Morgan Lewis

QUALIFYING FACILITIES AND PURPA: FERC'S REASSESSMENT AFTER NEARLY 40 YEARS

Levi McAllister
Pamela C. Tsang
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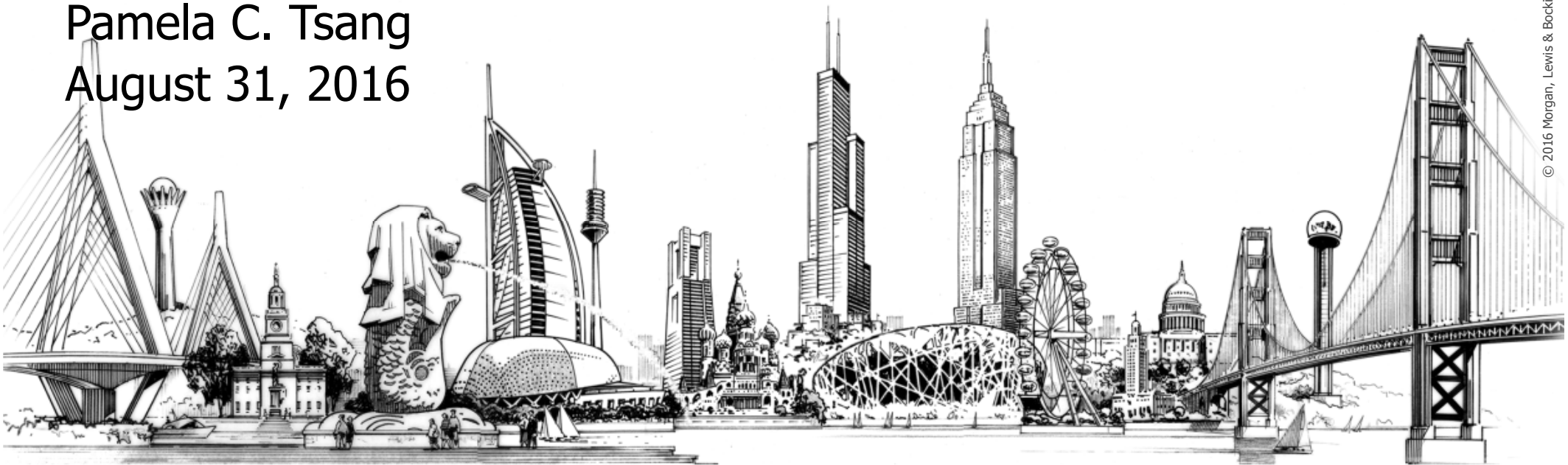


OVERVIEW

What is PURPA?

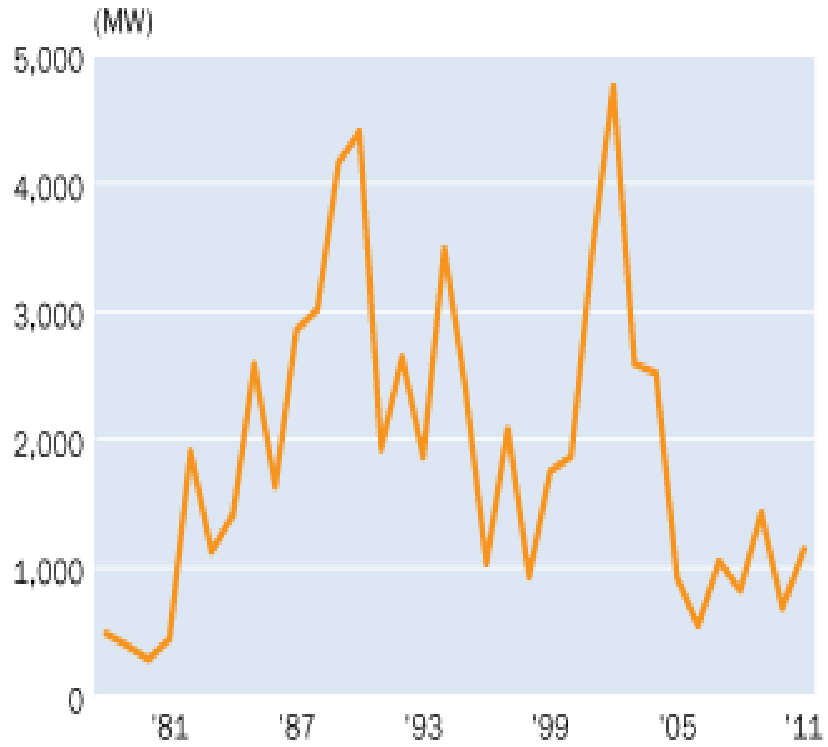
- The Public Utilities Regulatory Policies Act (PURPA) was enacted in 1978.
- PURPA was one of five pieces of major legislation that comprised the National Energy Act.
- PURPA was intended to address the ongoing "energy crisis" of the time.
  - The primary concerns at the time were the increasing amounts of imported oil, the national security risks those imports imposed, and the security of natural gas supply.

What is PURPA's Purpose?

- Section 101 of PURPA sets forth three purposes:
  - Conservation of energy supplied by electric utilities;
  - Optimization of the efficiency of use of facilities and resources by electric utilities; and
  - Equitable rates to electric consumers.
- In practice, PURPA's purposes are intended to accomplish several goals:
  - Reduce demand on fossil fuels
    - PURPA and the standards that states are required to consider implementing encouraged the development of alternative power, including renewable energy and cogeneration.
    - Provides Qualifying Facility (QF) status to eligible cogeneration and small renewables.
    - PURPA then imposes the mandatory purchase obligation that requires utilities to purchase energy and capacity from QFs.
  - Overcome utilities' reluctance to purchase power from, and sell power to, non-utility generators.
    - Congressional response that was designed to address a perceived inability of IPPs to sell their output.

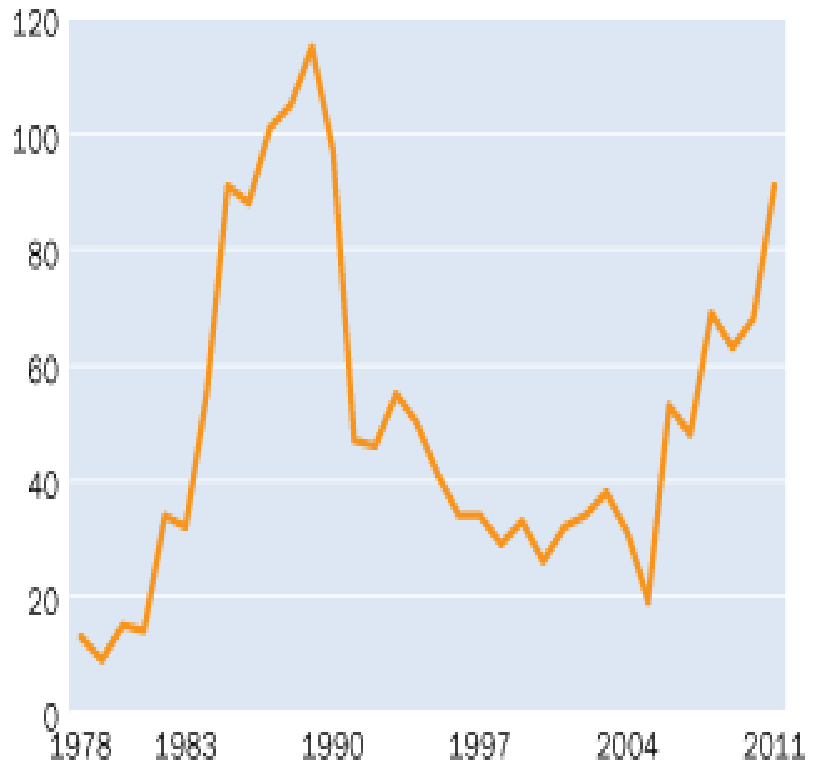
PURPA's Impact

QF capacity additions by year



Source: Energy Information Administration, Bentek Energy

QF filings by year



Source: Energy Information Administration, Bentek Energy

MECHANICS OF PURPA

What PURPA Does: State Implementation of Standards

- Although a federal law, PURPA implementation is left to the individual states.
  - A variety of regulatory regimes developed in states where renewable power resources were needed, available for development, or the generated power could be transmitted.
- PURPA is designed to further these purposes by creating certain federal standards that state regulatory commissions are required to consider implementing in order to carry out the purposes in Section 101.
  - PURPA originally included six federal standards;
  - EPAct 1992 added four federal standards;
  - EPAct 2005 added five federal standards;
  - EISA of 2007 added four federal standards.
- State commissions may determine that it is not appropriate to implement a statutory standard pursuant to their authority under state law.
  - A commission may reject a standard if acceptance would be contrary to state law.
- State commissions also may reject a standard by determining that the statutory standard would be inappropriate to carry out the three purposes of Title I

The PURPA Standards

Cost-of-Service Rates	Fuel Diversity
Declining Block Rates	Fossil Fuel Generation Efficiency
Time-of-Day Rates	Time-Based Metering and Communications
Seasonal Rates	Interconnection
Interruptible Rates	Integrated Resource Planning
Load Management Technique	Rate Design Modifications to Promote Energy Efficiency Investments
Integrated Resource Planning	Consideration of Smart Grid Investments
Investments in Conservation and Demand Management	Smart Grid Information
Net Metering	Consideration of the Effects of Wholesale Power Purchases on Utility Cost of Capital . . .
Energy Efficiency Investment in Power Generation and Supply	

What PURPA Does: FERC Implications

- PURPA's FERC implications are designed to address a market power disparity between IPPs and utilities by:
  - Reducing (or attempting to eliminate) the potential for overpayment or underpayment for energy purchases from IPPs; and
  - Encouraging the development of alternative fuel source electric generation.

Who Is Impacted By PURPA

- Electric Utilities
  - Any person or State agency which sells electric energy.
    - Federal power marketing agencies are excluded
    - In practice, this means PURPA also applies to IOUs, municipalities, cooperatives, etc. "Electric utility" is broader than "public utility".
- Qualifying Facilities
  - Qualifying cogeneration facilities
    - A facility that produces electric energy and steam or forms of useful energy (such as heat) which are used for industrial, commercial, heating or cooling purposes. *See* Part 292.202 through 292.205 of FERC's regulations.
  - Qualifying small power production facilities
    - A facility that uses biomass, waster, or renewable resources, including wind, solar energy and water, to produce electric power; which, together with any other facilities located at the same site, has capacity less than or equal to 80 MW. *See* Part 292.202 through 292.204 of FERC's regulations.
  - PURPA's initial ownership limitation was repealed by EPAct 2005.

How PURPA Accomplishes FERC-Related Goals

- Provides FERC with authority to issue an order requiring interconnection between and among electric utilities and QFs.
- Provides FERC with the authority to issue an order requiring electric utilities to provide transmission services to other electric utilities (i.e. mandatory wheeling).
- Under Section 210, electric utilities are required to purchase energy offered by QFs at rates that are just and reasonable to consumers and reflect no greater than the incremental cost that the utility would have otherwise incurred to generate or purchase the power supplied by the QF.
- Exempts QFs from FPA, PUHCA, and State-utility type regulations.

IMPLEMENTING PURPA: THE BIG PICTURE

FERC And State Authority

- FERC
  - Adopted rules to establish the framework for implementation of PURPA
  - Entertains petitions asserting PURPA violations by state commissions and/or non-jurisdictional utilities
  - Grants and denies utility requests to terminate mandatory purchase obligations.
- State
  - Section 210(f) of PURPA directed state regulatory agencies, in turn, to implement the FERC regulations
  - Implements PURPA by devising rules and policies within parameters of PURPA and FERC regulations (i.e. computation of avoided cost rate).
  - States control interconnect (except where QFs sell to 3rd party other than host utility)
  - Can resolve questions concerning RECs and net metering.

Proper Enforcement

- Section 210(h) of PURPA permits the Commission to exercise enforcement authority for the purpose of requiring a state regulatory authority or a nonregulated electric utility to implement the Commission's regulations.

- Section 210(g) of PURPA permits a private entity, such as a QF, to seek judicial review regarding the implementation of PURPA by a state regulatory authority or nonregulated electric utility.

The One-Mile Rule

- Part 292 of FERC's regulations specifies that a small power production facility may qualify as a QF so long as it and its small power production facility affiliates **at the same site** do not exceed 80 MW.
  - "Same site" includes all facilities within one mile of the facility for which QF status is sought.
  - Is the one-mile rule a bright line rule, or a presumption that may be rebutted?
    - "The one-mile rule for determining whether small power generation facilities are "at the same site" is a rule and not a rebuttable presumption."
- FERC has held that, in determining eligibility for exemptions provided under Section 210(e) of PURPA and Section 292.601 of the Commission's regulations, the QF must add the capacity of any affiliated generation projects located "at the same site" and using the same fuel, whether or not that capacity also had been certified as a QF

The Mandatory Purchase Obligation

PURPA § 210(b)	FERC Implementing Regulation
Rates: **1) Shall be just and reasonable to the electric consumers of the electric utility and in the public interest, and** **2) Shall not discriminate against cogenerators or small power producers** **Rates also must not exceed the incremental cost to the electric utility of alternative electric energy**	Rates must equal the utility's full avoided costs

- FERC regulations define "avoided cost" as "the incremental costs to an electric utility of electric energy or capacity or both which, but for the purchase from the qualifying facility or qualifying facilities, such utility would generate itself or purchase from another source."
- Require companies to make avoided cost data publicly available (18 CFR 292.302)

QF Exemptions

- Congress authorized FERC to exempt some QFs from parts of the FPA, PUHCA, and state regulations. FERC did so in 1980.
  - FPA Sections 205 and 206
  - FPA Sections 203, 204, 208, 301, 302, 304, and 305
  - PUHCA: "electric utility company does not include QFs
  - No state regulation of QFs if inconsistent with PURPA.
- Exemptions are size-limited in some instances.

Recap

- PURPA created a new regulatory status called qualifying facilities, or QFs
- QFs have a right to be served by, and sell to electric utilities at the utility's avoided cost
- QFs have a right to interconnect and wheel to any electric utility
- QFs exempt from many federal and state regulations.

ISSUES IMPLEMENTING AND APPLYING PURPA

Determining Avoided Cost

- FERC rules permit certain factors to be considered in determining avoided costs.
  - Availability of capacity or energy from a qualifying facility during the system daily and seasonal peak periods
  - Dispatchability and reliability
  - The relationship of the availability of energy or capacity from the qualifying facility to the ability of the electric utility to avoid costs, including the deferral of capacity additions and the reduction of fossil fuel use; and
  - The costs or savings resulting from variations in line losses from those that would have existed in the absence of purchases from a qualifying facility, if the purchasing electric utility generated an equivalent amount of energy itself or purchased an equivalent amount of electric energy or capacity.
- States permitted to set technology-specific avoided cost rates
- Avoided costs may reflect verifiable avoided environmental compliance costs
- Avoided costs do NOT include value of renewable energy credits (which are distinct from capacity and energy); absent contractual provision, states decide whether QFs or utilities own RECs.

Determining Avoided Cost (cont.)

- Administratively determined rates. State PUCs hold hearings to arrive at a methodology or a specific rate that represented the utility's avoided cost. States continue to determine standard offer rates for small QFs administratively.
  - Proxy method
    - Avoided cost is the cost of the utility's next planned resource addition
  - Peaker method
    - Avoided cost is the value of the QF operated as a peaker
  - Partial Displacement method
    - Avoided cost is the difference between the system revenue requirement without the QF and the system revenue requirement with the QF
  - Fueled rates method:
    - Avoided cost is the avoided capacity plus indexed energy cost
- Competitive bidding.
  - Auction/RFP rates: RFP process where successful bidders receive capacity contracts and unsuccessful bidders may sell energy but not capacity.
- Most states use:
  - Competitive procurement for large facilities;
  - Administratively determined, or managed competition, for small QFs.

Determining Avoided Cost (cont.)

- The factors that states may consider when determining how to compute avoid cost permit either an upward or downward adjustment of avoided cost rates.
  - In some instances, the impact of these factors may disadvantage QFs:
    - Utilities cite QFs' limited dispatchability as a basis for withholding, or limiting QFs' eligibility for capacity payments.
    - Downward adjustments for line losses can hurt those QFs located far from to load, which the CPUC has recognized and attempted to mitigate.
  - FERC's rules allow QFs to choose avoided cost "at the time of delivery" or at the time a "legally enforceable obligation" (LEO) is incurred.
    - FERC has addressed what it means to incur an LEO.
    - FERC has also been asked to address an instance where an avoided cost rate calculated based on an estimate at the time an LEO was incurred differs from the actual avoided cost.

Application of the One Mile Rule

- FERC has held that its regulation defining generating facilities as separate qualifying facilities if more than one mile apart does not create a rebuttable presumption.
  - The one-mile rule constitutes a safe harbor that the developer is entitled to rely on.
  - While the developer can rebut the one mile presumption under certain circumstances to establish separate qualifying facilities that are less than one mile apart, the separate qualifying facility status of generating facilities more than one mile apart is fixed by FERC's rule.
- Following this 2012 decision, no meaningful recourse is available in instances of potential "gaming" facility development locale for the purpose of establishing QF certification and being eligible for the exemptions bestowed upon QFs.

Exemptions from the Mandatory Purchase Obligation

- EPAct 2005 created Section 210(m) of FERC, which allows FERC to exempt utilities from the must-purchase obligation. As articulated by FERC, there is no must-purchase obligation if FERC finds that the QF has nondiscriminatory access to:
  - Independently administered, auction-based day ahead and real time wholesale markets and wholesale markets for long-term sales of capacity and energy; or
  - RTOs with competitive wholesale markets; or
  - Wholesale markets that are comparable to the aforementioned markets.
- PURPA must-buy obligation excused for QFs greater than 20 MW in MISO, PJM, ISO-NE, NYISO, SPP, and CAISO. A rebuttable presumption may be rebutted by showing that:
  - The QF has certain operational characteristics that effectively prevent the QF's participation in a market; or
  - The QF lacks access to markets due to transmission constraints
- There is a rebuttable presumption that a QF with a capacity at or below 20 MW does not have nondiscriminatory access to the market.

Resource Planning and PURPA Implementation

- In recent orders, FERC has declined to exercise its enforcement authority but has issued several declaratory orders in response to enforcement petitions.
- General Rules:
  - States cannot impede a QF's ability to sell its output to an electric utility.
  - State regulation cannot impose "unreasonable obstacles" to obtaining a legally enforceable obligation.
- Examples:
  - *Hydrodynamics Inc., et al.*, 146 FERC ¶ 61,193 (2014)
  - *Windham Solar LLC and Allco Finance Ltd.*, 156 FERC ¶ 61,042 (2016)

Hydrodynamics

- The Montana Rule:
  - A QF larger than 10 MW can only receive a long-term contract for energy and capacity by winning a competitive solicitation.
  - Otherwise, the QF can only sell power at avoided cost rates under a short-term agreement.
- 50 MW Installed Capacity Limit
  - The Montana Commission required NorthWestern to establish a cumulative installed capacity limit of 50 MW in its tariff that would be applicable to QFs.
- Petitioners challenged the Montana Commission's implementation of PURPA.

Hydrodynamics (cont.)

- FERC declined to exercise its enforcement authority but issued a declaratory order.

- FERC Ruling:
  - Montana Rule was inconsistent with PURPA and imposed an "unreasonable obstacle" to obtaining a legally enforceable obligation.
    - FERC noted that competitive solicitations were not regularly held.
  - The 50 MW installed capacity limit was inconsistent with PURPA and could preclude QFs from selling its output if the limit was met.

Windham Solar LLC and Allco Finance Ltd.

- Connecticut Rules:
  - A QF that has already separately sold its renewable energy credits (RECs) cannot now sell energy and capacity pursuant to a LEO at avoided cost rates calculated at the time the obligation is incurred.
  - A QF must participate in a request for proposal (RFP) as a condition to obtaining a legally enforceable obligation.

- FERC Ruling:
  - States can regulate RECs and determine who initially owns RECs and how they are transferred.
  - A QF has the right to sell its output under a legally enforceable obligation, regardless of whether it previously sold its RECs under a separate contract.
  - Requiring a QF to participate in an RFP imposes an "unreasonable obstacle."

LOOKING AHEAD

PURPA Implementations Technical Conference

Topics included:

- Application of the "one-mile" rule
- The rebuttable presumption that QFs 20 MW and below do not have nondiscriminatory access to wholesale markets
- Curtailment of QFs
- Methods for calculating avoided cost

One-Mile Rule

- The Rule:
  - Facilities are considered to be located at the same site if they are located within one mile of each other.
  - For facilities to qualify as separate QFs, facilities must be located more than a mile apart.
- The distance measured is the distance between the electric generating equipment of facilities.
- The one-mile rule is a standard and not a rebuttable presumption.

One-Mile Rule (cont.)

- "Gaming" the system
  - Idaho PUC President stated that Idaho's biggest concern is developers disaggregating large wind projects into small units to obtain the most favorable avoided cost rates for QFs.
  - NIPPC stated that the "gaming" is a manageable issue

- Proposed revisions to the one-mile rule
  - EEI offered proposed changes to increase transparency and clarify the one-mile rule by providing criteria to evaluate whether the QFs are located at the same site.
  - SEIA agreed with obtaining clarity on the one-mile rule to help developers with their decisions to develop projects.

The Rebuttable Presumption

- There is a rebuttable presumption that QFs above 20 MW have non-discriminatory access to the wholesale competitive markets in MISO, PJM, ISO-NE, and NYISO and that electric utility members should be relieved of their mandatory purchase obligation.
  - QF can rebut the presumption of access to markets by demonstrating that they face operational characteristics or transmission constraints.

- There is a rebuttable presumption that a QF with a capacity at or below 20 MW does not have nondiscriminatory access to the market

The Rebuttable Presumption (cont.)

- The 20 MW threshold
  - Most parties did not raise issues with the 20 MW threshold and did not suggest that the threshold should be increased or decreased.

- Who should rebut the presumption?
  - Michigan IPPC believes the rebuttable presumption should stay with the utility, citing burdens to the QF to prove a negative.
  - EEI believes that QFs under 20 MW should prove they do not have access to wholesale competitive markets.

Curtailments of QFs

- Section 292.304(f) of FERC's regulations addresses when QFs may be curtailed.

- For a QF to be curtailed:
  - The utility must provide notice to each affected QF in time for the QF to cease the delivery of energy or capacity to the utility.
  - Due to operational circumstances, the purchases from QFs must result in costs greater than the costs the utility would incur if it did not make the purchases but instead generated an equivalent amount of energy itself.

Curtailment of QFs (cont.)

- IECA stated that QFs at CHP facilities should be the last to be curtailed and should be curtailed only in emergency conditions where grid stability is threatened.
  - CHP facilities should be curtailed down to a net zero export condition

- Michigan IPPC stated that QFs (and especially QFs that are 20 MW or less) should be curtailed as a last resort.
  - Small QFs' fuel sources are often directly linked to some other process, and the fuel streams are not easily interrupted.
  - Many QFs are smaller, remotely located facilities, and curtailment can have a disruptive effect to the local grid support they provide.

Avoided Cost Calculations

- The avoided cost is the incremental cost to the utility of electric energy or capacity (or both) that the utility would generate itself or purchase from another source if it did not purchase from the QF.
- States use various methods to determine the avoided cost.
  - Proxy Unit Methodology
  - Peaker Unit Methodology
  - Differential Revenue Requirement
  - IRP Based Avoided Cost Methodology
  - Market Based Pricing
  - Competitive Bidding

Avoided Cost Calculations (cont.)

- Should FERC weigh in on which methodology should be used?
  - ELCON stated that the Commission should direct its staff to prepare a guidance document on the applicability of the various avoided cost methodologies that would be intended for the state commissions and utilities.
  - NARUC disagreed and stated that the guidance that is currently available is largely sufficient. Additional guidance from FERC could prove to be difficult because of the differences between various regions in generator revenue models.
  - Michigan IPPC stated that the Commission should not prescribe an avoided cost methodology and should continue to leave it to the states. States have dealt with PURPA in different ways, and they learn from other states and adapt to the changes.
  - American Forest & Power Association believes that allowing states to set avoided costs is a reasonable approach.
  - Idaho PUC agreed that the states should determine the avoided cost.

Questions?

Our Global Reach

Africa
Asia Pacific
Europe
Latin America
Middle East
North America

Our Locations

Almaty
Astana
Beijing
Boston
Brussels
Chicago
Dallas
Dubai
Frankfurt
Hartford
Houston
London
Los Angeles
Miami
Moscow
New York
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