

"Powering America: Consumer-Oriented Perspectives on Improving the Nation's Electricity Markets"

Testimony of John P. Hughes President & CEO Electricity Consumers Resource Council (ELCON) Before the Committee on Energy and Commerce Subcommittee on Energy United States House of Representatives October 5, 2017

Chairman Upton, Ranking Member Rush, members of the subcommittee and fellow panelists, I am John Hughes, President and CEO of ELCON, the national association of industrial consumers of electricity. I appreciate the opportunity to discuss with you today the concerns of large U.S. manufacturers regarding recent trends in the electric power industry. ELCON's function is to minimize government mandates or interference in power markets that unduly increase power costs. Large U.S. manufacturers are extremely price sensitive when it comes to electricity purchases. Rates that do not reflect true cost of service or are not competitively determined – depending on the type of power market – hurt our competitiveness. Unlike traditional utilities that can pass the cost of government mandates to captive customers, the ultimate cost of those mandates hurt the bottom line of ELCON members.

ELCON was founded in 1976 in anticipation of the enactment of the Public Utility Regulatory Policies Act or PURPA. PURPA was finally enacted in 1978 and ELCON's original focus as a Washington-based advocacy group was state implementation of six federal standards in Title I. This was the first time Congress and the Federal government attempted to directly intervene in state regulatory policies affecting electric utilities. The Title I standards included five retail ratemaking policies that states were required to consider as well as a requirement to consider load management techniques, i.e., the consideration of customer load reductions as an alternative to traditional utility supply from generation. Since 1978 Congress has enacted an additional thirteen federal standards. The House recently considered a twentieth standard on resilience, which I will touch on later in my remarks. For ELCON members these standards were a mixed blessing. Some represented sound economic policies that ensured that state retail ratemaking practices encouraged conservation, reliability, and efficiency in the delivery and generation of electricity, and to do so with "equitable retail rates for electric consumers." Most did little more than endorse a trend in the industry that did not need a nudge from Congress. A few were attempts to favor (or disfavor) one fuel or another and the same for non-traditional regulatory practices.

Beginning in the 1980s ELCON's focus shifted to another part of PURPA - Title II. Title II was intended to promote the development of cogeneration (often referred to as "combined heat and power" or CHP facilities) and small power production facilities, which were mostly renewable energy resources. Many ELCON members had manufacturing processes that were driven by steam or other forms of thermal energy. Traditionally they boiled water on site for steam and purchased electricity from the local utility. With CHP both could be produced on site with tremendous savings in costs, efficiencies and environmental impacts. CHP became the go-to technology for a wide swath of industrial processes such as chemicals, oil refining, paper, primary metals, building materials, and food processing. PURPA worked and today CHP facilities are an important part of our energy mix. Currently the United States has an installed capacity of over 82 gigawatts of CHP and more than 4,100 industrial facilities use this technology but there remains 149 gigawatts of potential CHP that has yet to be deployed. Unfortunately, with the changes made to PURPA by the 2005 Act coupled with other factors, the development of this important energy resource has stalled.

An important side benefit of PURPA Title II was the introduction of "competition" in the generation of electricity. The adoption of a CHP facility was made easier if for whatever reason the local utility's industrial rates were unacceptably high. In the 1980s and 1990s one of the main reasons for such rates was cancelled nuclear power plants and the fact that billions of dollars of abandonment costs were passed on to utility ratepayers. The punitive nature of this cost recovery policy inspired ELCON to support industry-wide restructuring that made market-forces a central feature of the electric utility industry. I will not belabor the origins of Independent System Operators (ISOs) or Regional Transmission Organizations (RTOs), which now serve as a platform for competitive electric services across more than half of the country. The landscape today is decidedly different from the late 1980s and early 1990s. In many states consumers are no longer dependent on the local utility for the electrons that run their homes, businesses and factories. But all is not well.

There remain some serious problems with the wholesale markets and wholesale market policies subject to FERC jurisdiction, and this gets me to several issues that bring me to the table today: the use of market-based solutions to achieve regulatory goals, price formation in ISOs and RTOs, transmission costs, and ISO-RTO stakeholder processes.

Market-based Solutions, Not Command and Control

ELCON supports greater use of competitive markets to provide compensation for unbundled electric services. In most states served by an ISO or RTO, electric services are no longer the monopoly of the local utility. Competitive suppliers and energy service companies exist that provide energy, capacity, ancillary services, demand response, and electric storage. This principle should also be applied to Essential Reliability Services (as recommended in the August 2017 DOE Grid Study and as defined by the North American Electric Reliability Corporation (NERC)). Essential Reliability Services, which are a subset of ancillary services, were recently defined by NERC to give system operators the right tools to maintain the reliability of the bulk power system given the tremendous changes that are taking place in the industry. The Federal Energy Regulatory Commission (FERC) has recently backtracked from its policy to favor market-based solutions over command and control when it issued a proposed rulemaking in November 2016 mandating that all new generators provide primary frequency response. We strongly believe that FERC, rather than issuing command and control mandates, should create competitive markets for all Essential Reliability Services that compensate willing providers of these services.

Price Formation in ISOs and RTOs

As a point of departure in any discussion on improving the market designs of ISOs and RTOs, ELCON believes that the designs need to be made simpler and not more complex. Complex market design only breeds the need for more and more complex price mitigation. We also believe that the existing dichotomy between energy and capacity markets is not sustainable. It is not clear what problem the capacity markets were attempting to fix. Even after 20 years of experience with these markets, there is still no stable market design. They are constantly being tweaked, amended, and modified such that it is impossible to plan more than a few years in advance. It is difficult for a large energy-intensive manufacturer to plan and develop new state-of-the-arts factories if reasonable forecasts of future power costs are impossible.

Beginning in 2014, FERC has initiated a series of rulemakings intended to improve price formation in ISO and RTO markets. Regulations are always a mixed bag, and the FERC proposals are no exception. It is not clear where FERC is going with this initiative, but many of the proposals are attempts to redress the fact that not every party is a winner in competitive markets.

Then, on September 29, 2017, in an attempt to redress the plight of uneconomic coal-fired and nuclear plants, the Secretary of Energy submitted to FERC under Section 403 of the DOE Organization Act a proposed rulemaking on grid resiliency pricing. The Secretary's action referenced the recent DOE Grid Study as suggesting that the price formation rulemakings should be used to prop up uneconomic baseload generators, even though the same study acknowledged that it is primarily market forces that doom these plants. The outcome of such a rulemaking if approved as proposed would be the destruction of the competitive wholesale electric markets. Those markets cannot be sustained if coal, nuclear, wind, and solar resources are all compensated with out-of-market payments. For all practical purposes, the DOE proposal would take the "price formation" out of price formation. Make no mistake that while ELCON has been critical of the ISO-RTO market designs, we have not advocated their destruction. Concerns about the jobs of specific resources are best left to markets. Markets are bipartisan. The federal government should not be in the position to pick the winners and losers in the power industry as DOE is proposing. DOE is saying manufacturing jobs are not as important as the jobs at economically obsolete coal-fired and nuclear power plants – plants for which the market has already provided much more economic alternatives.¹

Transmission Costs

ELCON members are concerned about the rapidly rising cost of transmission that is offsetting the downward pressure on rates created by low prices of shale gas. Transmission costs cannot be hedged. We are deeply concerned that the cost allocation proposals of ISOs and RTOs that are subsequently approved by FERC do not properly assign costs of new or upgraded transmission facilities to the ultimate beneficiaries of those lines. Federal subsidies that are provided to wind and solar facilities are artificially driving the need to expand the interconnected transmission system at no benefit to the nation's manufacturers.

ISO/RTO Stakeholder Processes

It is ELCON's judgment that the stakeholder processes of FERC-jurisdictional ISOs and RTOs do not generally serve the interests of consumers (of any size) and, in fact, consumer interests are consistently underrepresented in these processes. These processes lack transparency and have become a venue for rent seeking by dominant suppliers – the

¹ One particularly egregious aspect of the DOE proposal is the fact that the original owners of these baseloaded plants recovered all their fixed costs as a pre-condition to the plants being spun off as supposedly unregulated merchant generators.

establishment of capacity markets being one such example. Stakeholder processes also contribute to the fact that ISO-RTO market designs are in a constant state of flux. We know of no other competitive or regulated industry that faces this form of meddlesome tutelage.

Proposed Legislation on ISOs, RTOs and Capacity Markets

We are pleased that two provisions in the House energy bill (HR 8) that passed at the end of 2015 may be workable models for addressing some of our concerns.

GAO Study on ISOs/RTOs – Section 4221 would have required the Government Accountability Office (GAO) to assess and issue reports on each RTO and ISO's "market rules, practices and structures." The grid operators would be judged on a number of issues, including whether they produce just and reasonable rates; facilitate fuel diversity, reliability and advanced grid technologies; and promote "equitable treatment of business models, including different utility types." GAO also would evaluate the transparency of grid operators' governance structures and stakeholder processes as well as the transparency of dispatch decisions, including the need for out-of-market actions and the accuracy of day-ahead unit commitments. The reports also would review how well grid operators facilitate "the ability of load-serving entities to self-supply their service territory load." ELCON supports a study of this type. We also suggest that the study evaluate the merits of, not just the transparency of, existing ISO-RTO stakeholder processes, and the effectiveness of each ISO and RTO at creating efficient, open and competitive markets.

<u>Capacity Markets</u> – Section 1110 would have amended the Federal Power Act Section 215B to require RTOs and ISOs operating capacity markets to provide to FERC an analysis of how the capacity markets use competitive forces and include "resource-neutral" performance criteria. FERC would be required to report to Congress on whether each market meets the criteria and make recommendations for those that don't. ELCON supports such a study but prefers it be independently performed by GAO. We question the objectivity of ISOs and RTOs that have capacity markets. We also suggest that such a study seek an explanation from each ISO and RTO on why their respective energy markets do not function like real competitive markets and provide a market-based return on capacity. And this should include the market valuation of reliability and resilience.

Other Issues: Resilience, Nuclear Power, Clean Coal and PURPA

Resilience

I want to conclude my remarks with a couple of concerns that I hope Congress will not address. The new buzz word in the utility space is resilience. ELCON questions the validity of "resilience" as an externality having fungible value, especially in the context of base-loaded generation. While we will try to keep an open mind on the issue as the debate unfolds, we know that coal-fired and nuclear plants are not immune from so-called Black Swan events such as hurricanes, tornadoes, earthquakes, and tsunamis.²

It is important to point out that many critical manufacturing facilities do not really benefit from enhanced grid resilience. Several ELCON members report a recent increase in outages that resulted in costly damage to their industrial processes. They also note that the utilities are already doing a better job restoring service but the problem is the damage has been done regardless of how quickly service was restored, and it may take weeks or months to repair the damage and restore production.

The DOE Grid Study seeks the internalization of this externality in competitive wholesale electric markets. One approach suggested in the study would raise the level of compensation for all generators; DOE's Section 403 filing would limit it to coal-fired and nuclear units. Consumers would obviously be worse off from either approach. We believe consumers would benefit from a more efficient allocation of compensation among existing, economically viable generators and this might be another fruitful topic for study

² Nuclear plants in Florida had to be shut down because of Hurricane Irma and baseloaded coal plants in Texas were switched to natural gas in response to Hurricane Harvey. Also, NERC's assessment of the 2014 Polar Vortex concluded that "Outages [were]directly attributable to cold weather, including on-site fuel issues such as frozen coal piles, frozen equipment and/or sensors under the control of the generating plant, and gelled fuel."

by GAO. We stand firmly in the principle that uneconomic generators should exit the market and not be artificially sustained with subsidies.

ELCON believes that FERC's regulations and policies should remain neutral with respect to the types of technologies and fuels employed by the utility industry to generate electricity. FERC must not pick winners and losers. We believe that only the most cost effective resources should be planned and operated, consistent with existing environmental and siting laws and regulations, and NERC reliability standards.

Proposed Legislation on Resilience

Section 1107 in the previous House energy bill would have established a new federal ratemaking standard (under PURPA Section 111(d)) directing states to consider requiring all utilities to develop plans for improving the resilience of their systems against physical sabotage, cyberattacks, electromagnetic pulses, geomagnetic disturbances, severe weather and earthquakes. Among the measures that utilities may consider are the hardening of distribution facilities; technologies that can isolate or repair problems remotely, such as advanced metering and monitoring and control systems; cybersecurity measures; distributed generation; microgrids and non-grid-scale energy storage.³ State regulators "shall consider" authorizing spending on such improvements, the bill says.

While this provision only directed states to "consider" requiring their jurisdictional utilities to develop these plans, ELCON is concerned that it may promote "gold-plating" and result in higher power costs to consumers. Furthermore the nudge is unnecessary because states are fully aware of these risks and continue to work with their jurisdictional utilities to harden local infrastructures but balancing those investments with the interests of consumers who must pay for these upgrades. The recent experience with Hurricanes Harvey and Irma are good examples. ELCON also supports measured efforts by NERC

³ In addition, section 1201 would establish a competitive grant program for states and local governments for spending on resilience and reliability.

to address resilience – once a workable definition of resilience is achieved – and this also obviates the need for legislation.

Nuclear Power & Clean Coal

ELCON is troubled by the inability of utilities to prudently construct new nuclear power plants or utility-scale Clean Coal facilities (such as integrated gasification combined cycle (IGCC) systems). Efforts to date involving federal subsidies and other forms of government assistance have not worked, and cost overruns associated with these projects are exposing utility customers to unprecedented rate increases with little assurance that these plants will be successfully completed. We urge Congress to use its investigatory powers to ascertain whether continued federal support for these technologies is in the best interests of utility customers and taxpayers. The good intentions of Congress to support a new "renaissance" for these technologies may, in fact, be creating a false sense of security regarding their true economic viability —at great cost to both consumers of electricity and taxpayers.

PURPA & CHP

Finally, I understand that this committee is considering "reforms" to PURPA. While I believe any problems with PURPA could be – and were designed to be – fixed at the state level, I want to remind this committee that testimony before this committee last month and at last year's PURPA conference at FERC clearly showed that CHP is not the problem and should not be inadvertently harmed by broad-brushed PURPA reform.

Conclusion

I appreciate the opportunity to share ELCON's views and concerns with the subcommittee. These are exciting times and ELCON members will continue to be challenged by these changes to ensure that electricity – which is essential for their manufacturing processes and profitability – remains reliable and affordable. Thank you.