PJM MARKET UPDATE WEBINAR
After the call summary

Compiled: Feb. 3, 2025

Important highlights at a glance

The following is an overview of some important elements of the January 2025 PJM Market Update presentation.

Regulatory update

PJM Base Residual Auction (BRA) for DY 25/26

PJM, with FERC's approval, made several changes to the capacity market structure ahead of this auction that contributed to record-high clearing prices:

- changes to how they modeled weather risks
- how they accredited value for their resources' performance during systems stressing events

Load growth and accompanying reserve margin increases were met with fewer megawatts bidding into the auction, both due to retirement and accreditation, leading to a rate increase of about $241/MW-day across the ISO.

Demand: peak demand on the rise

One of the drivers of the robust capacity outcome, and "what happens next," is load growth. From the 2024 forecast to this year's—PJM is seeing an increase of 2,100 megawatts for the summer peak and an even larger increase for the winter peak. And, looking out to 2030, there is more than 16,000 MW of anticipated load growth impacting the summer peak. Keep in mind: this load growth informs PJM capacity market operations, specifically in how much supply they need to procure to meet reliability targets.

Supply: interconnection queue

Last year PJM made changes to the interconnection queue process to open up/expedite the opportunity for additional supply growth in the region.

- PJM is steadily moving through their backlog.
- The queue remains robust, with nearly 2,700 different projects, totaling nearly 171,000 MW of nameplate capacity, which is more than today's peak load.
- The bulk of the projects remain intermittent: solar, wind, batteries, or some hybrid version of these.

In-progress policy/rules

In-progress regulatory activity in the following areas will impact future market design and outcomes:

- How quickly capacity resources can enter the market
- How certain resources participate in the auctions, whether they are reliability must run resources or intermittent resources or others
- How to provide more opportunities to enter the interconnection queue and ease the speed at which they are studied

Most of these proposed changes seek to decrease volatility or stabilize pricing in the capacity market for the 26/27 BRA, which is scheduled for July 2025.

Federal actions in the energy space

- The Trump administration has appointed an acting secretary at the Department of Energy and an acting administrator for EPA, which are placeholder positions until nominees for those positions are confirmed.
- Commissioner Mark Christie has been appointed chairperson at FERC. Christie, who spent many years at the Virginia State Corporation Commission and as a member of the Organization of PJM States, is in his fourth year at FERC and has deep experience in the electricity and gas space.

Market Fundamentals & Pricing

Natural gas

The U.S. natural gas market was experiencing a low-price environment, mostly due low winter demand and healthy underground storage levels. With the shift in storage going from a surplus to a deficit, we are seeing 12-month strip prices higher than they've been in the past two years.

Production: production was low for most of the year but increased in December due to higher prices and Plaquemines completion. There have been some freeze-offs due to cold temperatures.

Demand:

- Power burn: for the past two years, the numbers have been above the 5-year average due to coal-to-gas switching and are expected to remain elevated for the foreseeable future. Sustained cold weather and power demand growth due to large loads is contributing to this.
- LNG exports: steadily growing and expected to grow substantially more in the next three years. A new record for total LNG exports (15.7 Bcf/day) was set on Jan. 18, with accelerated growth of 10 Bcf/day in three years (versus 10 Bcf/day in 6 years) expected.
- Res/comm: after several years of depressed demand, the cold temps in January have resulted in strong demand.

Storage: we came out of last winter with an abundance of gas in storage. While we're currently sitting at a 2-year surplus to the 5-year average, we are shifting toward a deficit to the 5-year average this winter due to sustained cold.

Impact of fundamentals on pricing: prices were depressed for the last couple of years but since the end of December, prices have become more bullish, due in large part to the sustained cold and increased demand for gas for heating, on top of the other demand sectors. Longer-term, the fast growth of LNG exports is expected to stress the supply/demand balance, which could have a bullish impact.

Challenges for production keeping up with demand:

- The need for increases and improvements in the infrastructure (pipelines) to accept and transport increased production
- The profitability for producers to continue or increase production

Electricity

Pricing: In April, when news about AI-related data center demand growth came out, the market and prices reacted. There was another spike in prices when the July BRA resulted in the highest capacity prices we have ever seen.

After each of these events, prices continued downward. Now, with forward prices averaging above $55/MWh, there's a disconnect between near-term settles and forward pricing. Day-ahead settles for the winter months, which are typically the most expensive months in PJM, have been below $50. This means buying at index pricing could provide value however long-term fundamentals, including demand increases from large load coming online, could increase forward prices even more, making current forwards a value.

Demand: In just one year, from 2023 to 2024, PJM's load growth outlook increased 14%. In terms of the forecasted large load requests, Ohio and Virginia are seeing the largest impact.

Supply-infrastructure: The current interconnection queue is made up of mostly intermittent generation, like solar and wind, but AI data centers need to run 24/7. We are already seeing the price signals from the last capacity auction, indicating that we need more generation. In addition, the transmission infrastructure needs to be able to support additional generation.

Strategy considerations

Natural gas purchasing

The delivered price of natural as is comprised of NYMEX (the commodity price), which is tied to national fundamentals, plus the basis cost, which is tied to both national and regional fundamentals—like weather, power burn demand, and pipeline infrastructure. Basis trends across PJM are similar but pricing can vary greatly.

Last January, NYMEX was in contango (outer years were costlier) and basis was trending downward. Now, NYMEX is backwardated (outer years are cheaper) and basis prices are trending up. Customers behind Transco and Tetco are seeing basis for all terms up $0.50/Dth over last year.

Buying considerations

Instead of locking in at a fixed price in an elevated market, a NYMEX Plus product could be more advantageous:

- Lock in basis now for the term.
- Execute strategic fixed price purchases for some/all of your load for various future periods when the market reaches your target prices.

Example: with the NYMEX 2027 Calendar Strip lower than 2026, many customers have been looking to lock some of that year-over-year discount.

Electricity purchasing

Natural gas continues to be the #1 driver of power pricing, especially given the resource mix in PJM however, the delivered gas price, which is NYMEX plus basis costs, more closely drives power pricing. Other interesting price points:

- Through 2026, gas pricing is increasing at a faster rate than power pricing. The extreme/sustained cold weather is the primary driver of the sizable increase in gas pricing over the next 12 months.
- Despite the cold weather, January index power pricing remained relatively under control. Outside of day-ahead average pricing getting into the mid-$200s/MWh for a couple of days, the rest of the month was consistently seeing index pricing in the mid-$40s/MWh.
- Since last year, power pricing for 2027 forwards has been rising at a faster rate than gas pricing, likely due to the expected load growth from data centers and supply/demand uncertainty.

Buying considerations

Looking at historical pricing, and considering forwards and fundamentals, a layered purchasing strategy could be in your best interest. This will allow you to capitalize on favorable near-term prices, while also actively reducing future price risk without having to lock in a high fixed price now.

A common strategy in the current market for customers with a near-term start is to fix 50 to 75% of their first 12 months, as well as 25-50% of the outer years. This approach helps to partially protect against potential rising prices from the data center load, while providing the flexibility to execute additional forward purchases for the outer years when/if those terms dip. You can even set a strike price for forward terms so you know when to take action.

Other benefits of a layering strategy

- Seamlessly incorporate energy services into your strategy, like peak load management or demand response, which can help you lower your overall costs.
- Independently and flexibly manage your non-commodity cost components by either wrapping them into a fixed adder or passing them through at cost—or a combo of both. This allows you to manage risk and risk premiums to meet your tolerance.

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