



## **New Jersey Assembly Telecommunications & Utilities and Senate Energy and Environment Committees**

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For Public Use

## PJM Position on Legislation

PJM takes no position on A1480 and S258. The primary impact of both bills is on electric distribution companies, competitive retail suppliers and consumer retail rates. PJM plans and operates the grid on the bulk electric system level and operates wholesale energy markets that set wholesale rates. Thus, these primarily retail market-related bills do not impact PJM core functions.

## Who Is PJM?

PJM Interconnection ensures the reliable flow of power to 65 million people in 13 states and the District of Columbia. We are similar to an air traffic controller but for the electric grid. We don't own the high-voltage transmission lines that carry electricity, but we direct and balance the flow of that power throughout our region and to and from neighboring regions. In addition to reliable operations, PJM also plans necessary enhancements to the transmission grid to ensure reliability into the future and operates the electricity markets within its region to competitively procure capacity and to meet electricity demand in real time. The purpose of these electricity markets is to cost-effectively reinforce reliable grid operations. PJM is federally regulated by the Federal Energy Regulatory Commission (FERC). Our core business functions save consumers between \$3.2 billion and \$4 billion in energy costs annually.

## The U.S. Grid Is in an Energy Transition

As with the entire U.S. electric grid, PJM is experiencing an accelerating transition toward renewable energy. Policies and consumer choices are shifting the grid away from dispatchable thermal (coal, gas, nuclear) generation resources toward resources with little-to-no carbon emissions. PJM has a generation interconnection queue that mostly comprises (~98%) intermittent generation, such as wind and solar as well as battery technology. Thus, PJM has affirmatively stated that we are in an energy transition to a changed resource mix and a greener grid.

## A Reliability Concern: Resource Adequacy

Knowing that we are in an energy transition, PJM has analytically studied and will continue to study the energy transition. Based on our analysis, we have observed a few trends that, when taken in the aggregate, will create a reliability concern around Resource Adequacy (i.e., having enough electricity supply to meet demand) later into this decade.

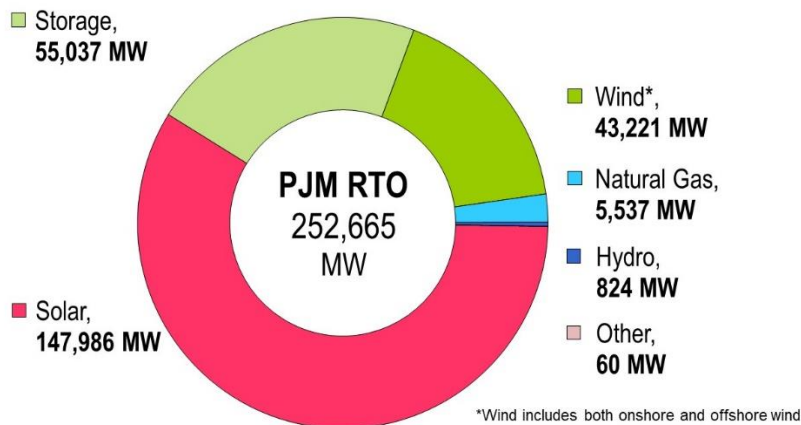
- First, the rate of electricity demand is anticipated to increase significantly in the future due to the electrification of the transportation and heating sectors. There has also been a significant near-term increase in the development of large data centers in the PJM service area, each of which consumes electricity in very high volumes.
- Second, the pace of retirements of existing fossil-based resources, largely due to state and federal policies, is clearly outpacing the construction of new renewable resources. There have been a variety of reasons cited for this lag in construction, including supply chain, state and local siting challenges, and issues related to project financing.

- Finally, the thermal dispatchable generators slated to retire are those that have historically provided the grid balancing services necessary to reliably operate the system. Longer-duration batteries and potentially other technologies could also serve in this role in the future if they can become more cost-effective and are deployed at scale.

## Replacement (Renewable) Generation Update

PJM has made significant strides in reforming the generation interconnection queue so as to speed up the interconnection of legitimate projects in the queue that have both financial wherewithal and site control. I will speak to the next few graphics:

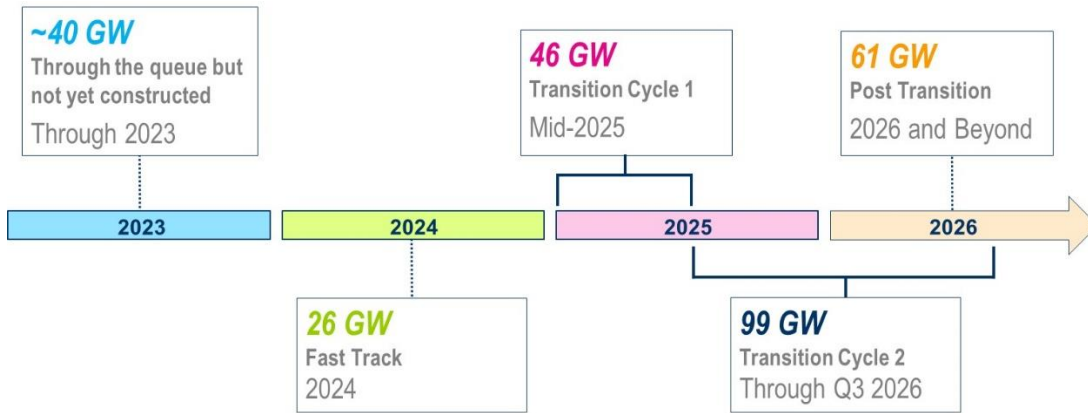
**Figure 1.** PJM Queued Capacity (Nameplate) by Fuel Type (“active” in the PJM Queue as of April 1, 2023)



**Figure 2.** Interconnection Process Reform Timeline

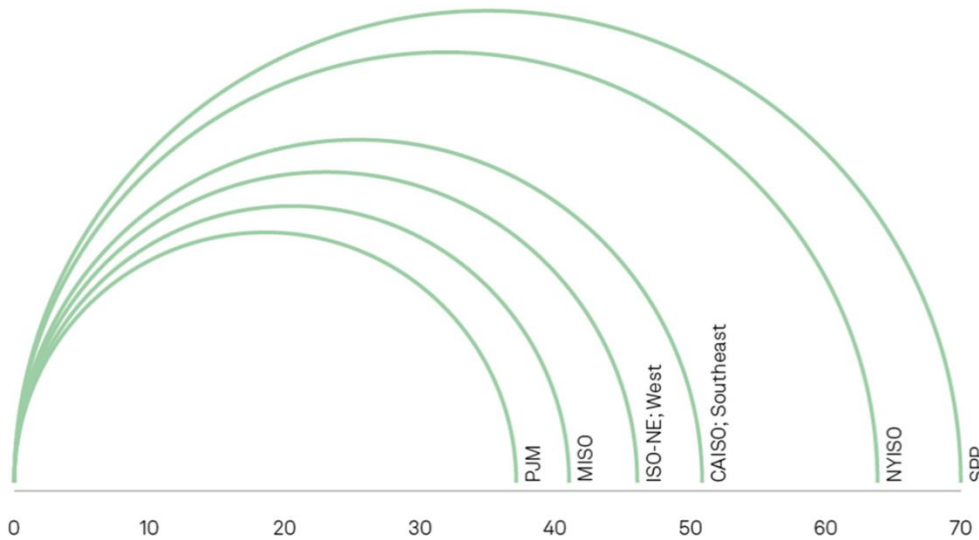


**Figure 3. Interconnection Queue Breakdown and Timeline**



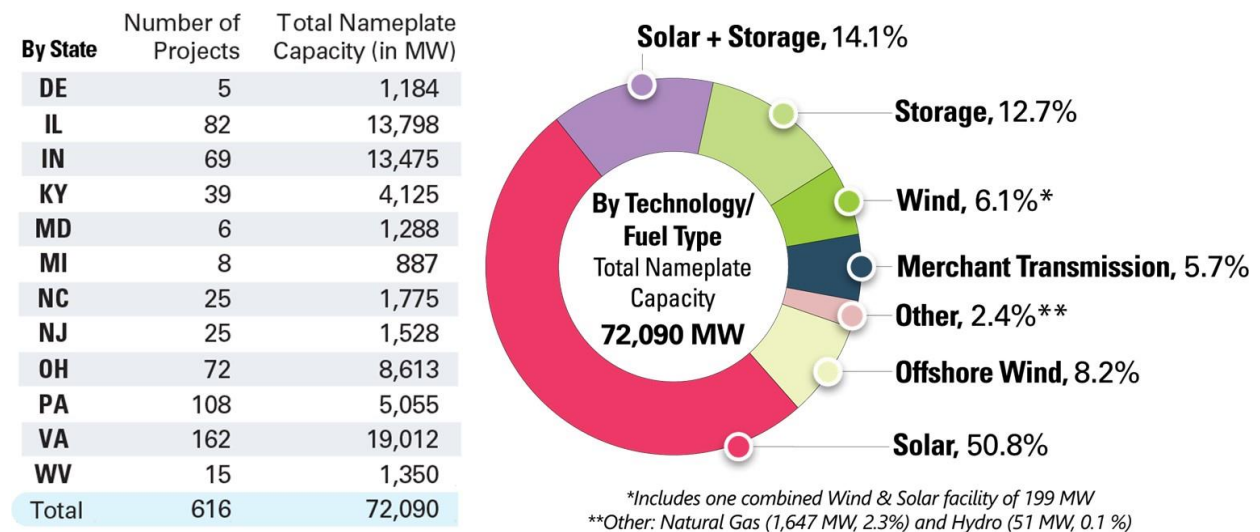
**Figure 4. U.S. Interconnection Queues - S&P Global**

Average time from queue date to proposed online date (months)



As of June 28, 2023.  
 Active queues only.  
 Only includes interconnection queues for which sufficient details were available.  
 Source: Public company reports (see Excel attachment for details).  
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**Figure 5. Projects to Clear PJM Interconnection Process in 2024 and 2025**



- While PJM leaves the determination of energy policy to state and federal government, we respectfully urge that policymakers:
  - **Avoid** policies meant to push generation resources off of the system until an adequate quantity of replacement generation is online and has been shown to be operational.
  - **Analyze** your state/local challenges in the deployment of new generation resources and electricity infrastructure, and **enact** policy to facilitate greater/quicker construction.
- PJM is working to advance state energy goals like offshore wind transmission planning with New Jersey, as well as taking a series of steps to try and maintain reliability as we progress through the energy transition. For more information on PJM's efforts, please visit the [Ensuring a Reliable Energy Transition](#) webpage on PJM.com. It outlines the organization's reliability concerns, the actions PJM is advancing to help alleviate those concerns, and all of the studies produced in support of these efforts.