

# Pennsylvania's Looming Energy Resource Adequacy Crisis



Now is the time to update decades-old state energy laws to build new generation supply and keep the lights on at a reasonable cost to customers.

**Issue:** Customers are at risk of much higher prices on their electric bills and have no guarantee that enough electricity will be there to serve their needs by the end of the decade. PJM Interconnection, LLC (PJM) has projected a supply/demand imbalance where there is insufficient generation in its markets to meet customer demand. By 2030, an estimated 40 GW of dispatchable generation resources within PJM's footprint are set to retire without replacement resources in place. When looking ahead to 2035, PJM projects that up to an additional 70GW are at risk of retiring.<sup>1,2</sup> Recent PJM market design changes to improve reliability are unlikely to solve this problem. Pennsylvania cannot continue to wait and see if the markets work before addressing this looming shortfall in supply.

## Why should Pennsylvania be concerned?

*Pennsylvania customers currently pay for the generation resources needed to meet regional demand regardless of who owns that generation.*

Pennsylvania is the largest net generation exporter in PJM. This means that we currently produce more electric energy than is used within the state, so the excess electricity generated is sold and used in other PJM states to meet the energy demands of those customers.

More than half of the generation capacity that exists in the Commonwealth today was built under the regulatory paradigm of vertically integrated utilities and directly paid for by Pennsylvania utility customers. Since deregulation in 1996, electric distribution companies (EDCs) no longer have any stake in generation ownership or operation, and all generation in Pennsylvania is owned and operated by Independent Power Producers (IPPs) that participate in the PJM market. Generation, despite the location of a plant, is a regional commodity and is used to serve customers based on regional demand.

*Pennsylvania's electric consumers currently support energy supply capacity through a regional market and are facing higher costs and reduced reliability as a result of failed market design.*

As forecasted demand for electricity in Pennsylvania and throughout PJM is increasing at unprecedented levels without sufficient new generation coming online, Pennsylvania's consumers are paying more for electricity supply while also facing the risk of reduced reliability.<sup>3</sup> Pennsylvania is part of a regional energy market, and electricity flows across the path of least resistance, including across state boundaries. However, Pennsylvanians shouldn't accept increased energy capacity prices without any assurance that these increases will result in new generation resources being built or that they will be built in Pennsylvania.

## Put the Power to Address Resource Adequacy Back in Pennsylvania's Hands

Pennsylvania's decades old energy policies need to be updated to give the Commonwealth tools to help insulate customers from price volatility and poor reliability if the market fails to provide adequate future power supplies. EDCs have a legal obligation to provide reliable electricity to customers at reasonable cost. IPPs within PJM have no such responsibility to Pennsylvania consumers. They choose to operate or not solely based on economics.

Legislative changes that will meaningfully address resource adequacy issues if the market fails to incentivize the construction of needed generation include:

- **New options for generation development** by enabling EDCs to invest in generation as one solution to address projected supply shortfalls and reduce price volatility for consumers. This includes utility ownership, as a backstop to the market, or long-term resource adequacy agreements that support the development of new generation resources in the state.
- **Ensuring that generation is built in the territory of a Pennsylvania EDC**, supporting local demand growth and bolstering reliability for customers while providing economic development opportunities and family-sustaining job creation in the Commonwealth.
- **Returning profits to customers** by ensuring that net revenues received by an EDC with generation participating in PJM markets be passed through to all customers.

If PJM market outcomes sufficiently incentivize the construction of new generation that is adequate to meet customer demand including PJM's reserve margin, then EDCs would not need to exercise this option.

**Accordingly, supporters of the market should have no problem supporting this solution. It's simply an insurance policy that allows EDCs to act if the market fails to deliver.**

Now is the time to ensure that Pennsylvania has the "right tools for the job" to timely address a supply/demand gap if the markets fail to meet that challenge. Pennsylvania consumers cannot afford for us to wait and see what happens.

## Why can't EDCs just create an IPP to build generation?

The resource adequacy issue is not due to a shortage of market participants. It is one of supply and demand and a flawed market design that is failing to incentivize the construction of new generation resources. Simply creating another unregulated IPP that requires sustained higher electricity prices as a signal to build generation and unilaterally recover its investments is not a solution – it's more of the same.

## The Time to Act is Now – The Cost of Inaction is Too Great

Allowing EDCs to be a backstop for the market is a reasonable "no regrets" approach that best positions the Commonwealth to act quickly if the PJM market and IPPs do not do enough to fill the growing gap between energy supply and customer demand.

The Keystone state has a choice to make – either create more options to get generation built now to successfully address the impending resource adequacy crisis while ensuring that Pennsylvania benefits or continue doing nothing other than hoping that the markets work.

The time for action is now. The people and businesses in Pennsylvania deserve a future where reliable energy at reasonable rates is not a question.

## Continue the Conversation:

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### Citations:

<sup>1</sup> PJM, "Energy Transition in PJM: Resource Retirement, Replacement & Risks," Feb. 24, 2023,

<https://www.pjm.com/-/media/library/reports-notices/special-reports/2023/energy-transition-in-pjm-resource-retirements-replacements-and-risks.ashx>

<sup>2</sup> PJM, "Energy Transition in PJM: Flexibility for the Future," June 24, 2024, <https://www.pjm.com/-/media/library/reports-notices/special-reports/2024/20240624-energy-transition-in-pjm-flexibility-for-the-future>

<sup>3</sup> Ethan Howland, "PJM capacity prices hit record highs, sending build signal to generators," Utility Dive, July 31, 2024, <https://www.utilitydive.com/news/pjm-interconnection-capacity-auction-vistra-constellation/722872>