

Testimony of the PJM Power Providers Group (P3)

New Jersey Senate Appropriations and Assembly

Telecommunications and Utilities Committees

Senate Bill 877 and Assembly Bill 2850

February 22, 2018

The PJM Power Providers Group (“P3”)¹ is a non-profit organization made up of power providers whose mission is to promote properly designed and well-functioning competitive wholesale electricity markets in the 13-state region and the District of Columbia served by PJM Interconnection. Combined, P3 members own more than 84,000 megawatts of generation assets in PJM, produce enough power to supply over 20 million homes and employ over 40,000 people.

P3 remains opposed to any legislative efforts that interfere with the competitive, regional, federally regulated wholesale markets by providing out of market support for selected resources. Senate Bill 877 and Assembly Bill 2850 (“the ZEC Bills”) not only undermine the competitive market in New Jersey and the entire PJM region, they represent an ill-conceived giveaway that unnecessarily harms consumers.

The Committee has seen scant evidence of a crisis because none exists at the current time. Are there issues that should be discussed? Yes. Are there improvements that can be made to the interstate wholesale market that more appropriately compensate generators for the value they bring to the grid? Absolutely. Is there an immediate crisis that demands a rush to approve flawed public policy? Absolutely not.

Only two of the nearly two dozen nuclear plants in PJM are on the path to closure and there are very unique circumstances surrounding both those plants.² Assertions by companies that their generating units may go “cash flow negative” at some future date reflect a reality shared by nearly all plants in PJM.³ Declining demand as a result of increased energy efficiency, record

¹ The views expressed in this testimony are those of P3 as an organization and do not necessarily reflect the view of any individual P3 member with respect to any issue. For more information on P3, see www.p3powergroup.com.

² See, <http://www.pjm.com/-/media/planning/gen-retire/pending-deactivation-requests.ashx?la=en>. Oyster Creek Nuclear Generating Station and Three Mile Island Unit 1 Generating Station are currently the only two nuclear plants on PJM’s deactivation list and PJM identified no reliability impacts associated with either unit’s closure.

³ PSEG’s reported projections indicate that the nuclear units in New Jersey are projected to be cash flow positive “at least through 2019.” See, <http://www.njspotlight.com/stories/17/04/30/pseg-warns-shutting-down-nuclear-units-could-drive-up-power-prices/>

low energy prices in 2016 and other factors combined with excess capacity on the system have naturally led to challenging economics for all power generators in PJM.

Despite the challenging economic circumstance for all power generators in PJM, the PJM Independent Market Monitor offers that the plants in question in New Jersey are producing revenues that are more than sufficient to justify their continued operations:

PSEG's nuclear plants covered their annual avoidable costs on average over the last five full years (2013 through 2017) by an excess of \$1.4 billion even when 100 percent of NEI's capital expenditures are included, and by an excess of \$1.6 billion when the first 17 days of 2018 are included. In 2016, PSEG had a shortfall of \$81 million, or 5.7 percent of the \$1.4 billion excess. In 2017, PSEG covered their annual avoidable costs by an excess of \$3.7 million. In 2018, PSEG covered their avoidable costs for the first 17 days by an excess of \$131.7 million.⁴

To be clear, P3 supports nuclear power provided it is competing with other forms of generation on a level playing field. Nuclear power has been a stable source of power in PJM for decades. P3's concern is focused on the market-distorting effects that the ZEC Bills will have on the interstate market that has benefited New Jersey enormously for decades. Subsidies distort markets and ultimately lead to the devolution of markets as competing suppliers seek subsidies to support their facilities rather than pursuing innovation and efficiency that drive down costs.

The regional market has worked well for New Jersey. Unfortunately, the debate regarding the ZEC Bills has been riddled with mischaracterizations of the regional market that have led to a false sense of a crisis. P3 urges this committee to consider these undisputable facts when evaluating the need for a subsidy for nuclear facilities:

1. 2016 Power Prices were the Lowest in PJM's History

2016 was a very challenging year for nearly all generating units in PJM. Due to a glut of natural gas and moderate weather, wholesale power prices in PJM "were lower in 2016 than at any time in PJM history since the beginning of the competitive wholesale market on April 1, 1999."⁵ It is only natural that given historically low energy prices that power generator's margins were either narrow or negative. This is not a NJ unique phenomenon or a nuclear specific problem. Moreover, while power prices have increased in other parts of the country, New Jersey consumers enjoyed the benefits associated with these historically low prices.

⁴ http://www.monitoringanalytics.com/reports/Reports/2018/IMM_Testimony_NJ_Bill_No_S-877_20180125-Revised.pdf at page 4.

⁵ http://www.monitoringanalytics.com/reports/PJM_State_of_the_Market/2016/2016-som-pjm-sec3.pdf page 94

2. Current Reserve Margins in PJM are well above what is Required.

The PJM reserve margin, or the amount of megawatts on the system over what is projected to be needed, for the summer of 2017 was 29.1%, well above the required reserve margin of 16.6%.⁶ Because of improvements in energy efficiency and other factors that have led to a reduction in demand, our grid simply is not growing at its traditional pace. As a result, high supply and low demand produces outstanding reliability while driving down prices. Concerns about having adequate power supplies if a handful of assets retire are simply misplaced. The PJM system could easily retire thousands of megawatts of power without jeopardizing reliability.

3. The PJM Grid has More Fuel Diversity than It has Ever Had.

Concerns about fuel diversity are equally misplaced and claims of a “trend toward a less diverse energy portfolio in the region”⁷ are patently false. Historically, PJM was a grid dominated by two fuel sources – coal and nuclear. As recently as 2005, 91% of PJM’s power came from nuclear and coal assets.⁸ However, with the increase in low cost natural gas and the advent of additional environmental restrictions on coal, natural gas and renewable assets are assuming the role once held by coal. Indeed, in 2016, installed capacity in PJM consisted of 33 percent coal, 33 percent natural gas, 18 percent nuclear, and 6 percent renewables (including hydro).⁹

4. Air Emissions from Power Generation in PJM Have Plummeted over the Last Decade.

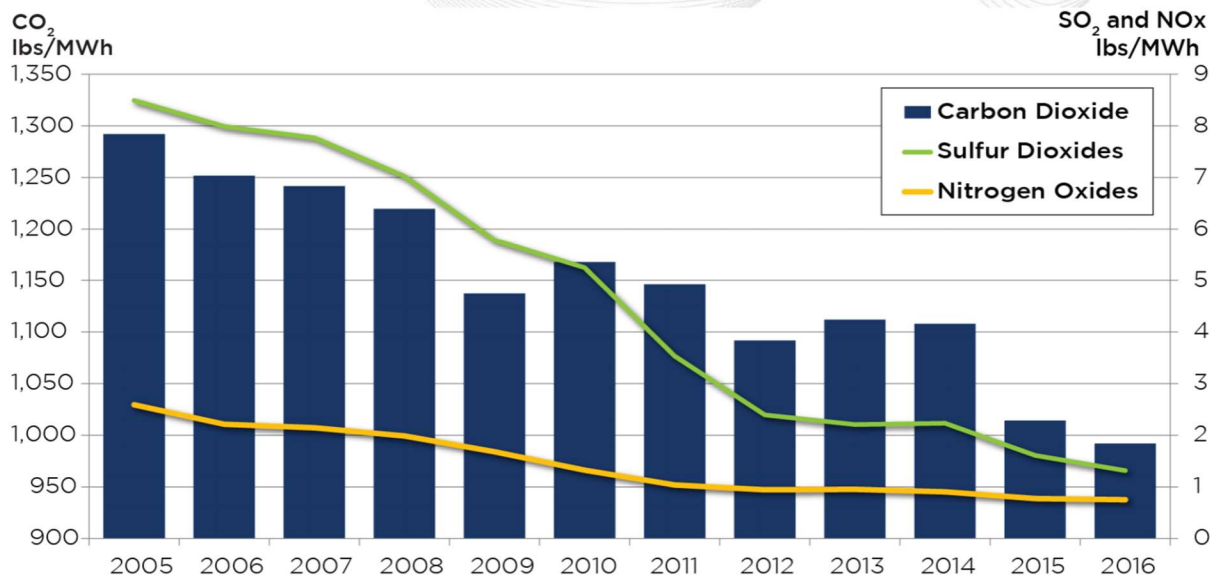
The graph below tells a powerful story about achieving environmental goals in a competitive regional electricity market. Sulphur, Nitrogen and Carbon emissions from power plants in PJM have dropped precipitously in the last decade as more efficient generating facilities (many of which are in New Jersey) have replaced older less efficient units.

⁶ <https://annualmeeting.pjm.com/-/media/pjm-annualmeeting/postings/2017-summer-outlook.ashx?la=en>

⁷ Senate Bill 877 Section 1 (a) (8) (prior version)

⁸ <http://www.pjm.com/-/media/library/reports-notice/special-reports/20170330-pjms-evolving-resource-mix-and-system-reliability.ashx> at 9.

⁹ *Id.*



10

While a debate over the long-term viability of nuclear facilities is appropriate, a short-term rush to pass an ill-conceived subsidy is clearly not necessary given the lack of a near term crisis. New Jersey has the ability to take a thoughtful look at these issues and develop policies that make sense and are consistent with competitive market principles that have served New Jersey well. Furthermore, efforts that are currently underway at both PJM and FERC to more appropriately value attributes that certain resources provide to the grid have an opportunity to address some economic issues surrounding nuclear facilities in a manner that does not undermine the competitive regional wholesale market. As PJM President and CEO Andrew Ott offered to the United States Senate Committee on Energy and Natural Resources on January 23, 2018,

Specifically, we have proposed key reforms in how we compensate generating units that are needed to serve the demand for electricity. Today, we operate under a set of rules written in a vastly different time that limit the ability of certain generating units to set prices in a given hour. These units are still compensated for their costs to operate, but because they are not able to set clearing prices, those clearing prices are artificially lower than they should be in those hours. **This has a price-suppressive effect on all generating units, including nuclear and coal generation, as well as natural gas and renewable generation.** Price formation reforms in this area were specifically recommended by the DOE in its comprehensive August 2017 analysis. This type of reform, along with reforms to pricing during certain times when we are approaching

¹⁰ <http://pjm.com/-/media/committees-groups/committees/mc/20170517/20170517-item-01-comments-of-the-president-and-ceo.ashx> at 7.

temporary shortage conditions, would, in our view, go a long way toward properly compensating all generation needed to serve demand.¹¹

Given the desire of PJM to develop market reforms that will impact the economics of nuclear and other generating facilities, P3 urges this Committee to explore the issues properly and not rush to address issues that can be handled in the interstate wholesale market. The PJM Market Monitor's numbers about the profitability of New Jersey's nuclear plants combined with the fact that no one has said that these New Jersey nuclear units are not committed to the market until 2021¹² afford the Committee the benefit of time. However, should the Committees move forward hastily in spite of the overwhelming case for deliberation, there are numerous problems specific to the ZEC Bills that should give the Committees great pause.

1. The ZEC Bills Would Subsidize Nuclear Plants outside of NJ.

The ZEC Bills are specifically written so that the New Jersey BPU may be required to provide a subsidy to nuclear power plants outside of the Garden State. The bill as currently drafted in no way limits the subsidies to just New Jersey nuclear plants and in many respects invites out of state plants to apply to receive Zero Emission Certificates. When combined with the 40% requirement in Section g(1), the BPU may be legally required to award subsidies to plants in Pennsylvania, Ohio or Maryland.

2. The ZEC Bills Return the Risks Associated with Nuclear Generation to the Ratepayer.

The long list of possible expenses in Section 3 (a) should send a justifiable chill up any legislator's spine. The management of all the possible risks associated with nuclear generation or any other form of generation were very intentionally and intelligently moved from the backs of New Jersey consumers to the investors in generation facilities by the "Electric Discount and Energy Competition Act" of 1999. The ZEC Bills effectively upend that deal and provide for possible cost recovery for virtually every conceivable risk that could be faced by the owners of a nuclear plant. Risks associated with equipment failures and non-performance penalties (among many other things) could all be paid for by New Jersey ratepayers. Moreover, the BPU will be theoretically called upon to evaluate the prudence of fuel expenses, non-fuel capital expenses and overhead costs just to name a few of the many risks or costs that will determine whether a ratepayer subsidy is appropriate.

¹¹ <http://www.pjm.com/-/media/library/reports-notice/special-reports/2018/20180123-testimony-andrew-ott-to-us-senate.ashx?la=en> at page 7. Emphasis added.

¹² All generating units that "cleared" the May 2017 PJM Base Residual Auction for Capacity Resources have an obligation to serve PJM load through May 2021. There have been no public announcements that any of the New Jersey nuclear units, other than Oyster Creek, did not clear the most recent PJM capacity auction.

The New Jersey Board of Public Utilities has been out of the business of regulating generation facilities for the last 19 years – the ZEC Bills effectively put the Board back in the game. Such a redirecting of the New Jersey Board of Public Utilities to effectively re-regulate that which was de-regulated represents an enormous shift in public policy and a significant mission change for the BPU.

3. The ZEC Bills Tie the Board of Public Utilities' Hands in Important Ways.

If the New Jersey Board of Public Utilities is going to be entrusted with evaluating whether nuclear units are economically viable (a very significant undertaking for any regulatory agency), it needs unfettered access to all available information, input from a broad variety of perspectives and the regulatory flexibility to address any challenge. The ZEC Bills provides the BPU none of these. The BPU should have specific authority to review historical plant data from any company seeking a ZEC. The BPU should have a similar obligation to review data about market conditions possessed by PJM and the PJM Independent Market Monitor. Since the BPU will be placed in the challenging position of evaluating the prudence of operation and maintenance decisions, it should have clear authority to hire necessary experts. Similarly, market projections are by their nature subjective and the Board should be able to hire the necessary experts to challenge any market projections presented by companies seeking ZECs.

Beyond the technical expertise that will be required of the BPU, the ZEC Bills limit the ability of the BPU to set the ZEC price at an appropriate level, but instead requires that the ZEC price be based on the amount of money collected, not the amount of money necessary to keep a plant operational. The bill places limitations on the ability of the Board to set and adjust the per-kilowatt charge by not allowing changes until at least three to four years into the program. It also locks the Board into providing a ZEC payment for up to four years even if the financial condition of the plant improves.

4. The ZEC Bills Do Not Provide for a Fair Opportunity for Participation.

Given the enormous amount of money that is at stake, the BPU must have the benefit of input from as wide a swath of interests as possible. As amended, the ZEC Bills provide that the Board and the Attorney General must give permission for anyone other than the nuclear plants owners to participate in the process. Clearly, this result is not appropriate. The BPU should be required to receive input from consumer advocates, PJM and the PJM Independent Market Monitor (all of whom are already in possession of larger amounts of confidential information). While P3 is sensitive to concerns about bidding strategies becoming public information and is not suggesting the competitive power providers should receive commercially sensitive information, provisions should be added to The ZEC Bills that allow by right consumer advocates, PJM and the PJM Independent Market Monitor to review information submitted to the BPU, under appropriate confidentiality protections, and offer input to inform the BPU's decision.

5. The ZEC Bills Do Not Recognize PJM’s Capacity Procurement Timelines

Every May, owners of generation in PJM must decide the financial support required for a specific unit to be available to serve load three years ahead. For example, in May 2018, all PJM unit owners will need to decide the “price” at which a unit can be available to meet the needs of the system in from June of 2021 to May of 2022. These capacity auctions “clear” enough capacity in order to serve the projected needs of the system at a price that unit owners agree will be sufficient to ensure their availability. Almost every year, a certain number units do not “clear” the auction because the price is not high enough to cover their revenue needs and, as a result, those units are likely to retire. For example, Three Mile Island did not clear the last two capacity auctions and, as a result, is slated to retire in 2019.¹³

The ZEC Bills evaluate the financial status of plants over three energy years. As a result, the BPU will be deciding if plants that have cleared the PJM capacity auctions and are committed to the market should be getting additional dollars for the same commitment that has already been made to the PJM market. Unit owners that have cleared PJM’s capacity markets have made physical commitments to the PJM grid that cannot be easily unwound – especially for units the size of nuclear plants. The ZEC Bills completely ignore this reality of the PJM grid and, in essence, ask New Jersey consumers to pay more for something they are already guaranteed to get. Moreover, any reasonable policy maker would need to ask how a nuclear plant unit owner could certify to a state regulatory body that it will cease operations without state financial support AFTER it has already made a commitment to the regional market that it will be available to serve consumers WITHOUT any state subsidy. When viewed through this lens, the ZEC Bills appear to be nothing more than a giveaway by consumers with nothing in return.

In some respects, this Committee is fortunate in that it has time to be thoughtful. There is currently no reliability crisis, no diversity crisis, the nuclear power plants in New Jersey are committed to the market until May of 2021 and, according to data from the PJM Independent Market Monitor, the nuclear power plants in New Jersey are not in financial distress. Given the numerous policy flaws that remain in the ZEC bills and the fact the PJM and FERC are currently changing market rules that are likely to improve the economics of nuclear generation facilities, New Jersey would be well served by fully investigating the economic vitality of the current nuclear facilities and developing policies that are consistent with the market principles that have served New Jersey well for the last two decades. P3 urges the Committee to take the time to do it correctly rather than rush forward with haste to address a crisis that does not exist.

¹³ See, <http://www.exeloncorp.com/newsroom/pjm-auction-results-release-2017>.

