UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Carbon Pricing in Organized Wholesale Electricity Markets Docket No. AD20-14-000

PRE-CONFERENCE COMMENTS OF EXELON CORPORATION

Exelon Corporation (Exelon) appreciates the opportunity to participate in the Commission's discussion of carbon pricing mechanisms in the RTO/ISO regions. The scientific evidence is clear: in order to avoid the worst effects of climate change, we must significantly expand current efforts to decarbonize our economy by transitioning away from fossil fuels. The evidence is equally clear that the cornerstone of economy-wide decarbonization is the near or complete elimination of carbon emissions from the electric generation sector, to enable clean electricity to fuel larger portions of the economy. Our wholesale power markets, however, are not aligned with this goal. They ignore the cost of pollution and actively work against state policies to account for the harmful effects of carbon and air pollution on our customers.

Exelon has long supported carbon pricing as a way to correct these fundamental flaws in wholesale electricity markets.[1] Left unchecked, these market flaws are driving the nation's nuclear fleet – by far our largest source of emissions-free electricity – toward premature retirement by artificially allowing polluting generation to appear less expensive. Yet despite years of discussion about the benefits of integrating a meaningful carbon price into our regional electricity markets, no RTO or ISO has done so. And while states have implemented carbon pricing programs both individually and collectively, such as through the Regional Greenhouse Gas Initiative (RGGI), our current wholesale market rules actively undercut the ability of these programs to drive decarbonization in the generation sector.

There is one reason, and only one reason, why Exelon did not fully support the petition seeking a technical conference or workshop on carbon pricing. It is the following sentence from the petition: "To be clear, the Interested Parties are neither asking the Commission to institute a rulemaking proceeding, nor are we suggesting that FERC should direct implementation of a carbon pricing mechanism."[2] Continued talk about the benefit of placing a meaningful price on carbon emissions, uncoupled from concrete and immediate action to do so, while simultaneously acting to undermine state-led emission reduction efforts, serves only to prolong emissions output

[1] Exelon has been a long-time advocate for meaningful carbon pricing, including before the Commission. *See, e.g.*, Comments of Kathleen Barrón for Exelon Corporation, Technical Conference on Environmental Regulations and Electric Reliability, Wholesale Electricity Markets, and Energy Infrastructure – Docket No. AD15-4-000 (Feb. 19, 2015).

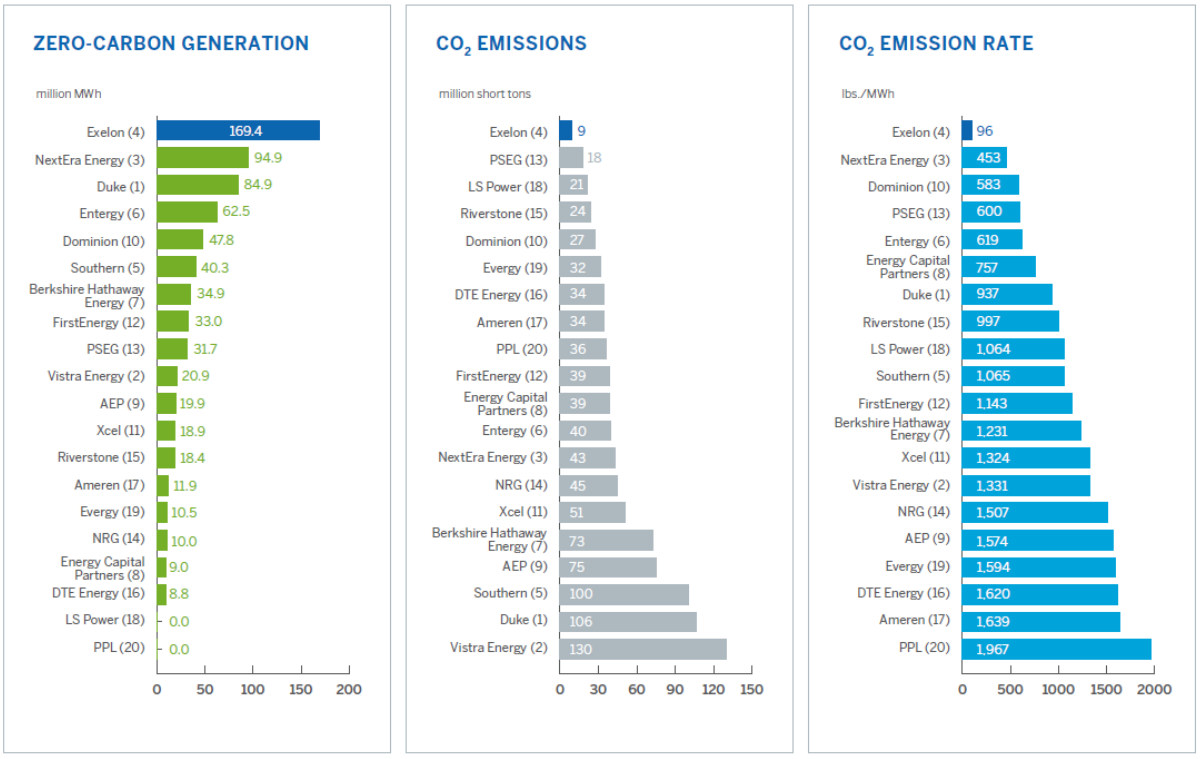
[2] Request for Technical Conference or Workshop, at pg. 3, Docket No. AD20-14-000 (April 13, 2020).

from fossil generation, force more nuclear into early retirement, and put the nation farther away from meeting our decarbonization goals. Discussion at the Commission and RTO/ISO level must evolve into action that is commensurate with the urgency of the climate crisis. Until then, states seeking to preserve and expand emissions-free electricity have only second-best tools available. If the Commission is serious about the virtue of wholesale markets and the efficiencies they bring, it will insist that those markets be used to help states achieve their carbon goals, rather than undermine them.

Exelon is Committed to a Clean Energy Future

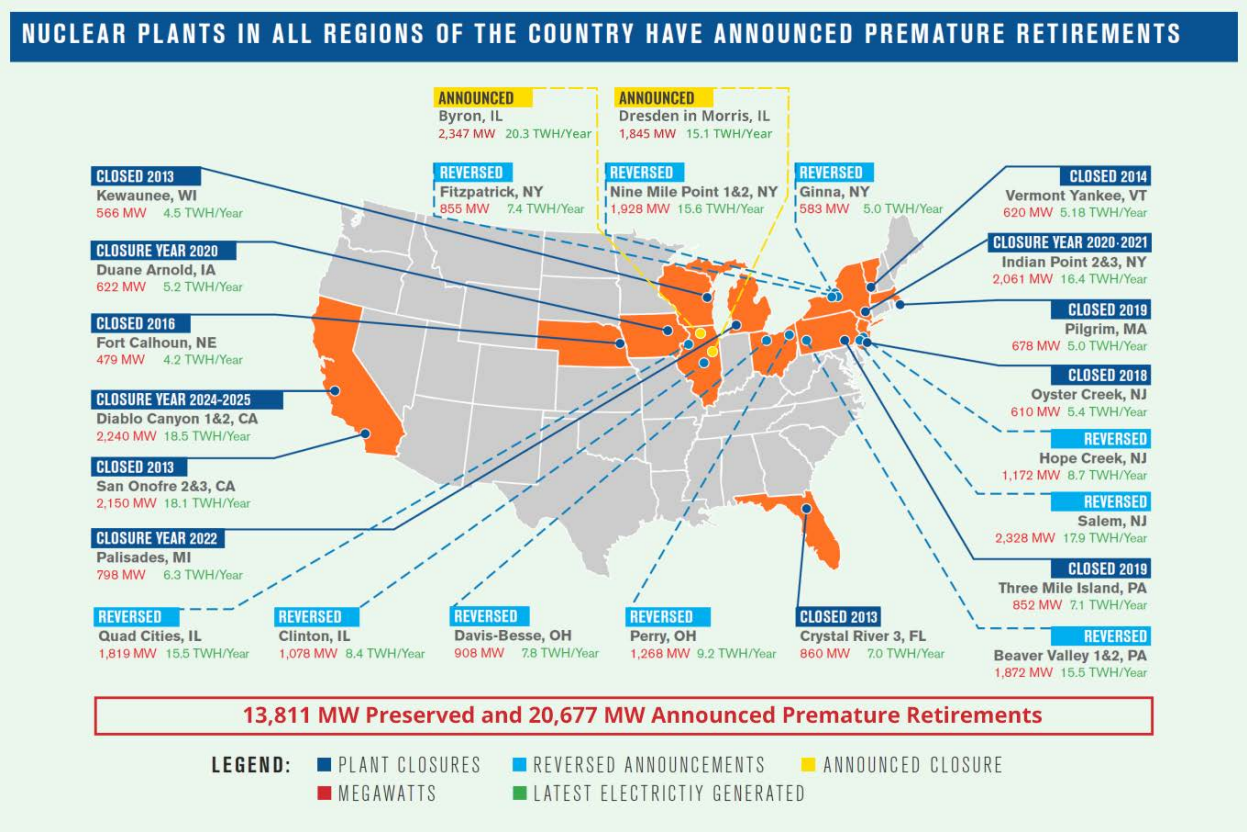
Exelon's business strategy is based on delivering clean, affordable, and reliable electric generation to our customers. Since our inception in 2000, Exelon[3] has maintained a strong leadership position on the need to reduce carbon and other harmful emissions in our industry and across the national economy. Our electric generation fleet produces almost two times more zero-carbon electricity than our next largest competitor, and the emissions profile of our fleet is no accident. We have made a conscious business decision that the availability of affordable, carbon-free electricity is imperative to staving off the worst effects of climate change and consequently generate the most carbon-free electricity, have the lowest total CO_2 emissions, and have the lowest emission rate by far among the nation's large generation companies, as illustrated in the figures below.

[3] Exelon is a holding company with operations and business activities in 48 states, the District of Columbia, and Canada. Exelon's utility subsidiaries are Atlantic City Electric Company, Baltimore Gas and Electric Company, Commonwealth Edison Company, Delmarva Power & Light Company, PECO Energy Company, and Potomac Electric Power Company. Exelon's utilities operate own electric transmission and distribution systems that deliver electricity to approximately 10 million customers in the District of Columbia, Delaware, Illinois, Maryland, New Jersey, and Pennsylvania. Constellation, an Exelon business unit, is one of the nation's leading marketers of electricity and natural gas and related products in wholesale and retail markets. These businesses serve approximately 2.5 million residential and business customers in various markets throughout the United States. Of particular relevance to this discussion, Exelon Generation Company is one of the largest competitive power generators in the U.S., with approximately 33,000 megawatts of owned capacity comprising one of the nation's cleanest and lowest-cost power generation fleets.



Source: Benchmarking Air Emissions of the 100 Largest Electric Power Producers in the United States, M.J. Bradley & Associates (July 2020). Data used in the benchmarking report was calendar year 2018. Number in parenthesis by company name is the company generation ranking in 2018. E.g., Exelon was the fourth largest investor-owned producer in 2018.

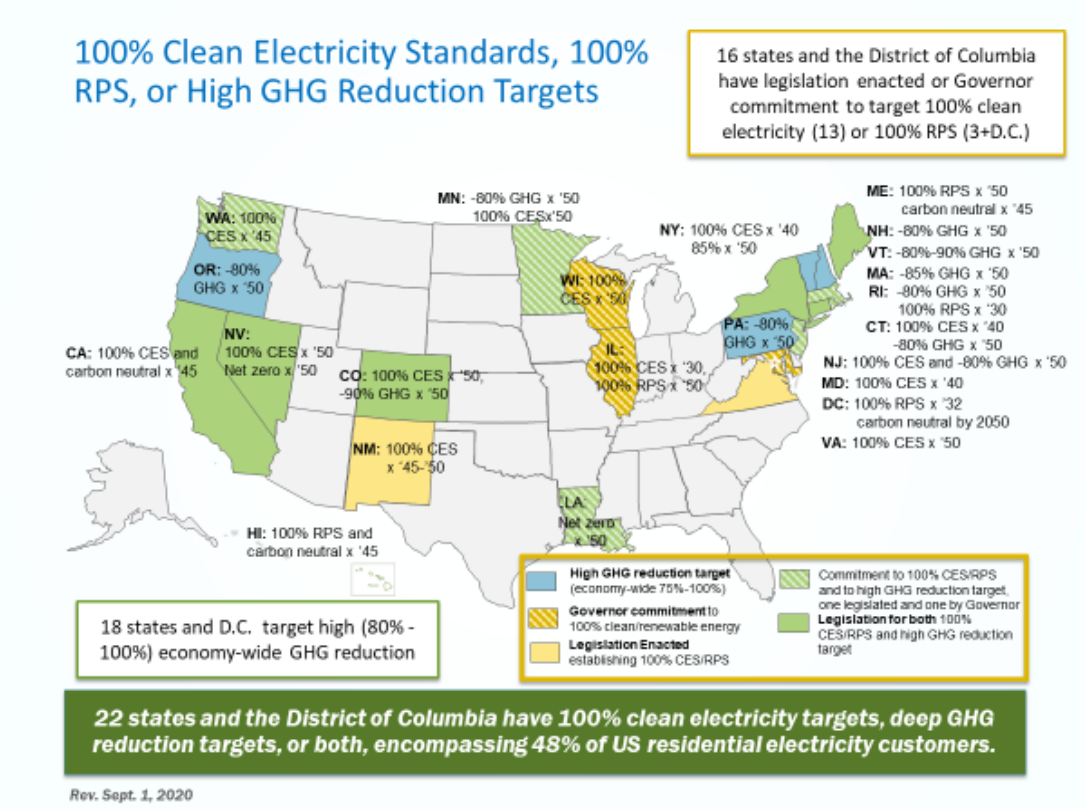
It should come as no surprise, then, that Exelon is a founding member of both the Climate Leadership Council and CEO Climate Dialogue, both of which advocate for a federal economy-wide carbon price aligned with necessary levels of decarbonization. Exelon also has been a vocal supporter of RGGI since its inception in 2009 and has actively advocated for facilitation of RGGI and other carbon pricing mechanisms by PJM, New York ISO, and New England ISO. Unfortunately, the continuing failure of wholesale markets to internalize the cost of pollution is allowing polluting generators to push an increasing number of emissions-free nuclear plants out of the market, forcing retirement announcements well in advance of their licensed lifespan, as illustrated in the figure below.



The most recent casualties of the flawed wholesale power market are eight of Exelon's reactors in Illinois, with four reactors at the Byron and Dresden stations now scheduled for premature retirement in 2021 and four reactors at the Braidwood and LaSalle stations showing increasing signs of financial distress. This follows the premature closure of other Exelon nuclear stations in New Jersey and Pennsylvania in 2018 and 2019. While we know that closure of these nuclear stations is the wrong thing for the customers we serve and the environment in which they live, the wholesale power markets are telling us that they should be retired and replaced with natural gas-fired generation, which appears less expensive because it can bid without fully reflecting the cost of pollution. In Illinois alone, loss of these nuclear reactors will result in a 70 percent increase in electric sector emissions. This is the direct result of failing to have a meaningful carbon price in the wholesale power market.

States Are Leading the Clean Energy Transition

In the absence of robust and timely federal action addressing the climate crisis, states have led the clean energy transformation by adopting clean and renewable portfolio standards, retaining and procuring clean electricity sources, and adopting targets for reducing greenhouse gas emissions across the broader economy, as summarized in the figure below. These policies all rely upon deep decarbonization of the electric generation sector and already cover almost half of Americans.



While the level of detail in each of these decarbonization policies varies, each will require an unprecedented and rapid transformation of the way our country produces and uses electricity. State clean energy programs, whether in the form of carbon pricing or clean energy credits, are seeking to increase the efficiency of the wholesale power market by internalizing carbon externalities that would otherwise go unaddressed. Pollutants such as carbon dioxide are negative externalities because they impose costs on society, yet polluters do not have to incorporate these costs into the wholesale power offers. As a result, the "market" cost of generating electricity using fossil fuels is much lower than the true costs. Wholesale power markets have not been designed to account for these externalities and, instead, the Commission has left correction of this market flaw to other federal agencies and the states.[4]

To date, most states have relied on credit-based programs to drive investment in clean energy technologies. These credit programs enhance wholesale market efficiency by offsetting

[4] Despite years of discussion about the benefits of integrating a carbon price into energy markets regulated by the Commission, including at the Commission's 2017 technical conference on state policies and the eastern RTO/ISO markets, no progress has been made at the Commission on this front or in any RTO/ISO stakeholder process with the exception of the New York ISO, which has put forth a robust plan for integrating a carbon adder into its energy market. By comparison, PJM identified the integration of carbon pricing in its market as a primary initiative three years ago, yet there has been little movement to date beyond stakeholder education.

the subsidy that fossil fuel resources receive by being allowed to emit carbon and other air pollutants without incurring the full cost of related environmental damage. However, they do little to reduce emissions directly. Eleven states therefore have adopted modest carbon pricing mechanisms to partially capture this environmental damage within the energy markets by incentivizing redispatch from coal to gas-fired generation. These include the multi-state RGGI program and California's cap-and-trade program, each of which target the reduction of carbon emissions by requiring fossil generators to obtain allowances for each ton of carbon released into the atmosphere. While these carbon pricing mechanisms have driven meaningful reductions in emissions, they are not designed to achieve the level of decarbonization required to address climate change because the carbon price generated by these programs is not significant enough to drive investment in new clean generation. Nevertheless, even these modest carbon pricing programs have produced tremendous benefits by generating revenue to invest in weatherization, energy efficiency, clean generation and related programs that benefit consumers.[5]

The reality is that carbon pricing mechanisms in every case are coupled with clean energy credit programs. In both California and the RGGI states, clean energy standards or other procurement requirements drive investment in clean energy resources while the carbon pricing mechanism rationalizes unit dispatch by internalizing some portion of emissions costs.

Wholesale Markets Can be Part of the Climate Solution

RTO/ISOs are ideally situated, and in fact necessary, to facilitate implementation of a meaningful state-directed carbon pricing policy unless and until a single federal program is in place.[6] In particular, RTO/ISOs are already well-versed in reliably dispatching resources on a least cost basis. Facilitating states' carbon pricing choices – their attempts to more accurately price electricity generation – is a logical extension of what RTO/ISOs are designed to do. Yet only the California ISO has tariff provisions designed to facilitate the effectiveness of the carbon pricing regime there. The failure of all other RTO/ISOs to include such provisions has limited the effectiveness of carbon pricing structures in the remainder of the states covered by wholesale markets and will continue to do so absent Commission action.

The most direct way to utilize wholesale markets to achieve state goals would be for an entire region to implement a carbon price as part of the energy market dispatch algorithm. This is the approach proposed by the New York ISO. Swift Commission approval of this proposal

[5] *See, e.g.*, https://acadiacenter.org/document/the-regional-greenhouse-gas-initiative-ten-years-in-review/ and https://www.analysisgroup.com/globalassets/uploadedfiles/content/insights/publishing/analysis_group_rggi_report_april_2018.pdf.

[6] A meaningful carbon price is one that is sufficient to incent decarbonization consistent with recognized emission-reduction goals, such as an adequately supported estimate of the Social Cost of Carbon or near-term to net zero price.

once submitted would signal the Commission's acknowledgement that wholesale markets are the best tool to achieve emissions reductions goals. However, such an approach is not on the near-term horizon in multi-state regions like PJM and, thus, the Commission's attention should be focused on addressing emissions leakage, which is a significant impediment to states' expanded use of carbon pricing mechanisms.

If a state or collection of states imposes a carbon price that is higher than a neighbor's, emitting generation in the area with a lower (or no) carbon price simply ramps up to displace emitting generation in the carbon pricing region, and neither state gets the policy result they've chosen. The least-cost dispatch energy market operated by RTO/ISOs is explicitly designed to shift generation from the higher-priced state to the lower-priced state. Thus, absent leakage mitigation, least-cost dispatch limits the ability of states to use carbon pricing to reduce emissions, no matter how economically and environmentally effective it would be to do so. Instead of reducing emissions, standard RTO/ISO dispatch practices simply move the targeted emissions across state borders. And if the generation mix in the area without the carbon price is comprised of resources with higher emission rates, as is the case in the PJM region, the end result will be a higher level of total emissions than if the generation in the carbon pricing area had been fully dispatched.

Because carbon leakage is largely a phenomenon arising in the wholesale energy markets, which the states do not control, RTO/ISOs are an obvious partner in mitigating leakage by adjusting their market rules to take into account the geographic boundaries of carbon pricing programs. To be clear, this would result in the RTO/ISO – and therefore the Commission – facilitating state-selected pricing programs. This would not, however, result in either the Commission or RTO/ISOs imposing a carbon price.[7] Rather, the Commission would approve RTO/ISO border adjustments, as it has done with the California ISO. We urge the Commission to direct the remaining RTO/ISOs to accelerate their efforts to develop leakage mitigation options to support the carbon pricing choices being made by the states.

We look forward to the discussion of these issues at the September 30 technical conference. More importantly though, we look forward to action by the RTO/ISOs and Commission to support state carbon pricing programs. We are grateful for state leadership in deploying the myriad clean energy programs they have developed, but they cannot go it alone when it comes to carbon pricing. RTO/ISOs are ideal partners to facilitate implementation of state carbon pricing programs as an effective complement to the full suite of clean energy tools being used in the fight against climate change.

[7] As noted above, New York ISO has put forth a robust plan for integrating a carbon adder into its energy market, which is distinct from the intra-regional leakage mitigation issues discussed herein.