailed information concerning the existing source of water at its cogeneration facility and its proposed purchase of water from CAG.

9. On February 24, 2005, Calpine King City submitted a response (February 24 Amendment). In its response Calpine King City clarifies that its pending request for recertification has two separate purposes: (1) to obtain a Commission determination that the cogeneration facility satisfies the operating and efficiency standards based on its sales of steam to an unaffiliated entity for the production of distilled water; and (2) to obtain clarification as to the quantity of distilled water that Calpine King City may purchase from CAG without jeopardizing the cogeneration facility's QF status.

10. Calpine King City provided answers to specific questions contained in the deficiency letter. Those responses indicate that Calpine King City will use the distilled water it purchases from CAG to offset the cogeneration facility's consumption of well water for steam cycle makeup, sanitary purposes, combustion turbine inlet fogging, equipment cooling, and wash down. The response also indicates that the distilled water produced by CAG will replace demineralized water that is currently produced by Calpine King City. Calpine King City argues that replacing the demineralized water with distilled water purchased from CAG will improve Calpine King City's efficiency by minimizing parasitic load and variable costs associated with producing demineralized water at the Facility. Calpine King City states that the average daily raw water requirements for all uses at its facility is approximately 900 gpm. Calpine King City states that the distillation facility is designed to produce approximately 40 gpm of distilled water. Calpine King City states that it has agreed to purchase all of the distilled water produced by CAG's distillation facility, but that it will not be obligated to purchase any quantity of distilled water that Calpine King City determines may jeopardize its ability to maintain the QF status of the facility. Calpine King City states that the purpose of the pending request for recertification is to obtain clarification as to the quantity of distilled water that Calpine King City may purchase from CAG without adversely affecting its QF status. Calpine King City represents that if it determines that it cannot purchase all of the distilled water produced by CAG because FERC has instructed Calpine King City that purchasing all of CAG's distilled water would adversely affect the cogeneration facility's QF status, CAG is obligated to make commercially reasonable efforts to transfer all or any necessary portion of such water to third parties. There are, however, no current plans or facilities to make sales to third parties.

11. Although it answered the request for additional information, Calpine King City argues that the request is unnecessary and inconsistent with Commission precedent. Calpine King City points out that in *EcoEléctrica*, the calculation of the cogeneration facility's operating standard included all of the thermal energy used to produce distilled water, even though the cogeneration facility bought back water. Calpine King City states that CAG's sale of distilled water to Calpine King City will be the result of an arm's-

length transaction between non-affiliates. In such circumstances, the Commission has repeatedly held that there is to be no inquiry into the use an unaffiliated thermal host makes of its arm's-length purchase.⁶ Calpine King City's calculations of the operating and efficiency standards assume that the use of distilled water for steam cycle makeup is for a power production purpose and that the other uses are not.

Notice, Interventions and Protests

12. Notice of Calpine King City's filing was published in the *Federal Register*,⁷ with protests and interventions due on or before March 28, 2005. On December 15, 2004, PG&E filed a motion to intervene and protest. On December 30, 2004, Calpine King City filed an answer to PG&E's protest. On March 28, 2005, PG&E filed comments and a protest of Calpine King City's February 24 Amendment. On April 18, 2005, Calpine King City filed an answer to PG&E's protest.

13. PG&E argues that the Commission should deny Calpine King City's recertification because any use of the distilled water by Calpine King City would be in the power production process and further that the distillation process was devised to facilitate Calpine King City's QF status with no other useful purpose. PG&E argues that Calpine King City makes no showing that CAG has any need for the distilled water, that Calpine King City has a need for all of the distilled water, and that there is no known market for the water beyond use by Calpine King City itself. PG&E concludes that the use of steam as proposed by Calpine King City is not useful thermal output for purposes of QF certification.

14. In Calpine King City's answer it suggests that its proposal to sell its thermal output to CAG for use in CAG's distillation facility meets the Commission's definition of a cogeneration facility. It argues that, because the Commission has found on numerous occasions that the use of steam to produce distilled water is common and thus presumptively useful for the purposes of meeting the Commission's definition of a cogeneration facility, Calpine King City's recertification should be approved and that it should be allowed to purchase the distilled water from its steam host. Calpine King City states that according to Commission precedent QF cogeneration applications involving water distillation need not be accompanied by evidence of arm's-length contracts (in the case of an unaffiliated thermal user) or economic viability (in the case of an affiliated thermal user).

⁶ Calpine King City points to the recent recertification of the EcoElectrica facility. *EcoElectrica, L.P.*, 108 FERC ¶ 61,249 at P 25 (2004).

⁷ 69 Fed. Reg. 70,140 (2004); 70 Fed. Reg. 11, 230 (2005).

15. Calpine King City concludes that its application for recertification presents the information necessary for a Commission determination that the cogeneration facility satisfies the operating and efficiency standards based on the sale of steam to an unaffiliated third party for use to produce distilled water, a common and presumptively useful process.

Discussion

16. Under 18 C.F.R. § 292.203(b) (2004), a facility seeking certification or recertification as a qualifying cogeneration facility must meet the ownership criteria for QF status specified in 18 C.F.R. § 292.206 (2004), as well as any applicable operating and efficiency standards specified in 18 C.F.R. § 292.205 (2004), in order to receive QF status. By definition, a cogeneration facility also must produce “forms of useful thermal output.” See 18 C.F.R. § 292.202(c) (2004). As discussed below, we find that Calpine King City’s facility, notwithstanding PG&E’s objections, satisfies the requirements for QF status, provided that it does not include any thermal output used by CAG to produce distilled water that is in turn bought back by Calpine King City in the calculation of the operating and efficiency standards.

17. In view of many of the arguments made by Calpine King City and PG&E, we believe it appropriate to summarize, as a preliminary matter, the Commission’s process of certifying QFs before proceeding to address the merits of Calpine King City’s application. As we have explained in numerous orders, the Commission acts upon the information presented in the application and the responsive pleadings.⁸ The Commission renders what is essentially a declaratory order deciding whether the facility, as described in the application and pleadings meets the statutory and regulatory requirements set forth in the Public Utility Regulatory Policies Act of 1978 (PURPA) and the Commission’s implementing regulations.⁹

⁸ See, e.g., *Arroyo Energy, Limited Partnership*, 62 FERC ¶ 61,257, *reh’g denied*, 63 FERC ¶ 61,198 (1993); *Cogentrix of Mayaguez, Inc.*, 59 FERC ¶ 61,159, *reh’g denied*, 59 FERC ¶ 61,392 (1992); *Inter-Power of New York, Inc.*, 55 FERC ¶ 61,387 (1991); *Georgetown Cogeneration, L.P.*, 54 FERC ¶ 61,049, *reh’g denied*, 55 FERC ¶ 61,038 (1991).

⁹ See *Midland Cogeneration Venture Limited Partnership*, 56 FERC ¶ 61,361 at 62,393 & n.12 (1991), *aff’d sub nom. Michigan Municipal Cooperative Group v. FERC*, Nos. 91-1366, *et al.* (D.C. Cir. March 26, 1993) (unpublished decision); *EcoEléctrica*, 77 FERC ¶ 61,344 at 62,510-11.

18. To have QF status, a cogeneration facility must satisfy the applicable operating and efficiency standards, as well as the ownership criteria for QF status.¹⁰ Turning to the instant filing, we look first at Calpine King City's compliance with the ownership requirements for QF status. The ownership requirements for QF status¹¹ require that no more than 50 percent of the equity ownership in a QF may be held, directly or indirectly through subsidiaries, by an electric utility or utilities or by an electric utility holding company or companies, or any combination thereof. According to the application, and there is no argument to the contrary, no more than 50 percent of the facility is owned, directly or indirectly through subsidiaries, by an electric utility or utilities or by an electric utility holding company or companies, or any combination thereof. Based on this representation, we find that the facility satisfies the Commission's ownership criteria.

19. We turn next to satisfaction of the operating and efficiency standards. Based on the information provided by Calpine King City, and notwithstanding PG&E's protest, we also find that the facility will meet the operating and efficiency standards.¹² We make this finding with the proviso that Calpine King City may not include in its calculation any of the thermal output from its facility used to produce distilled water it purchases from CAG.

20. The Commission has found that the use of the thermal output, i.e., steam, to produce distilled water is common and thus presumptively useful for purposes of meeting the Commission's definition of a cogeneration facility.¹³ However, Calpine King City proposes to buy back the distilled water. In order to be useful for cogeneration purposes, the thermal output of a facility must be used in a process that is independent of the power production process; the ultimate use of the thermal output cannot be power production.¹⁴ The Commission has found that processing material for use as a boiler fuel in unrelated electric generating facilities or for other heating used by entities unaffiliated with the

¹⁰ See 18 C.F.R. § 292.203(b) (2004).

¹¹ 18 C.F.R. § 292.206 (2004)

¹² 18 C.F.R. § 292.205 (2004).

¹³ See, e.g., *Brazos Electric Power Cooperative v. Tenaska IV Texas Partners, Ltd.*, 83 FERC ¶ 61,176 at 61,727, *reh'g denied*, 85 FERC ¶ 61,097 (1998), *aff'd*, *Brazos Electric Power Cooperative, Inc. v. FERC*, 205 F.3d 235 (5th Cir. 2000), *reh'g denied en banc*, 214 F.3d 214 (5th Cir. 2000), *cert. denied*, 531 U.S. 957 (2000).

¹⁴ See, e.g., *EG&E, Inc.*, 16 FERC ¶ 61,060 at 61,104 (1981); *LaJet Energy Company*, 43 FERC ¶ 61,288 at 61,789 (1998), *reh'g denied*, 44 FERC ¶ 61,070 (1988).

cogeneration facility is independent of the power production cycle,¹⁵ but that use of steam to process material for use in an affiliated facility is not. Here we find that Calpine King City's proposed sale of thermal output to the unaffiliated CAG, coupled with its purchase back of distilled water produced by the steam, is, in essence, a sham transaction, and hence Calpine King City may not consider the thermal output used to produce any distilled water bought back to be "useful" and thus includable in its calculation of its compliance with the operating and efficiency standards.¹⁶

21. Our conclusion is based on the facts that CAG has no independent need for the water it is producing, that Calpine King City currently has an adequate supply of water, that Calpine King City has not shown that the distilled water offers any marked advantages over the water it currently uses, or is in fact particularly different than the water it currently uses. Calpine King City and CAG both have wells that are located near each other. Calpine King City currently processes water to specifications suitable for use in its power production process. Calpine King City's response to the deficiency letter in which it states that the purchase of water from CAG "will improve Calpine King City's efficiency by minimizing parasitic load and variable costs associated with producing demineralized water" is telling. In essence, Calpine King City is arguing that shifting the processing of water, which it admits is part of its power production process, to CAG's facility somehow makes it no longer part of the power production process. However, the processing of that water, whether by Calpine King City or by CAG is still part of Calpine King City's power production process. Such processing of water is not "useful" for cogeneration purposes. Calpine King City's proposal is, in short, nothing more than a sale of thermal output to CAG so that CAG rather than Calpine King City may process water for use in Calpine King City's power production process. This simply does not satisfy the requirement that a cogeneration facility must produce thermal energy that is used in a process independent of the power production process.

22. Calpine King City's arguments that *EcoEléctrica* and *Wilbur Power* should be read as permitting its purchase of distilled water from CAG are unconvincing. *EcoEléctrica* was a case where a cogeneration facility in Puerto Rico owned and operated a desalination facility. The water produced in the desalination facility was in turn sold to the local water utility. *EcoEléctrica* in turn purchased its water needs from the local

¹⁵ See, e.g., *Pennsylvania Power & Light Company v. Schuylkill Energy Resources, Inc.*, 83 FERC ¶ 61,188 at 61,779 (1998), *reh'g rejected*, 86 FERC ¶ 61,053 (1999).

¹⁶ Calpine King City has not convinced us that any of the water it proposes to purchase from CAG has any use other than in the power production process. Calpine King City, therefore, may not consider any of the thermal output used by CAG to produce distilled water that is then bought back by Calpine King City to be "useful thermal output."

water utility. As a consequence, it may have been purchasing some of the water produced in the desalination facility. There, however, EcoEléctrica was selling to an established water utility which undeniably had a need and a market for the water produced by the desalination facility. The transaction in *EcoEléctrica* had a justification other than to satisfy a cogeneration facility's need to produce "useful" thermal output for QF status reasons. In the case before us, CAG has no need for any water produced with the steam from Calpine King City's facility, and other than selling the water back to Calpine King City appears to have no market for the water. This does not satisfy the requirement that the thermal use be independent of the power production process. In sum, the fact that ultimately some water may have "returned" to EcoEléctrica is not a sufficient justification to allow the wholesale "return" of water on the facts presented here.

23. In *Wilbur Power*, Wilbur Power sought to distill water and to sell that water to an affiliated power producer. The Commission specifically found that "Wilbur Power's proposal to sell the distilled water to an affiliated power producer is not consistent with QF status."¹⁷ Wilbur Power sought clarification of this order. On clarification the Commission stated that if Wilbur Power sells water to an unaffiliated entity, it would not consider "how the unaffiliated entity, in turn, used the distilled water in making its QF determination."¹⁸ The Commission's clarification did not reverse its prior statement in *Wilbur Power* that the distilled water produced by its facility could not be used in the power production process. Nor did the Commission ever intend that such clarification should be read to overturn our regulations that require useful power output to be exclusive of energy used in the power production process.¹⁹ In conclusion, nothing in *Wilbur Power* justifies granting recertification to Calpine King City to the extent it is providing steam to CAG so that CAG may produce distilled water to sell back to Calpine King City.

24. Based on this discussion, we will grant the application of Calpine King City for recertification, conditioned on Calpine King City's not counting as "useful thermal output" any of the thermal output used by CAG to produce distilled water that is in turn purchased back by Calpine King City.

¹⁷ 103 FERC ¶ 61,183 at P 10.

¹⁸ 104 FERC ¶ 61,055 at P 10.

¹⁹ 18 C.F.R. § 292.202(g) (2004).

The Commission orders:

The application for recertification of qualifying facility status filed on November 16, 2004, as completed on February 24, 2005, by Calpine King City, pursuant to 18 C.F.R. § 292.207(b) (2004), and section 3(18)(B) of the Federal Power Act, 16 U.S.C. § 796(18)(B) (2000), is hereby granted, provided the facility is owned and operated in the manner described in the application and this order.²⁰

By the Commission.

(S E A L)

Linda Mitry,
Deputy Secretary.

²⁰ Certification as a qualifying facility serves only to establish eligibility for benefits provided by PURPA, as implemented by the Commission's regulations, 18 C.F.R. Part 292 (2004). It does not relieve a facility of any other requirements of local, state or federal law, including those regarding siting, construction, operation, licensing and pollution abatement. Certification does not establish any property rights, resolve competing claims for a site, or authorize construction.