New York ISO
Independent System Operator

EXPLAINER

Impact of National & Global Conditions on

Electricity Prices in New York

January 2026

New York Power Prices Mirror National Trends: Gas Costs and Supply Constraints Drive Electricity Price Volatility

As we pass the midway point of the 2020s, one trend in the energy sector has stood out: energy price volatility.

Over the last five years, according to analysis by Lawrence Berkley National Lab (LBNL), national-average retail electricity prices increased sharply from 2019 to 2024, rising by 23%.[i] But, as the LBNL report points out, electricity price volatility is a direct result of volatility in the market for natural gas.

The LBNL analysis explains that natural gas prices experienced dramatic swings: increasing sharply in 2022 following the onset of the Ukraine-Russia war and falling steeply through 2024. Further, data shows that "the states most dependent on natural gas experienced some of the greatest increases in retail electricity prices through 2022–2023, followed by some of the largest price decreases." [ii]

In New York, where natural gas is the primary fuel for roughly half of the electricity generated in the state, the wholesale price of electricity has mirrored these recent national trends. The wholesale price of electricity in New York reached a record low in 2020, largely the result of reduced demand due to the COVID-19 pandemic. Natural gas prices were similarly suppressed. But by 2022, with economies recovering and demand for energy rising, the record low prices for electricity were replaced with near-record high prices.

Over just two years, the wholesale electricity price in New York climbed from the record low of $25.70/MWh to $89.23/MWh in 2022, directly reflecting changes in natural gas prices. While both natural gas and wholesale electricity prices in New York eased up following 2022's spike, tight supplies and emerging pressure points have kept prices for these essential commodities higher.

LBNL's analysis notes that several factors influence the extent to which natural gas price changes affect retail electricity prices in a given state, including the state's reliance on natural gas in its resource mix, the presence of pipeline constraints, and the extent to which generators or utilities can successfully hedge fuel purchases.

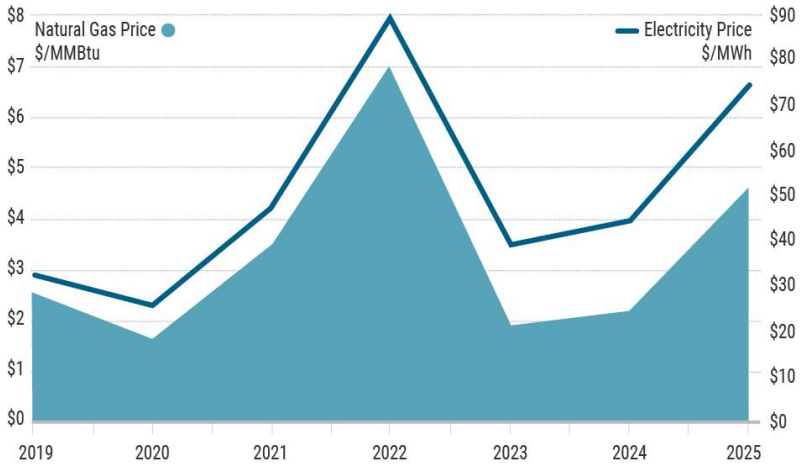
The Link Between Natural Gas and Electricity Prices in New York

Wholesale electricity prices directly reflect the price of the fuel used to produce it. In New York, gas-fired generators often set the market-clearing price for electricity, meaning their production costs heavily influence overall electricity prices. This is particularly noticeable during winter months, when natural gas prices tend to rise due to increased heating demand. For gas-fired generators, these higher seasonal fuel costs increase production costs, causing electricity prices to spike even though winter electricity demand is typically lower than demand during summer months.

In 2020, when New York wholesale electricity prices reached a record low, natural gas prices were also historically low, trading at an average annual price of $1.64/MMBtu at the Transco Zone 6 pricing hub, where most of the state's gas-fired capacity procures its fuel. By 2022, the average price climbed to $7.01/MMBtu, driving up the wholesale price of electricity.

Throughout 2025, elevated gas prices continued to contribute to higher wholesale electricity prices. The average 2025 gas price at Transco Zone 6 was roughly 120% higher than in 2024—trading at an average price of $4.64/MMBtu in 2025 compared to $2.10/MMBtu in 2024. The result was significantly higher wholesale prices for electricity as well—with an average price of $74.40/MWh throughout 2025, compared to $41.81/MWh for 2024.

Figure 1: Average Gas and Electricity Prices in New York: 2019-2025



Continued Upward Pressure on Gas Prices Expected

Heading into 2026, higher fuel costs are expected to persist. In October 2025, the New York State Public Service Commission (PSC) reported that residential electricity bills were likely to be 1.4% higher than last winter while gas customers could expect to pay 8% more.[iii]

According to the U.S. Energy Information Administration's (EIA) December 2025 Short-Term Energy Outlook (STEO), which provides insights into the energy market's near-term perspective, spot prices for natural gas this winter were expected to be about 22% higher than last winter.[iv] EIA noted a key driver for its forecasted increase from last winter was that early December temperatures were colder than expected. But EIA subsequently revised that winter forecast through its January 2026 STEO, which noted milder-than-normal weather is expected throughout January, leading to less demand than previously anticipated and resulting in lower price forecasts than in prior December report. The January gas price revision results in prices comparable to last winter.[v]

Clearly, winter temperatures play a critical role in gas price projections throughout the winter season. But EIA's monthly reports identify another factor behind rising natural gas prices that may contribute to sustained higher prices: the growth of gas exports.

Historically, natural gas was largely a domestically sourced product, with a network of pipelines enabling delivery across much of North America. Export capabilities were limited. Following a sustained period of increased U.S. gas production stemming from hydraulic fracturing, which led to significantly lower prices for natural gas, federal policy moved to facilitate the export of liquefied natural gas (LNG) to overseas markets.

EIA's January STEO noted that LNG exports in 2025 increased by roughly 26% compared to 2024 exports, growing to an estimated 15 billion cubic feet per day. For context, U.S. residential gas customers consume approximately 12 billion cubic feet of gas per day. **In other words, the U.S. is forecast to export more natural gas than residential customers are expected to consume**. Going forward, EIA predicts that LNG exports will continue to grow to as much as 16 billion cubic feet per day in 2026, or about 33% more than LNG export levels from only two years ago.[vi]

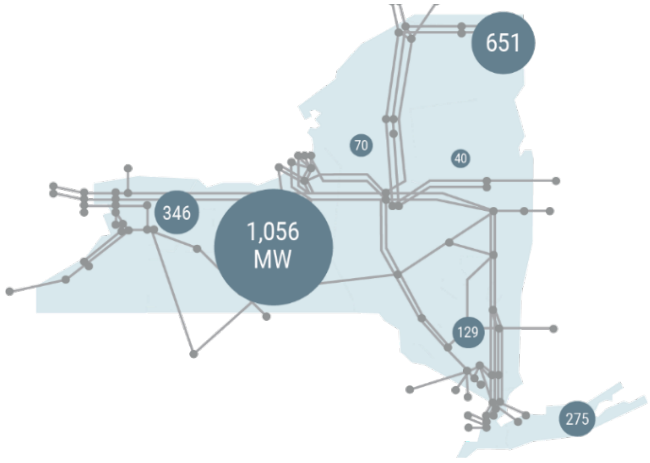
One result of the growth in exports is that U.S. gas prices are more closely tied to global gas markets and circumstances than they have been historically. A 2024 Harvard University research paper found that the "surge in LNG exports has reconnected U.S. gas prices to world market prices, after a hiatus of 'shut-in' fracked gas."[vii] The ability to export gas overseas means producers can sell their product in more lucrative markets, placing upward pressure on domestic prices.

A 2024 DOE study concluded that the price of natural gas could increase by as much as 31% by 2050 due to increasing LNG exports.[viii] While DOE's study notes that increased domestic gas production could dampen the long-term price impact of rising exports, EIA's January STEO notes that growth in gas demand is outpacing production growth, led by expanding exports and more natural gas consumption in the electric power sector.[ix]

EIA's outlooks also note that natural gas will remain the dominant fuel for power generation and predict natural gas price increases, driven by stronger demand, will continue to place upward pressure on wholesale electricity prices in the coming years.

EIA also notes that electricity generation is projected to grow by 1.7% in 2026, fueled by rising demand from data centers and large industrial loads.[x] In New York, over the next ten years the NYISO expects more than 2,500 MW of new demand associated with large load customers, including data centers and chip manufacturers. This is in addition to the expected growth in demand associated with building and transportation electrification efforts, which are forecast to add more than 6,500 MW of new demand by winter 2034-35. Absent new supply resources to accommodate demand growth, the combination of increased demand for electricity and higher fuel costs to generate it contributes to higher wholesale prices.

Figure 2: Expected Demand from Large Load Customers by 2035



Aging Generation, Tightening Electricity Supply Margins Impact Prices

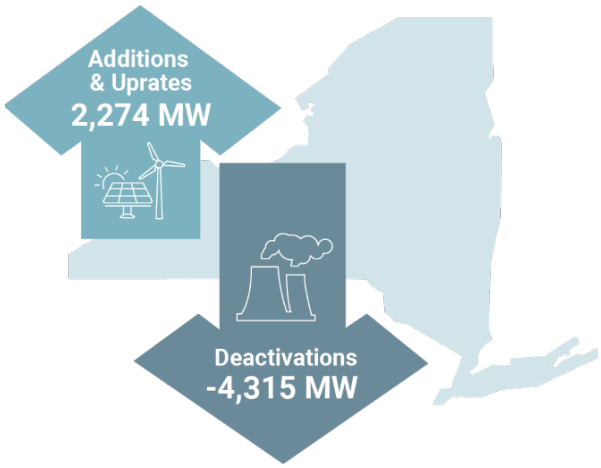
While natural gas prices are a significant factor contributing to recently elevated electricity prices, longer-term trends such as shrinking reliability margins and increasing reliance on older and less efficient generators are compounding pricing outlooks.

As highlighted in NYISO's *Power Trends 2025* report, 4,315 MW of capacity left the system while only 2,274 MW have been added since 2019.

Furthermore, most generation and storage projects currently in the development pipeline have encountered delays unrelated to the interconnection process.

Of 106 projects that have completed the NYISO's interconnection process since 2019, the NYISO estimates that just seven, representing 3,493 MW, have begun construction.

Figure 3: Capacity Additions and Retirements Since 2019



As fossil-fuel plants have retired, new energy projects have struggled to come online fast enough to replace the departing capacity. As a result, the margin between the amount of generation required to operate the grid reliably and the amount of generation available to the grid is narrowing. And, in the absence of new resources coming online, older and more costly generators are being dispatched more frequently, resulting in higher wholesale prices.

Projects That Have Completed NYISO's Interconnection Process Since 2019

Resource Type	Capacity (MW)	Projects
Combined Storage/Solar	780.0	4
Energy Storage	2,058.9	24
Offshore Wind	1,740.0	3
Solar	5,460.5	64
Wind	1,694.8	8
DC Transmission	2,550.0	3
Total	**14,284.2**	**106**

New York's generation fleet is among the oldest in the country. Its resources rank among the oldest or second oldest among natural gas steam turbines, combustion turbines, and combined cycle technology types deployed across the country. This is particularly apparent in New York City where the average age of a steam turbine is 65 years. The state's Nine Mile Point 1 and Ginna nuclear facilities are also the two oldest operational nuclear units in the country.

Older generating units incur significantly higher costs than new units, due largely to lower efficiencies that increase the amount of fuel needed to generate power and escalating operations and maintenance costs that are factored into wholesale market offers. These factors directly contribute to higher electricity prices when grid operators must rely on older units. Repowering or replacing them with new and more efficient equipment would alleviate some of the price impact.

Supply chain constraints further exacerbate long-range price pressures. Delays in obtaining components for power plants, transformers, and renewable energy equipment can reduce generation capacity or slow the deployment of lower-cost resources.

The thinning supply cushion we've been tracking is especially concerning during peak demand periods, when reliability risks increase and wholesale prices spike. Absent new resources to supply the grid, surging demand from electrification and data center growth increases our reliance on aging and expensive generation, driving up prices.

How Do These Factors Impact Retail Bills?

Retail prices are the rates charged to end-use consumers by the utility delivering electricity to those customers' homes or businesses. These rates are set at a level to recover the utilities' costs of doing business, including the cost to purchase or generate the electricity needed to supply consumers, the cost of delivering the power, and administrative costs. In October 2025, the PSC reported on electric system readiness and anticipated prices for the 2025-26 winter. The PSC noted that, "… a residential electric customer using 600 kWh per month is expected to pay about $60 per month for supply this winter, up 1.4% from the same period a year ago... Meanwhile, the average residential customer using 719 therms of natural gas can expect to pay an estimated $224 per month during the winter heating season…up 8% from the same period a year ago."[xi] These increases are expected despite the fact that utilities take steps to reduce the volatility of electricity and gas supply prices to residential customers.

In addition to the supply component of the customer bill, retail electricity prices are rising due to infrastructure investments and regulatory requirements. Utilities are investing heavily to upgrade aging infrastructure, expand transmission capacity, and modernize the grid to support New York's clean energy goals under the Climate Leadership and Community Protection Act, signed into law in 2019. While such upgrades are essential for long-term reliability and sustainability, they result in near-term cost increases that are passed on to consumers through higher retail rates.

Managing the Transitioning Grid

The power system is experiencing an unprecedented transition. But as residents and businesses across New York use increasing amounts of renewable electricity to power their lives and livelihoods, they expect reliable and affordable electricity. Investments in upgrading and modernizing the energy grid, while necessary for reliability and efficiency, can also lead to higher costs for consumers in the near term. Disruptions in the supply chain for goods and material to build out and strengthen the grid and inflation contribute to rising energy costs.

Components of the Retail Electricity Bill

- **Supply Charges:** In New York, each utility procures electricity to serve consumers through a combination of purchases from the wholesale electricity markets administered by the NYISO and directly from suppliers. How each utility procures electricity supply varies and is subject to oversight by the state PSC.
- **Transmission and Distribution Costs:** Expenses related to delivering electricity from power plants to consumers, including maintenance of power lines and supporting equipment and infrastructure.
- **Administrative and Operational Costs:** Costs associated with billing, customer service, and other operational activities of the utility or retail provider.
- **Taxes and Regulatory Fees:** Government-imposed taxes and fees that support state-sponsored energy programs, resource development, and other regulatory requirements.
- **Profit Margins:** Utilities include a profit margin to cover business risks, investment costs for new infrastructure and costs for maintaining aging infrastructure.

Rising electricity prices consumers across the nation are experiencing are the result of several interrelated factors of a modern economy and a grid in transition. Fuel cost volatility, increasing demand due to economic development and new technologies, infrastructure upgrades, and supply chain challenges are all contributing to higher costs.

Being aware of factors like seasonal demand, grid maintenance and inflationary drivers, can help consumers anticipate potential price changes. Knowing the components of the electric bill and the drivers behind cost increases, like fuel prices, infrastructure investments, and demand fluctuations, can help consumers and policymakers make informed choices.

The NYISO's open, transparent, and competitive markets continue to deliver the least-cost electricity supply available to consumers. While the NYISO does not control the many factors that have caused prices to rise, our competitive energy markets and planning processes work together to prepare for grid reliability, operate the grid efficiently, and deliver least-cost electricity prices for consumers.

Our planners work closely with state and federal regulators, stakeholders, state agencies and lawmakers to identify solutions to meet these looming challenges.

As noted in recent NYISO planning reports and the latest *State Energy Plan*, investments in existing gas infrastructure—replacing aging gas plants with cleaner, cutting-edge technology—can ultimately reduce emissions, improve grid reliability, and lower overall system costs. This is a true "all of the above" approach: cleaner gas working in tandem with aggressive renewable deployment to deliver a resilient, affordable, and greener future.

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[i] *Factors Influencing Recent Trends in Retail Electricity Prices in the United States*; Wiser et al., Lawrence Berkley National Lab, The Electricity Journal, 2025.
[ii] *Factors Influencing Recent Trends in Retail Electricity Prices in the United States*; Wiser et al., Lawrence Berkley National Lab, The Electricity Journal, 2025.
[iii] Utilities Prepared to Meet Demand for Electricity and Natural Gas During Winter, NYS PSC, October 16, 2025
[iv] Short-Term Energy Outlook, U.S. Energy Information Administration, December 2025
[v] Short-Term Energy Outlook, U.S. Energy Information Administration, January 2026
[vi] Short-Term Energy Outlook, U.S. Energy Information Administration, December 2025
[vii] The Market and Climate Implications of U.S. LNG Exports, Stock, James A., March 2024
[viii] Domestic Energy, Economic, and GHG Assessment of U.S. LNG Exports, US DOE, December 2024
[ix] Short-Term Energy Outlook, U.S. Energy Information Administration, January 2026
[x] Short-Term Energy Outlook, U.S. Energy Information Administration, December 2025
[xi] Utilities Prepared to Meet Demand for Electricity and Natural Gas During Winter, NYS PSC, October 16, 2025

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