



**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

**Technical Conference on Implementation
Issues under the Public Utilities Regulatory Policies
Act of 1978**

Docket No. AD16-16-000

COMMENTS OF THE INDUSTRIAL ENERGY CONSUMERS OF AMERICA

I. The Industrial Energy Consumers of America (IECA)

IECA is a nonpartisan association of leading manufacturing companies with \$1.0 trillion in annual sales, over 2,900 facilities nationwide, and with more than 1.6 million employees. It is an organization created to promote the interests of manufacturing companies through advocacy and collaboration for which the availability, use and cost of energy, power or feedstock play a significant role in their ability to compete in domestic and world markets. IECA membership represents a diverse set of industries including: chemical, plastics, steel, iron ore, aluminum, paper, food processing, fertilizer, insulation, glass, industrial gases, pharmaceutical, building products, automotive, brewing, independent oil refining, and cement.

II. Changes to or Retention of PURPA Provisions that IECA Supports

- a. The rebuttable presumption minimum threshold should be based upon the capacity that is exported to the grid, not on net system capacity.**

The current regulation unfairly discriminates against industrial CHP/WHR in favor of entities, such as merchant wind and solar projects that are in the business of producing electricity for sale. This is because an industrial CHP/WHR installation with a net generating capacity exceeding 20 MW may still export far less total electricity to the grid than a wind or solar facility of similar or even smaller capacity. Facilities that export small amounts of power should not be classified as either large or small based on the size of the net generation system after consideration of parasitic loads. The classification should be based on the maximum amount of capacity that potentially can be exported to the grid under normal operating conditions of the manufacturing facilities at which the CHP/WHR facility is located.

b. The rebuttable presumption should be retained.

Utilities are currently afforded the opportunity to challenge or rebut the presumption that QFs smaller than 20 MW in size do not have nondiscriminatory access to competitive markets for their output. The opportunity to rebut should be retained. Utilities can rebut this presumption on a case-by-case review of each CHP/WHR QF to assess whether they have non-discriminatory access to markets. In evaluating such challenges FERC would need to consider multiple factors that include: physical configuration, operational considerations, and federal and state legal and regulatory issues. We note that it is not appropriate for a regulatory agency such as the FERC to change the energy conservation requirements and goals embedded in PURPA or to propagate new rules that would effectively result in this outcome.

c. Avoided cost calculations for wind and/or solar facilities should account for the cost associated with under-utilizing existing electric generation capacity when wind/solar are generating power.

States should consider the additional costs imposed on the system by intermittent QFs and reduce the avoided cost rates to those QFs accordingly. Wind and solar are intermittent and operate at less than a 30 percent average capacity factor. The utility that buys QF power from such intermittent resources incurs additional costs to integrate that resource into their mix. The avoided cost rates paid to such intermittent resources should therefore be adjusted downward to reflect these additional costs incurred by the buying utility, which are eventually passed onto us, the consumer.

d. FERC should provide guidance to states to ensure that capacity and energy costs are appropriately allocated to the rate classes.

In regulated jurisdictions, the capacity portion of the Purchased Power Agreement (PPA) should be added to the utility's base rates while the variable costs in the energy rate should be included in the fuel rate. If a PPA is based only on energy produced and the rate is in \$ per kilowatt-hour, then the state regulatory authority should determine the percentage of the energy rate to recover in base rates based on their assessment of the portion of the energy rate that is attributable to fixed capacity costs incurred.

e. FERC should provide guidance to states regarding the review of Purchase Power Agreements (PPAs) such that state commissions are required to hold a public proceeding on the merits of the PPA prior to the state commission decision-making.

Transparency is sound public policy. We find, all too often that state commissions do NOT hold such proceedings. Since PPAs have the potential to raise electricity rates and utilities always have generation alternatives, all PPAs should be subject to a transparent approval proceeding initiated by the utility that is seeking cost recovery for the PPA. Ratepayer and other interested parties' participation should be included in the approval process.

f. FERC should extend expedited interconnection to CHP/WHR QFs up to 250 MWs.

Under current FERC rules, an expedited interconnection process is only provided to CHP/WHR QFs who are 20 MW or smaller. Facilities larger than 20 MW in size are required to go through the “large generator” interconnection process. This is the same process that very large new utility plants go through to get their facilities interconnected. This process is far too costly, administratively burdensome and time consuming for most CHP/WHR QFs to go through especially since most of these facilities primarily serve load behind the meter. CHP/WHR QFs larger than 250 MW should continue to have to go through the “large generator” interconnection process as these facilities are large enough to potentially impact the grid, so grid stability studies should be conducted for such facilities.

g. CHP/WHR QFs should be the last in the queue to be curtailed - right before nuclear and hydro units.

Unfortunately, right now, as an example, CHP/WHR units are being curtailed in California to allow for greater generation of renewable energy. The result is that manufacturing facility operations are being directly and negatively impacted. It is an example where environmental priorities are being placed ahead of good paying manufacturing jobs and economic growth. Depending upon how often and how long they are being curtailed, could result in reduced manufacturing production rates, higher operating costs and eventual shut down of the facility.

It is sound public policy to acknowledge that not all generation resources are similar with regard to reliability, capacity, and total economic impact of curtailment to the electric generator. All three are important factors that should be considered when decisions are made to curtail generation. If a need to curtail generation arises, it is because there is more generation available than needed to meet the instantaneous demand. At this point the price signals in the energy market should have already reduced the thermal generators’ output to absolute minimum levels. The remaining generation on the system will be QFs, nuclear, hydro and some natural gas generation. Since it is not practical to curtail hydro or nuclear, the next choices are QFs and the remaining natural gas generation units.

IECA believes that intermittent QFs that are small power producers under should be curtailed before QFs that are CHP/WHR units. This is because the overall impact to the economy will be less as wind and solar electric generating units do not have an entire manufacturing site tied to them. Industrial CHP/WHR facilities are the backbone of the manufacturing facility which provides continuous economic benefits for the communities in which they operate. CHP/WHR helps the manufacturer lower its steam and electricity costs, which improves competitiveness, increases investment and job creation, and may increase exports of the products that are created. In contrast, the overall economic benefits of wind/solar facilities are far less.

Industrial CHP/WHR facilities should only be curtailed if the grid is truly in an emergency situation and the stability of the grid is being threatened. The CHP/WHR facility should only be curtailed down to a net zero export position. CHP/WHR facilities are often located in remote rural locations and can provide much needed voltage support. Therefore, CHP/WHR QFs should not be curtailed below a net zero export position. In the reverse situation where the grid becomes unstable because there is insufficient generation to meet instantaneous demand, CHP/WHR units have the ability to shift their load/generation profile to actually help stabilize system loads to reduce the impact of grid capacity shortfalls. Such assistance from CHP/WHR units would enable the grid operator to avoid triggering cascading blackouts. CHP/WHR units are reliable and run continuously when they are serving a manufacturing facility.

The CHP unit is producing steam and electricity that is essential to keeping the associated manufacturing facility operating. If the CHP facility is curtailed (and not curtailed only to zero export level), then the entire manufacturing facility will not be able to operate efficiently and as stated above, there will be significant economic harm. The manufacturing facility will incur great financial loss which includes lost production, and operating expenses to shut down and then start-up of the entire manufacturing facility. Hundreds, if not thousands, of employees would not be able to work. These costs are significantly greater than shutting down facilities such as wind and solar, natural gas, or even coal-fired production facilities. CHP/WHR should be the last in the queue to be curtailed right before nuclear and hydro units.

Policies that deal with curtailment need to address the problem of the aggregated unpredictable impact of wind and solar facilities. While there may be several wind and solar facilities in a given region, they are a block of resources that act together with important implications for the grid. This means when the wind is not blowing and/or the sun is not shining, “all” of the turbines in the region are not turning/generating electricity and/or all of the solar panels are not generating electricity. As such, wind and solar facilities have a disproportionate impact. In contrast, CHP/WHR units act alone at the single industrial site where they are installed (i.e. a condition at one CHP/WHR unit will not impact another CHP/WHR unit in the same region).

h. “One-Mile-Rule”

Manufacturing QFs that develop CHP/WHR projects are not a party to this controversy. However, if it is found that wind and solar qualifying facilities (QFs) are applying the “one-mile rule” in a manner that takes advantage of the PURPA mandatory purchase obligation provision, then changes should be made to the rule to protect ratepayers. One suggestion is to make the one-mile rule rebuttable so that utilities can challenge its application if they suspect it is being misused.

III. Proposed EEI Changes to PURPA that IECA Opposes

a. QF's to receive credit for capacity provided to the electric utility in a form that is recognized by the applicable capacity markets.

IECA opposes the EEI changes to PURPA as proposed below. Long term contracts are needed in order to finance QF projects. IECA encourages utilities to develop proposals that support financing QF projects and that make it easier for the utility to accommodate the generation into their planning. PURPA is the law and serves sound public policy objectives.

EEI Proposed Changes:

*(b)(3). The estimated capacity costs at completion of the planned capacity additions and planned capacity firm purchases, on the basis of dollars per kilowatt **unit of capacity and per unit time as such units of capacity and time are used by the applicable electric markets**, and the associated energy costs of each unit, expressed in cents per kilowatt hour. These costs shall be expressed in terms of individual generating units and of individual planned firm purchases.*

b. §292.309 Termination of obligation to purchase from qualifying facilities

IECA opposes the EEI recommendations as proposed below.

IECA supports retaining the PURPA rebuttable presumption for application to industrial CHP/WHR facilities that are 20 MWs or less where comparable markets exist. We also support retaining the requirement to purchase QF output in areas where comparable markets do not exist. We believe that the intent of PURPA, that is, to increase energy conservation (energy efficiency) is still as important today as it was in 1978 and remains a very high public interest. In fact, it may be a higher priority today because of the need to reduce GHG emissions and maintain and increase high paying manufacturing jobs which are under constant threat from foreign production, reduce a staggering manufacturing trade deficit and reduce GHG emissions. The 2015 U.S. manufacturing trade deficit stands at \$627 billion and 61 percent of the deficit is with one country, China.

Manufacturers configure CHP units to supply internal demand for steam and power in the most efficient manner possible. From an operational standpoint, the priority will always be to produce enough steam to keep the manufacturing process operating with less regard to how much electricity is produced. In other words, the manufacturing facility will never jeopardize production of its products to increase production of electricity. At the same time electricity production is an important by-product because it enables the manufacturing facility to be more competitive in global markets for their products. It is important for the QF to be able to put excess power to the local utility in order to run the CHP facility as efficiently as possible. The natural and most logical off-taker for this power is the local electric utility.

In addition, the purchase obligation provides necessary protections for small projects with limited resources. Usually, it is only the utility that has the modeling and study information that can be used as an obstacle to QF development. This information can also be used to rebut the presumption that small QFs do not have access to competitive markets. Small QFs seldom have the information or knowledge of the transmission system and study assumptions to show that discrimination exists. For these reasons the 20MW rebuttable presumption should be retained.

Manufacturers that have units 20 MW or smaller in size do not have the expertise to sell the power to wholesale markets. The quantities usually available to sell into the market are so small, that it makes it impractical to establish the personnel and expensive back-office resources necessary to do so. In addition, requiring such entities to become a market participant presents a significant challenge. For example, if a QF became a market participant and offered a quantity of power into the day ahead market and the QF was unable to deliver that amount, then the QF would be subject to true-up in the real time market. If there is volatility between the day ahead and real time rate, then the QF will be exposed to the risk of the price differential. If the price moved against them, the costs could be so high that it makes little financial sense to risk selling into the day ahead market at all. As a result, the QF would most likely be limited to selling into the real time energy market and forego the opportunity to know the value of that power on a day ahead basis or to secure a capacity payment from the market. Finally, from a practical perspective, it should not be a burden for an electric utility to take these small increments of “as available” power from QFs that are CHP/WHR at avoided cost. The utility with whom the QF is interconnected is the logical “off-taker” of this energy.

If the rebuttable presumption were removed, the manufacturer would still need to get rid of the power that it cannot use internally. Because of the large financial risks of selling into the market versus the limited financial gains, we believe that most less than 20 MW units would reconfigure their units to produce less power so that there is never a possibility of an export taking place. This would reduce the energy efficiency benefits of the CHP facility which PURPA was designed to promote.

EEI Proposed Changes:

*(a)(2)(ii). Competitive wholesale markets that provide a meaningful opportunity to sell capacity, including long-term and short-term sales, and electric energy, including long-term, short-term and real-time sales, to buyers other than the utility to which the qualifying facility is interconnected **would otherwise sell such capacity and electric energy**. In determining whether a meaningful opportunity to sell exists, the Commission shall consider, among other factors, evidence of transactions within the relevant market; or*

*(d)(1). For purposes of §292.309(a)(1), (2), and (3), there is a rebuttable presumption that a qualifying facility with a capacity at or below 20 **[?]** megawatts does not have nondiscriminatory access to the market.”*

e) Midwest Independent Transmission System Operator (Midwest ISO), PJM Interconnection, L.L.C. (PJM), ISO New England, Inc. (ISO-NE), and New York Independent System Operator (NYISO) qualify as markets described in § 292.309(a)(1)(i) and (ii), and

there is a rebuttable presumption that qualifying facilities with a capacity greater than 20 megawatts have nondiscriminatory access to those markets through Commission-approved open access transmission tariffs and interconnection rules, and that electric utilities that are members of such regional transmission organizations or independent system operators (RTO/ISOs) should be relieved of the obligation to purchase electric energy from the qualifying facilities. A qualifying facility may seek to rebut this presumption by demonstrating, inter alia, that:

(1) The qualifying facility has certain operational characteristics that effectively prevent the qualifying facility's participation in a market; or

(2) The qualifying facility lacks access to markets due to transmission constraints. The qualifying facility may show that it is located in an area where persistent transmission constraints in effect cause the qualifying facility not to have access to markets outside a persistently congested area to sell the qualifying facility output or capacity.

(h) For Wholesale Markets, not otherwise listed in this section, the market operator can make a filing under § 205 of the Federal Power Act to demonstrate that the wholesale market meets the criteria outlined in § 292.309(a)(1), (2) or (3) and therefore qualifies for the rebuttable presumption.

(j) No electric utility shall be required, under this part, to enter into a new contract or obligation to purchase from or sell electric energy to a facility that is not an existing qualifying cogeneration facility unless the facility meets the criteria for new qualifying cogeneration facilities established by the Commission in §292.205.

(i) For purposes of §292.309(h), an “existing qualifying cogeneration facility” is a facility that:

(1) Was a qualifying cogeneration facility on or before August 8, 2005; or

(2) Had filed with the Commission a notice of self-certification or self-recertification, or an application for Commission certification, under §292.207 prior to February 2, 2006.

(k) For purposes of §292.309(h), a “new qualifying cogeneration facility” is a facility that satisfies the criteria for qualifying cogeneration facilities pursuant to §292.205.

Thank you for the opportunity to provide comments on this important issue.

Dated: September 14, 2016

Respectfully submitted,

Paul N. Cicio
President
1776 K Street, NW, Suite 720
Washington, DC 20006
T: 202-223-1661
pcicio@ieca-us.org