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*VIA Electronic Delivery*

June 5, 2023

The Honorable Josh Shapiro  
Governor of the Commonwealth of Pennsylvania  
508 Main Capitol Building  
Harrisburg, PA 17120

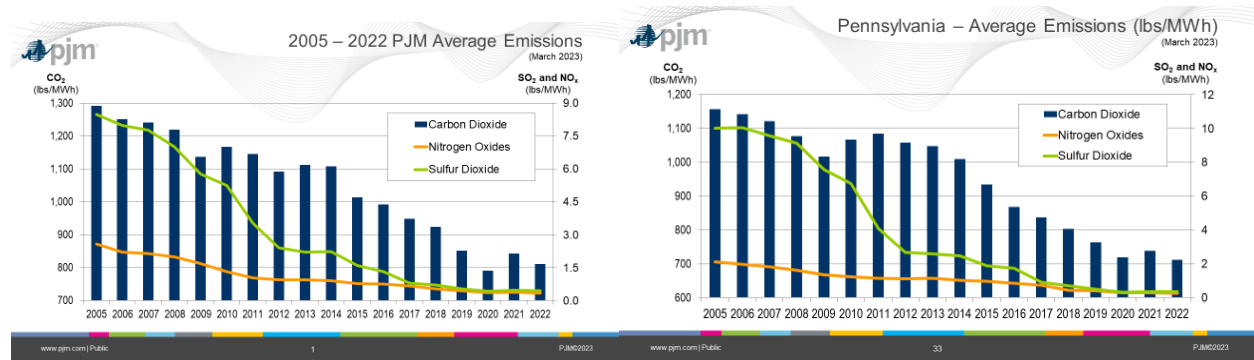
Dear Governor Shapiro,

On behalf of the PJM Board of Managers, we extend our congratulations to you on your election as Governor of the Commonwealth of Pennsylvania. PJM has enjoyed a long and important partnership with our home state. Importantly, we believe PJM and our 700 Pennsylvania-based employees share key goals with your administration in providing reliable and cost-effective electric service to consumers throughout the Commonwealth.

Thank you for your letter dated May 16, 2023, highlighting the profound changes occurring within the energy system. PJM fully embraces what is deemed the “energy transition,” and has advanced a corresponding five-year strategy consisting of the following pillars: (i) facilitating state and federal decarbonization policies reliably and cost-effectively; (ii) planning for the grid of the future; and (iii) fostering an environment of innovation.

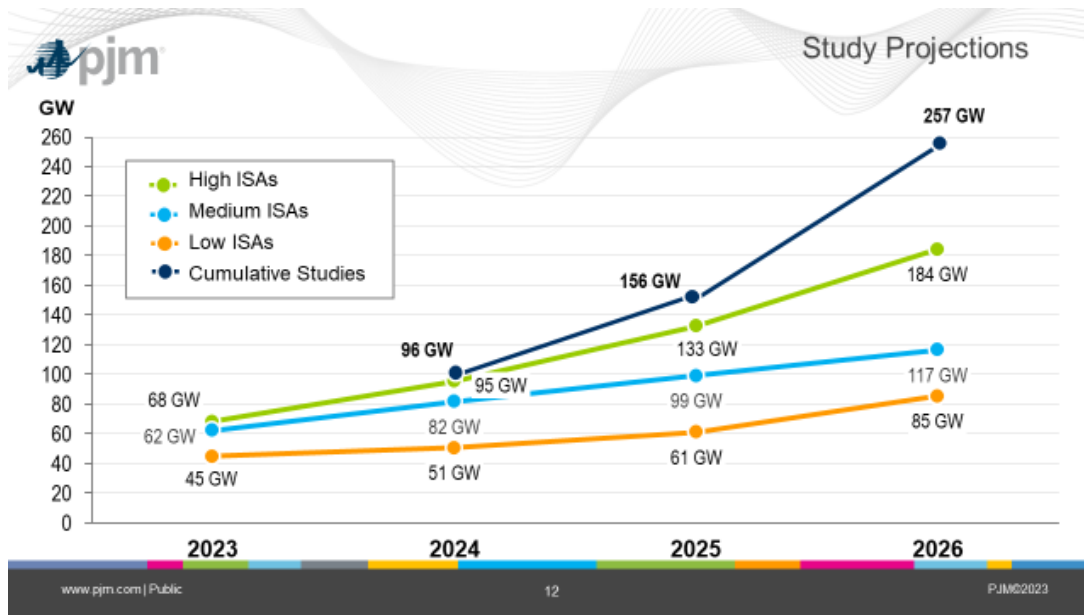
As to the first pillar, PJM has made significant strides. PJM has developed and is implementing reforms of the generation interconnection process (discussed in greater detail below) and executed a process called the State Agreement Approach with the State of New Jersey to assist in their buildout of offshore wind transmission facilities. In fact, New Jersey just recently announced that it intends to proceed with a “2.0” version of this effort. Further and structurally, we have a robust state apparatus that contains a group named State Policy Solutions whose sole purpose is to assist states in the advancement of their state policy initiatives. PJM stands ready to assist Pennsylvania with its energy policy initiatives, including projects related to the Infrastructure Reduction Act, wherever possible.

These strides combined with market forces provided by our robust competitive market framework have also led to a multi-decade decrease in emissions across our footprint. An annual study of generators in the PJM footprint shows a drop in average emission rates for carbon dioxide (CO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>), continuing a downward trend of nearly two decades. According to the latest PJM Emission Rates Report, the average CO<sub>2</sub> emission rate for electric generators in the PJM footprint decreased approximately 37% from 2005 to 2022. The average NO<sub>x</sub> emission rate dropped about 87%. The average emission rate of SO<sub>2</sub> fell by about 95%.



As to the PJM generation interconnection queue, PJM agrees with the importance of a robust queue process that is built to accommodate a high volume of new projects. We share your sense of urgency around expediting queue throughput. Recognizing the sheer volume of projects entering its queue, in October 2020, PJM and stakeholders began working together to create a plan that streamlines generation interconnection requests. PJM held 25 separate meetings as part of this reform process culminating in landmark reform to speed the interconnection queue that was overwhelmingly approved by PJM stakeholders and the Federal Energy Regulatory Commission (FERC) on Nov. 29, 2022.

The transition that was approved by FERC and that starts in the third quarter of this year is expected to process interconnection applications that cumulatively represent about 260 GW worth of resources over the next three years. For context, PJM’s peak load is approximately 150 GW, so performing the engineering analysis for proposed generation that represents a nameplate quantity that is almost 175% of our peak is a tremendous undertaking, but our team has embraced this challenge. In the below graph, we have included three different potential scenarios whereby projects receive and sign their Interconnection Service Agreements (ISAs). Regardless of the scenario, we see a significant number of resources finding their way through the queue by the end of 2026.



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Further, we currently have about 44 GW of projects that have already come through our study process with either signed or pending ISAs and should be moving to construction. We expect that number will grow to about 62 GW by year's end. However, PJM remains concerned about the slow rate of contracted new build actually coming online for several reasons, including supply chain constraints and siting and permitting issues.

PJM also understands your stated concerns about the interaction between the interconnection queue and legacy generation redevelopment. This is an issue that is being worked on in the PJM stakeholder process. PJM supports the stakeholder discussion on the treatment of legacy generation redevelopment going forward.

PJM continues to look at additional measures to improve queue throughput and efficiencies through its Interconnection Process Subcommittee. PJM will remain focused on clearing the queue based upon the reforms approved by the PJM stakeholders and FERC and generally supported by state utility commissions, including the Pennsylvania Public Utility Commission (PA PUC).

In regards to your stated concerns with Capacity Performance, PJM agrees that this is an important subject that will be considered as PJM and its members undertake a comprehensive review of resource adequacy. PJM implemented its current capacity performance construct after the Polar Vortex of 2014, and customers have benefited from markedly improved generation performance during extreme cold weather events in the intervening years. However, as you note, the generator outage rate during Winter Storm Elliott was unacceptably high. Drivers of the higher-than-normal outage rate include mechanical failures at generators driven by extreme cold weather as well as the unavailability of natural gas as a result of production and processing disruptions in the Marcellus and Utica regions where an unprecedented almost 30% loss of daily supply occurred between Dec. 23 and Dec. 25. It is important to note that, despite this outage rate, PJM and our members maintained grid reliability throughout the storm, and were also able to provide support to our neighbors who were forced to shed load. Going forward, we are focused on generator performance during extreme weather, enhanced outage risk modeling, and generator capacity accreditation, among other important topics.

To address these, we have initiated a fast-tracked stakeholder process that is targeting a filing with FERC in October 2023. We look forward to continued engagement by the PA PUC and the Pennsylvania Office of Consumer Advocate on this and other matters related to the energy transition, reliability, competition and markets, and will be happy to provide your team a full and comprehensive briefing as you have requested.

Again, we want to thank you for your thoughtful correspondence, and we enthusiastically accept your request to formalize coordination between PJM and your administration. PJM and representatives from your administration have set a date for your requested briefing, and we look forward to engaging on the matters discussed herein and any additional matters you and your administration may wish to discuss.

Sincerely,

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Manu Asthana  
President & CEO, PJM

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Mark Takahashi  
Chair, PJM Board of Managers