NARUC

Winter Committee Meetings

Committee On Electricity

PURPA

How Much Implementation Flexibility do State Commissions have?

Moderator:

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A VERY BRIEF OVERVIEW OF FERC AND STATE COMMISSION ROLES AND RESPONSIBILITIES UNDER PURPA AND FERC'S PURPA REGULATIONS

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The views expressed are the author's alone, and do not necessarily represent the views of the Federal Energy Regulatory Commission, individual Commissioners, or other staff.

FERC and State Commission Responsibilities
"The Big Picture"

- Congress has directed FERC to promulgate "such rules as [FERC] determines necessary to encourage cogeneration and small power production" (PURPA § 210(a), 16 U.S.C. § 824a-3(a)) – including, among other things, rules providing for a so-called mandatory purchase obligation (PURPA § 210(a)(2), 16 U.S.C. § 824a-3(a)(2); 18 C.F.R. § 292.303), and rules addressing the determination of avoided cost rates (PURPA § 210(b), (d), 16 U.S.C. § 824a-3(b), (d); 18 C.F.R. § 292.304) (*American Paper Institute, Inc. v. American Electric Power Service Corp.*, 461 U.S. 402, 404-06 (1983); *Allco Renewable Energy Ltd.*, 146 FERC ¶ 61,107, at P 9 (2014))
- Congress has directed that State Commissions "shall. . . implement" the rules promulgated by FERC (PURPA § 210(f), 16 U.S.C. § 824a-3(f)(1); *Allco Renewable*, 146 FERC ¶ 61,107 at P 9)

FERC Responsibilities

- **Certification of QFs**:
  - FERC is responsible for addressing QF certification (and recertification), either through consideration of requests for FERC certification of QF status, or by acceptance of filings for self-certification of QF status (FPA § 3(17)-(18), 16 U.S.C. § 796(17)-(18); *see* 18 C.F.R. §§ 292.203-.207)
    - FERC may revoke previously-granted QF status (18 C.F.R. § 292.207(d)(1))
- **Utility-QF Interactions**:
  - FERC's rules cannot authorize QFs to make sales of electric energy "for purposes other than resale" (PURPA § 210(a), 16 U.S.C. § 824a-3(a))
  - FERC's rules must ensure that rates for electric utility purchases of energy from QFs:
    - Shall be just and reasonable, and in the public interest
    - Shall not discriminate against QFs, and
    - Do not exceed the cost to the electric utility of the electric energy which, but for the purchase from the QF, such utility would generate itself or purchase from another source (PURPA § 210(b), (d), 16 U.S.C. § 824a-3(b), (d))
    - The Commission chose to adopt so-called "full avoided cost" rates – i.e., equal to the incremental cost of the electric energy/capacity which, but for the purchase from the QF, such utility would generate itself or purchase from another source (18 C.F.R. §§ 292.304(b)(2), 292.101(b)(6); *American Paper Institute, Inc. v. American Electric Power Service Corp.*, 461 U.S. 402 (1983))
  - FERC's rules must largely exempt QFs from federal and state laws regarding rates, as well as financial and organizational regulation, to the extent necessary to encourage cogeneration and small power production (PURPA § 210(e), 16 U.S.C. § 824a-3(e); *see* 18 C.F.R. §§ 292.601-.602)
  - FERC may enforce State Commission implementation of FERC rules promulgated under PURPA, and thus FERC addresses electric utility- and QF-filed enforcement petitions seeking review of State Commission implementation of FERC rules promulgated under PURPA (PURPA § 210(h)(2)(A)-(B), 16 U.S.C. § 824a-3(h)(2)(A)-(B); *see* PURPA § 210(f), 16 U.S.C. § 824a-3(f); *see generally Policy Statement Regarding the Commission's Enforcement Role Under Section 210 of the Public Utility Regulatory Policies Act of 1978*, 23 FERC ¶ 61,304 (1978))
  - FERC addresses requests for relief from, and reinstatement of, an electric utility's mandatory obligation to purchase from QFs (PURPA § 210(m), 16 U.S.C. § 824a-3(m); *see* 18 C.F.R. §§ 292.309-314)

State Commission Responsibilities - Generally

- State commissions "shall. . . implement" rules promulgated by FERC regarding QFs (PURPA § 210(f), 16 U.S.C. § 824a-3(f)(1)). Implementation may be through:
  - Enactment of laws or regulations at the state level
  - Application of rules adopted by FERC on case-by-case basis, or
  - Any other action reasonably designed to implement FERC rules (*See Small Power Production and Cogeneration Facilities; Regulations Implementing Section 210 of the Public Utility Regulatory Policies Act of 1978*, Order No. 69, FERC Stats. & Regs. ¶ 30,128 at 30,891-93 (1980), *order on reh'g*, Order No. 69-A, FERC Stats. & Regs. ¶ 30,160 (1980), *aff'd in part and vacated in part*, *Am. Elec. Power Serv. Corp. v. FERC*, 675 F.2d 1226 (D.C. Cir. 1982), *rev'd in part*, *Am. Paper Inst., Inc. v. Am. Elec. Power Serv. Corp.*, 461 U.S. 402 (1983); *Allco Renewable*, 146 FERC ¶ 61,107 at n.15)
- But the implementation may be challenged in state court, by a petition seeking review of a State Commission's implementation of a rule promulgated by FERC under PURPA (PURPA § 210(g)(1), 16 U.S.C. § 824a-3(g)(1))
- But the implementation also may be challenged in federal court, by a petition seeking enforcement of a rule promulgated by FERC under PURPA (PURPA § 210(h)(1)-(2), 16 U.S.C. § 824a-3(h)(1)-(2)). If FERC chooses not to initiate an enforcement proceeding (FERC must decide within 60 days of the date of filing of the petition), the petitioner itself may do so. In any such proceeding, however, FERC may intervene as a matter of right.

State Commission Responsibilities – Rates. . .

- State Commissions are responsible, in the first instance, for establishing rates for electric utility purchases of energy and capacity from QFs consistent with FERC's standards (18 C.F.R. § 292.304; *Pioneer Wind Park I, LLC*, 145 FERC ¶ 61,215, at P 41 (2013); *Council of the City of New Orleans*, 145 FERC ¶ 61,057, at P 30 (2013))
- For electric utility purchases of energy and capacity from QFs, FERC's regulations provide that "[i]n determining avoided costs, the following factors shall, to the extent practicable, be taken into account:"
  - (1) Utility cost data provided to the State Commission and the public pursuant to § 292.302(b), (c), or (d);
  - (2) The availability of capacity or energy from a QF during the system daily and seasonal peak periods, including:
    - (i) The ability of the utility to dispatch the QF;
    - (ii) The expected or demonstrated reliability of the QF;
    - (iii) The terms of any contract or other legally enforceable obligation, including the duration of the obligation, termination notice requirement and sanctions for non-compliance;
    - (iv) The extent to which scheduled outages of the QF can be usefully coordinated with scheduled outages of the utility's facilities;
    - (v) The usefulness of energy and capacity supplied from a QF during system emergencies, including its ability to separate its load from its generation;
    - (vi) The individual and aggregate value of energy and capacity from QFs on the electric utility's system; and
    - (vii) The smaller capacity increments and the shorter lead times available with additions of capacity from QFs;
  - (3) The relationship of the availability of energy or capacity from the QF to the ability of the electric utility to avoid costs, including the deferral of capacity additions and the reduction of fossil fuel use; and
  - (4) The costs or savings resulting from variations in line losses from those that would have existed in the absence of purchases from a QF, if the purchasing electric utility generated an equivalent amount of energy itself or purchased an equivalent amount of electric energy or capacity (18 C.F.R. § 292.304(e))

State Commission Responsibilities – Rates. . . (cont'd)

- Rates for electric utility purchases from QFs satisfy FERC's standards if the rates equal avoided costs determined after consideration of the FERC-specified factors noted on the prior slide (18 C.F.R. § 292.304(b)(2))
- FERC is reluctant to second-guess a State Commission's determination of avoided cost (*California Public Utilities Commission*, 133 FERC ¶ 61,059, at P 24 (2010), *reh'g denied*, 134 FERC ¶ 61,044 (2011))
- Upon an appropriate showing of procurement requirements and resulting costs, QF rates can be resource-specific (*California PUC,* 133 FERC ¶ 61,059 at PP 20, 26-30, *reh'g denied*, 134 FERC ¶ 61,044 at PP 30-34)
- Rates agreed to between a QF and an electric utility are permissible rates, even if they differ from the rates which would otherwise be required (18 C.F.R. § 292.301(b); *Otter Creek Solar LLC*, 143 FERC ¶ 61,282, at P 4 (2013), *reconsid. denied*, 146 FERC ¶ 61,192, at P 8 (2014))

State Commission Responsibilities – Rates. . . (cont'd)

- QFs have the right to choose whether to sell power "as available" or to sell power pursuant to a legally enforceable obligation (LEO) at a forecasted avoided cost rate determined, at the QF's option, either at the time of delivery or at the time the obligation is incurred (18 C.F.R. § 292.304(d); *FLS Energy, Inc.*, 157 FERC ¶ 61,211, at P 21 (2016); *Windham Solar LLC*, 157 FERC ¶ 61,134, at P 4 (2016); *Hydrodynamics Inc.*, 146 FERC ¶ 61,193, at P 31 (2014))
  - The existence of an LEO turns on the QF's commitment, and not the utility's actions, and can pre-date the formal memorialization of the parties' agreement – a requirement for interconnection studies and agreements, or a utility-executed PPA, or the firm-ness of the QF's power, or the availability of renewable energy credits, or winning a competitive solicitation, etc. are not essential/necessary predicates for an LEO (*E.g.*, *FLS Energy*, 157 FERC ¶ 61,211 at PP 20-26; *Windham Solar*, 157 FERC ¶ 61,134 at PP 4-5; *Windham Solar LLC*, 156 FERC ¶ 61,042, at PP 4-5 (2016); *Hydrodynamics*, 146 FERC ¶ 61,193 at P 32)
  - If the avoided cost rate is inaccurate, the appropriate response is to re-set the avoided cost rate (*FLS Energy*, 157 FERC ¶ 61,211 at n.33; *Windham Solar*, 157 FERC ¶ 61,134 at P 6; *Hydrodynamics*, 146 FERC ¶ 61,193 at P 35)
- Where rates for electric utility purchases from QFs are based on estimates of avoided cost over the life of the transaction, i.e., forecasted avoided cost rates, the rates would not violate FERC's requirements if the rates ultimately differ from avoided cost at the time of delivery (18 C.F.R. § 292.304(b)(5))
- States may have additional/alternative, voluntary programs providing for purchases, additional to and separate from their QF purchase program (*Winding Creek Solar LLC*, 151 FERC ¶ 61,103, at PP 6-7, *reconsid. denied*, 153 FERC ¶ 61,027, at P 7 (2015))

State Commission Responsibilities – Interconnection & Curtailment

- Electric utilities are obligated to interconnect with QFs as necessary to permit purchases from QFs, and State Commissions must enforce this obligation as part of their implementation of rules promulgated by FERC under PURPA (18 C.F.R. § 292.303(c); *see* Order No. 69, FERC Stats. & Regs. ¶ 30,128 at 30,874; *cf.* 18 C.F.R. § 292.306 (QF shall pay the interconnection costs which a State Commission determines may be assessed to the QF))
    - Interconnections between an electric utility and a QF, when the QF sells only to the directly interconnected utility, are State Commission-jurisdictional. Interconnections between an electric utility and a QF, when that QF either sells or plans to sell any of its output to a utility other than the directly interconnected utility, are FERC-jurisdictional. *See Standardization of Generator Interconnection Agreements and Procedures*, Order No. 2003, FERC Stats. & Regs. ¶ 31,146, at PP 813-14 (2003), *order on reh'g*, Order No. 2003-A, FERC Stats. & Regs. ¶ 31,160, *order on reh'g*, Order No. 2003-B, FERC Stats. & Regs. ¶ 31,171 (2004), *order on reh'g*, Order No. 2003-C, FERC Stats. & Regs. ¶ 31,190 (2005), *aff'd sub nom. Nat'l Ass'n of Regulatory Util. Comm'rs v. FERC*, 475 F.3d 1277 (D.C. Cir. 2007), *cert. denied*, 552 U.S. 1230 (2008); *accord Florida Power & Light Co.*, 133 FERC ¶ 61,121, at PP 19-23 (2010)
- For State Commission-jurisdictional interconnections, State Commissions establish the manner of payments for interconnection costs, e.g., reimbursement over a reasonable period of time (18 C.F.R. § 292.306(b))
- QF curtailments are permitted only when the utility is faced with a system emergency or, for a QF selling "as available" energy, in light load periods (18 C.F.R. §§ 292.307(b), 292.304(f) (2016); *Pioneer Wind Park I*, 145 FERC ¶ 61,215 at PP 36-37)

Thank you!

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PURPA: How Much Implementation Flexibility Do State Commissions Have? "An Industrial Perspective"

Irene Kowalczyk, Director of Global Energy, WestRock Company

on behalf of

Industrial Energy Consumers of America

For Manufacturing - PURPA is Just as Important Now as in 1978

➢PURPA serves sound public policy objectives

- Industrial CHP is up to 80 % energy efficient
- Supports millions of manufacturing jobs by providing low cost steam and electricity
- Without PURPA, very difficult to build and operate CHP units economically
- Reduces line losses
- Reduces GHG emissions and criteria pollutants.
- Enhances grid reliability as a distributed resource
- CHP is not subsidized by the production tax credit (PTC) or investment tax credit (ITC)

There are Different Types of QFs

- PURPA originally designed to allow CHP/WHR and renewables the right to "break into" the utilities' monopoly on generation development.
- Wind/solar still receive PTC and ITC incentives and are encouraged by state RPS programs whereas industrial CHP/WHR rarely receive any incentives.
- Does wind and solar still need the protections of PURPA when they are mainstream in utility IRPs and utilities issue RFPs to acquire these resources? As QFs they can force capacity into capacity flush systems, stranding assets that ratepayers must continue to pay for.

How are States Doing?

In Regulated Markets PURPA is Somewhat Working…

- The methodology for determining "avoided cost" is oftentimes done in a black box and NOT transparent
- In most cases states did not set an overall framework for implementation of PURPA provisions delegated to states
- Results in inconsistent methodologies used for determining avoided costs and standby service rates on different utility systems even in a single state
- Length of contract offered continues to be a problem
- Interconnection is reasonably streamlined for small QF's

State Implementation is Mixed

- Trends that result in QFs being paid less than utilities' true avoided cost:
  1. Movement to competitive bidding for capacity payments and energy payments based on market based indices.
  2. Payments for purchases from QFs 20 MW and smaller on utility systems in PJM are often times based on PJM energy and capacity clearing prices.
- States often condone utility practice of refusing to offer long term contracts, as required by PURPA.
- Standby tariffs can be too restrictive to be useful for industrial CHP
- Transmission cost is oftentimes allocated on non coincident peak demand making standby rates too high.

In Regulated and RTO Markets

"Finance-ability" is #1 Criterion for QF Projects

- If capacity is needed, the minimum term for QF contract should include 10-12 years of capacity payments for QFs of all sizes in fully regulated non RTO areas and in RTO markets for smaller QFs. If no capacity is needed then "energy-only" pricing is appropriate
- Standard offer pricing should be available for QFs smaller than 20 MW in both RTO and non RTO markets
- To achieve lowest cost for ratepayers, states should encourage utilities to develop technology specific avoided cost rates for each resource type, wind, solar, gas, etc. considering all credits/subsidies available to that resource and whether it is intermittent or baseload.

In RTO Markets

QFs larger than 20 MW do not always have non-discriminatory access to wholesale markets and industrial QFs have largely not exercised their right to rebut – too difficult to rebut

- RTO rules treat industrial CHP/WHR QFs as if they are a merchant power generators that sell power as their primary business
- Interconnection is oftentimes based on gross capacity of CHP/WHR QF instead of the maximum potential export capability of the facility
- Difficult to become a capacity resource because power generation from an industrial CHP is dependent on steam requirements associated with manufacturing of products.

Support

- Establish different treatment under PURPA for industrial CHP/WHR QFs that are not in the primary business of selling power.
- Avoided cost for capacity should be based on utility's cost of installing the same or similar facility.
- Obligation to purchase "as available" power with standard offer pricing must be retained.
- Establish interconnection process for CHP/WHR facilities based on maximum potential capability to export to the grid.
- Standby and maintenance tariffs should not restrict the number of days and events that CHP QF can take service.
- "LMP or energy only" based compensation appropriate for QF contract renewals where the facility's costs have been fully depreciated.
- Renewable energy attributes of QF power sold at avoided cost should pass to the utility and be monetized for the benefit of ratepayers.

Appendix

For Manufacturing Sector - PURPA – Just as Important Now as in 1978

PURPA – Just as important now as in 1978

PURPA is the law and serves sound public policy objectives

- Encourages installation of highly energy efficient cogeneration and small renewable power facilities.
- CHP is 75-80% efficient versus conventional power generation and stand alone steam production systems around 35 %
- Provides a market for excess power
- Requires reasonable standby tariffs that QFs can use
- Acceptable interconnection standards for small generators

PURPA is Important to Manufacturing

- CHP generates "steam" and "electric" energy – integrated directly with manufacturing of our products
- Very difficult to build and operate CHP units economically without PURPA – need easy outlet for excess power generated
- Most electricity generated is consumed by the manufacturing facility
- CHP/WHR is not subsidized by federal tax incentives

Importance of Industrial CHP

- Cost Effective - Global competition is tougher than ever and is often subsidized.
- Efficient
  - Reduces steam energy and power costs
  - Reduces line losses
  - Reduces GHG emissions and criteria pollutants.
  - Reliable -Enhances grid reliability

U.S. CHP Information (DOE)

- There are 1,199 industrial CHP units in the U.S.
- Installed capacity of over 82 GW capacity representing about 8% of U.S. generation
- Majority of industrial units are between 5 to 19.9 MWs
- Since Energy Policy Act of 2005, CHP capacity has not grown

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