

*Qualifying Cogeneration Facilities
In a Post-energy Policy Act World:
Challenges and Opportunities*

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ABSTRACT

Much has been written, of the doom-and-gloom variety, about the future of qualifying cogeneration facilities after passage of the Energy Policy Act of 2005 (EPAct) in August, 2005. It is true that cogenerators will face a number of challenges. Yet, there remain significant—and unique—benefits and opportunities for cogeneration Qualified Facilities (QFs). Of course, these benefits may depend upon the size of a particular QF, its location, configuration, regulatory status, and other factors. But the right combination of these factors could provide economic advantages to cogeneration QFs, while relieving them of most of the regulatory requirements of the Federal Power Act (FPA), the Public Utility Holding Company Act of 2005 (PUHCA 2005), and state utility laws.

This article describes the new post-EPAct world for cogeneration QFs, the challenges that will be faced by both “existing” and “new” cogeneration QFs, and ways in which cogeneration QFs can take advantage of opportunities available to them under the new regulatory program.

REGULATORY CHANGES AFFECTING COGENERATION QFS
UNDER THE ENERGY POLICY ACT OF 2005 AND
FEDERAL ENERGY REGULATORY COMMISSION'S NEW RULES

EPAct makes the following key changes to the Public Utility Regulatory Policy Act of 1978 (PURPA): (1) elimination of the PURPA Put,

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where QFs have nondiscriminatory access to markets found by Federal Energy Regulatory Commission (FERC) to meet certain standards of competitiveness; (2) elimination of the guaranteed right to obtain electric energy from utilities, where FERC has found that competing retail electric suppliers are willing and able to sell and deliver electric energy to QFs; (3) imposition of more stringent technical operating requirements on “new” cogeneration QFs in certain circumstances; and (4) elimination of the utility ownership restrictions on QFs. In addition to these key changes, FERC, in implementing EAct, has chosen to eliminate the exemption most QFs had previously enjoyed from the rate provisions of the FPA. Consequently, most QFs will now be required to submit rate schedules to FERC with respect to new¹ wholesale power sales contracts and will not be permitted to commence wholesale sales until those rate schedules have been accepted for filing (other than PURPA Put sales).² The implications of these developments are discussed below.

ELIMINATION OF THE PURPA PUT IN ORGANIZED ELECTRICITY MARKETS

EAct provides that electric utilities will no longer be required to enter into *new* contracts (*i.e.*, contracts entered into after August 8, 2005) for the purchase of electric energy from QFs if FERC makes a finding that QFs have nondiscriminatory access to competitive wholesale markets. FERC has now proposed to find³ that the control areas of four independent regional transmission organizations (RTOs)—the Midwest Independent System Operator (ISO), PJM, ISO-New England, and New York-ISO are sufficiently competitive to warrant elimination of the PURPA Put. (In doing so, FERC gave no consideration whatsoever to whether there is actually a “market” in these RTOs for the often unique types of energy and capacity that QFs have to offer.) Although a final rule has yet to be issued in this proceeding, there is a strong likelihood that FERC will adopt this proposal.⁴ If this were to happen, all QFs seeking to sell power under new contracts, where such QFs are located within the footprint of these RTOs (which currently covers approximately three-quarters of the land area of the continental United States) would be barred from exercising the PURPA Put.

However, FERC has not proposed to find that California ISO and the Southwest Power Pool meet the EAct standards, on the grounds

that they each lack a day-ahead market. In addition, FERC has not proposed to find that any other area outside of Midwest ISO, PJM, ISO-New England and NY-ISO has a sufficiently competitive market. As a consequence, the PURPA Put likely will continue to be available in some of the areas with the largest and fastest-growing need for power, such as Florida, Texas, and California,⁵ as well as in the Pacific Northwest and other areas in the south and southeast. These are areas that merit particular consideration by project developers, notwithstanding the difficulties faced in the past by cogen QFs attempting to secure power purchase contracts with some of the larger utilities in these areas.

ELIMINATION OF THE UTILITY OBLIGATION TO SELL ELECTRICITY TO QFS

A critical but less-noticed provision of EAct would potentially eliminate the obligation of electric utilities to sell electric energy to QFs (the "Mandatory Sales Obligation") if FERC makes certain findings. So far, FERC has not proposed to make such findings. Moreover, although not required to do so under EAct, FERC has proposed to include in the regulations a mechanism for QFs to apply for reinstatement of the Mandatory Sales Obligation similar to the mechanism for QFs to apply for reinstatement of the PURPA Put.

QF developers should take notice of the significant economic harm that could result from elimination of the Mandatory Sales Obligation at some point in the future. Under current FERC regulations, QFs are entitled to receive backup, maintenance, and supplementary power from the utility to which they are directly interconnected. QFs receive no beneficial rate treatment with respect to their purchases of supplementary power because, in taking such power, they are no differently situated than other industrial retail customers. However, QFs do receive beneficial rate treatment with respect to their purchases of back up and maintenance power. Specifically, rates for sales of backup cannot be based on an assumption that forced outages or other reductions in electric output by all QFs on an electric utility's system will occur simultaneously, or during system peak, or both, and rates for sales of maintenance power must take into account the extent to which scheduled outages of the QF can be usefully coordinated with scheduled outages of the utility's facilities. These regulatory requirements mean that QFs typically pay less

for backup and maintenance power than they otherwise would if, for example, they were simply industrial customers purchasing firm power during periods of scheduled or unscheduled outages.

The rate benefits attendant to backup and maintenance power may well disappear for QFs if FERC makes the required findings to eliminate the Mandatory Sale Obligation. This is because FERC need only find that competing retail electric suppliers exist who are willing and able to sell and deliver "electric energy." However, "electric energy" is a generic term, and it is not the same thing as backup or maintenance power. While QFs would be able to purchase electric energy during periods when they are out of service in whole or in part as a result of scheduled or unscheduled outages, there are no guarantees that the rate for such electric energy would be comparable to the lower rates they now enjoy for backup and maintenance power.

IMPOSITION OF MORE STRINGENT TECHNICAL OPERATING REQUIREMENTS ON NEW COGENERATION QFS

All new cogenerators seeking QF status for a facility must now file with FERC either a notice of self-certification or an application for certification. This is accomplished in either case by filing a completed Form FERC No. 556.⁶

In addition, although the old operating and efficiency standards remain unchanged, all new cogeneration facilities must now meet several new technical operating standards to achieve QF status if they wish to exercise the PURPA Put in markets the FERC has not found to be sufficiently competitive.⁷ These new standards are referred to, respectively, as the "productive and beneficial use standard" and the "fundamental use standard."

Productive and Beneficial Use Standard

Cogeneration QFs must now demonstrate that their thermal output will be used in a "productive and beneficial manner." FERC has provided some helpful guidance on the productive and beneficial standard. First, FERC cautioned that there would be no "bright line" test for determining whether a particular thermal use meets the productive and beneficial use standard. FERC elaborated that a determination in this regard would be made based on such factors as the type of thermal output, the

circumstances of the thermal host, the product produced by the thermal energy, the intended use of the product in the market, and the level of need for the product. Second, with respect to the use of thermal output to produce distilled water (a thermal use that has raised contentious issues in the past), FERC warned that such thermal use might or might not meet the standard, depending on individual circumstances.⁸ Third, applicants may have to produce “detailed economic analyses” in support of their claim that a thermal use meets the productive and beneficial use standard. However, FERC made clear that such analyses would not be required where the thermal output “is for a common industrial or commercial application” and “not merely to allow the applicant to achieve QF status.” In the past, FERC (and FERC staff under delegated authority) has issued dozens of decisions identifying particular thermal uses that are “common,” *e.g.*, for making ice, for space heating and cooling, and for drying a variety of products. Thermal applications previously determined to be presumptively useful will, under the new regulatory regime, be considered to satisfy the productive and beneficial standard (with the exception of the production of distilled water). FERC made clear in the preamble that once it makes a determination that a particular thermal application meets the standard, no further challenge of that finding can be made, even if the economics of the thermal application change, absent a change in the operations of the facility.

Of note, FERC has created a presumption that the productive and beneficial use standard is met where the new cogeneration facility is replacing a previously used thermal source at a previously existing thermal host. While the presumption is not irrebuttable, FERC has said that it would apply “a very high hurdle to overcome the presumption.”

Fundamental Use Standard

Under EPCAct, the electrical, thermal, and chemical output of the cogeneration facility must be “used fundamentally for industrial, commercial, or institutional purposes”⁹ and not be intended fundamentally for sale to an electric utility...¹⁰ In implementing this new statutory requirement, FERC has decided to utilize a “safe harbor” approach. Under this approach, if on a calendar year basis at least 50% of the aggregated annual energy output of a new cogeneration QF is used for industrial, commercial, residential and/or institutional purposes and not sold to an electric utility, then the QF meets the “fundamentally for” standard.

Facilities that do not fall within the safe harbor may nevertheless

meet the standard. FERC has provided a helpful roadmap of circumstances in which less than 50% would meet the standard, including (but not limited to) situations in which: (1) the thermal host requires redundant generation capacity and/or redundant thermal capacity to ensure the reliability of their processes; (2) there are long lead times and high costs associated with siting approvals and equipment orders that may make it more economic to construct a large increment of capacity at one time, even though a portion of that capacity cannot be used by the thermal host; (3) it is generally more cost-effective for an applicant to keep a cogeneration unit operating during periods of host shutdown or curtailment; (4) the thermal energy requirements of thermal host is so large relative to its electricity requirements that optimizing electricity production from the QF generates a continuous surplus of power that can only be exported; (5) new cogeneration QF may require its higher capital cost to be offset in the long term with an income stream based on electric sales to the grid; (6) it may be advantageous or necessary for a manufacturing company to export some of its power to a utility for a short time during periods of peak demand; (7) economies of scale (and concomitantly better heat rates and emission rates) dictate that larger cogeneration facilities should be built; and (8) the cogeneration facility must be sized to meet the largest expected steam demand of the thermal host but also must be able to make use of excess steam during periods when the steam demands of the thermal host have been reduced.

Notably, FERC has created a rebuttable presumption that both the productive and beneficial use standard and the fundamental use standard are met with respect to cogeneration facilities that are 5 MW or smaller in size.

Existing cogeneration QFs must be cautious about making substantial changes to their technical operating characteristics. In the preamble to the new final QF regulations, FERC established a rebuttable presumption that an "existing" cogeneration QF does not become a "new" cogeneration QF simply because it files for recertification. However, FERC warned that "changes to an existing cogeneration facility could be so great (such as an increase in capacity from 50 MW to 350 MW) that what an applicant is claiming to be an existing facility should, in fact, be considered a 'new' cogeneration facility at the same site." In light of FERC's acknowledgment in the preamble that its mission is still to "encourage cogeneration," FERC may be sending a message that changes in the technical operating characteristics of a facility that are not extensive

would not cause a facility to lose QF status. In the future, this could well be a battleground for QFs and purchasing utilities.

ELIMINATION OF THE UTILITY OWNERSHIP RESTRICTION

EPAct removed the old PURPA requirement that QFs could not be owned primarily by electric utilities or their holding companies. Although FERC has removed the utility ownership restriction from its regulations, it is still requiring QFs to provide detailed information on their upstream ownership when they file for QF status.

Elimination of the utility ownership requirement means that QFs selling electric energy other than electric energy they produce (or purchase and resell from other QFs) will no longer trigger loss of QF status. That being said, FERC has made clear that a QF seeking to sell non-QF electric energy at wholesale must obtain FERC authorization pursuant to Section 205 of the FPA before engaging in such sales. QFs will now need to obtain market-based rate authorization from FERC or, alternatively, justify a given contract rate on a cost basis.

Prior to making ownership changes involving such interests, existing QFs are strongly advised to review their power purchase agreements to be certain that those agreements do not bind them to follow the old ownership rule.

ELIMINATION OF KEY EXEMPTIONS FROM THE FEDERAL POWERS ACT

Although not required to do so by EPAct, FERC decided to eliminate certain exemptions from the FPA which most QFs had enjoyed under the old regulatory regime. In particular, FERC eliminated the exemptions from Sections 205 and 206 of the FPA, which had previously been available to all cogeneration QFs. This exemption had previously enabled QFs to make wholesale sales without needing to obtain prior FERC rate approval or have a rate schedule on file.

The new regulations provide an exception for new QF contracts under which sales are "made pursuant to a state regulatory authority's implementation of PURPA." What this means is that a QF selling electricity at an avoided cost rate established by a state regulatory authority

to implement PURPA, whether or not the sale is made under a bilateral contract (including contracts at market-based rates), is not required to comply with Section 205 or 206 of the FPA. Unhappily, FERC has not provided any guidance as to how a determination should be made whether a particular sale is made pursuant to a state regulatory authority's implementation of PURPA. This may well cause significant problems for to-be-developed QFs that secured power sales contracts prior to enactment of EPCAct. As others have noted, "QF and utility purchasers sometimes negotiate modifications of state-approved standard offer contracts; utilities in some states have conducted competitive procurements under state avoided cost regimes; and some states' only 'approval' is an order allowing utilities to recover costs paid for QF power."¹¹

CONCLUSION

EPCAct and FERC's new implementing regulations are definitely a mixed bag for cogeneration QFs. Cogeneration QFs will now face new regulatory challenges. For the first time, new cogeneration QFs will have to meet more stringent technical operating standards. In addition, all cogeneration QFs larger than 20 MW will be required to have rate schedules on file with FERC for new sales of electric energy at wholesale.

At the same time, however, elimination of the utility ownership restrictions is expected to open doors to additional investment in QF projects by traditional electric utilities and holding companies. In addition, existing cogeneration QFs, as well as new cogeneration QFs able to meet the new technical operating standards, will enjoy a number of significant regulatory and economic benefits.

With respect to economic benefits: (1) QFs outside the footprints of Midwest ISO, PJM, ISO-New England, and NY-ISO can continue to take advantage of the PURPA Put;¹² and (2) QFs will continue to have the right to be interconnected to an electric utility and to obtain backup, maintenance, and supplementary power from an interconnected utility at non-discriminatory rates;

With respect to regulatory benefits: (1) QFs will continue to be exempt from state laws respecting the rates of electric utilities and the financial and organizational regulation of electric utilities; (2) upstream owners of QFs will not become subject to PUHCA 2005 solely by virtue

of such ownership (this can be critically important for companies wishing to own generation used in part or in whole for retail sales while being exempt from the onerous new filing requirements for holding companies established by FERC pursuant to PUHCA 2005)¹³; and (3) QFs will continue to be exempt from the requirement to obtain prior FERC approval before disposing (by sale, lease, or otherwise) of their assets or acquiring other QF assets.

Given the continuing economic and regulatory benefits available to cogeneration QFs, rumors of the demise of the cogeneration QF industry are definitely premature.

ABOUT THE AUTHOR

Laurel W. Glassman practices in the Energy, Infrastructure and Project Finance Group at White & Case LLP. Her practice includes representation of electric utilities, independent power producers, electricity marketers, qualifying facilities, large industrial ratepayers, and debt and equity investors in a wide variety of matters, including mergers and acquisitions, spin-offs and restructurings, market-based rate proceedings, contract drafting and negotiations, settlements, and advice on state and federal regulatory issues. She has nearly 30 years of experience representing clients before the Federal Energy Regulatory Commission (FERC), and has also represented clients before state public utility commissions and in federal courts.

Ms. Glassman routinely advises clients with respect to matters arising under the Federal Power Act and the Public Utility Holding Company Act of 1935. She has significant experience with respect to complex qualifying facility issues, and has published extensively on developments in the qualifying facilities sector. For more information on Ms. Glassman, see www.whitecase.com/lglassman/. Ms. Glassman may be contacted at lglassman@whitecase.com.

Footnotes

1. Unfortunately, the new PURPA regulations fail to address a key question: whether an existing QF contract that is subsequently amended becomes a "new" contract that loses the protections from FERC rate review. Furthermore, the new regulations fail to address the status of contracts that were not executed on the date of enactment of EAct but that were pending approval before the appropriate State regulatory authority on that date. Such pending contracts were specifically protected under Section 1253(a) of EAct as "existing" contracts.
2. In addition, QFs are now subject to regulation with respect to rules governing

- market transparency, false statements, and market manipulation.
3. *New PURPA Section 210(m) Regulations Applicable to Small Power Production and Cogeneration*, RM06-10-000, Notice of Proposed Rulemaking, 71 Fed. Reg. 4532 (Jan. 27, 2006).
 4. Even with the anticipated demise of the PURPA Put for QFs located within the footprints of Midwest ISO, PJM, ISO-New England, NY-ISO, QFs have a continuing right under EPAct and FERC's implementing regulations to apply for reinstatement of the PURPA Put "if there has been a change in the conditions upon which the Commission based its finding."
 5. For example, California is projecting a need for more than 12,000 MW of capacity within the next five years. See *Integrated Energy Policy Report*, California Energy Commission, No. CEC-100-2005-008-CTF (November 2005), updated in CEC-400-2006-008 (June 2006). According to the Energy Information Administration's *Annual Energy Outlook*, capacity needs projected for 2005-2030 are 37 gigawatts for California, 43 gigawatts for Texas, and 30 gigawatts for Florida.
 6. There is no filing fee applicable to a notice of self-certification. Currently, the filing fee applicable to an application for certification is \$18,890 for a cogeneration facility, and \$16,690 for a small power production facility. When an application is filed, FERC will review the application and, typically within 90 days, issue an order either granting or denying the application. If the application is granted, the cogeneration facility will be considered to be a QF so long as it conforms to the facts forming the basis on which the application was granted. A notice of self-certification does not represent a determination by FERC that a facility meets the requirements to be a QF.
 7. New cogeneration QFs not wishing to exercise the PURPA Put are required to meet only the "old" technical operating standards.
 8. "As we stated in the NOPR, in some geographic areas, thermal energy used to produce distilled water can be used in a productive and beneficial manner, but in other geographic areas it may not." 71 Fed. Reg. at 7854.
 9. FERC has broadened the standard to include residential uses within the scope of "institutional purposes."
 10. FERC has added "mechanical output" to this group. However, it has clarified that new cogeneration QFs are not required to produce each one of these outputs.
 11. M. Hornstein and J. Stoermer, *The Energy Policy Act of 2005: PURPA Reform, the Amendments and Their Implications*, 27 Energy Law Journal, No. 1, at 25 (2006).
 12. Depending on the outcome of FERC's rulemaking on the Mandatory Purchase Obligation, cogeneration QFs that are 20 MW or smaller may retain their PURPA Put right even within Midwest ISO, PJM, ISO-New England, and NY-ISO.
 13. However, *all* QFs are deemed to be "electric utility companies" for purposes of Section 203(a)(2) of the FPA. This means that a company that is currently a holding company cannot acquire, directly or indirectly, a QF with a value in excess of \$10 million without prior FERC approval.