15 January 2026

PJM trims near-term load forecast on stricter data center vetting, economic outlook

The PJM Interconnection scaled back its load growth forecast through 2032 compared to last year's estimates, but the largest U.S. grid operator expects electric demand to surge past those expectations through the next decade, according to an annual report released Wednesday.

PJM expects its summer peak load will grow by 3.6% a year to about 222 GW by 2036, up from its previous 3.1% forecast. The increase totals about 65.7 GW over the next 10 years.

In a change that affects PJM's upcoming capacity auction, the grid cut its peak demand forecast for the summer of 2028 by 4.4 GW, or 2.6%. It also lowered its forecast for the summer of 2027 by about 4 GW, reducing a reserve margin shortfall for that capacity year to about 2.6 GW.

PJM's reduced near-term load forecast was driven by updates to electric vehicle and economic forecasts and stricter vetting of planned data centers and large loads, according to the grid operator. Those changes reduced PJM's peak load forecast for this summer by 0.7% from large loads, 0.5% from economic activity and 0.1% from EVs compared to the last long-term load forecast report, PJM said in a press release.

Changes From 2025 Long-Term Load Forecast

Year	Summer Peak (MW)	Change From 2025 Long-Term Load Forecast (MW/%)	Year (Winter Season Dec. – Feb.)	Winter Peak (MW)	Change From 2025 Long-Term Load Forecast (MW/%)
2027	160,451	-3,735 (-2.3%)	2026/27	142,536	-4,155 (-2.8%)
2028	165,567	-4,414 (-2.6%)	2027/28	147,807	-5,759 (-3.8%)
2029	171,530	-4,564 (-2.6%)	2028/29	153,434	-6,186 (-3.9%)
2030	183,008	-875 (-0.5%)	2029/30	160,126	-7,111 (-4.3%)
2031	191,017	-1,630 (-0.8%)	2030/31	172,202	-3,994 (-2.3%)
2035	216,872	+6.949 (+3.3%)	2034/35	199,622	+1,477 (+0.1%)

PJM summer peak load forecasts

The grid operator's 2026 forecast is lower in the nearterm than last year's forecast. PJM uses its annual load forecast for transmission planning and to help determine how much capacity it should buy in its capacity auctions. PJM's next base capacity auction, for the 2028/29 delivery year, is set to start June 30. PJM's downward revisions to its load forecast don't indicate weakening demand for electricity, according to Jefferies equity analysts.

"We read the load revisions as reflective of pushouts/delays, NOT weakness in demand," they said in a note Wednesday. "While we expect a 3-4 GW improvement in shortfall for [the] next two auctions, [the] market will still fall short — an accelerated backstop procurement is the way to go." Even if PJM secures an additional 10 GW in a procurement process, capacity prices will "comfortably clear" at the maximum price of about $530/MW-day in PJM's next two capacity auctions, the analysts said.

Compared to last year's forecast, PJM increased its 2031 summer peak load forecast for the Dayton Power and Light zone by 27%, or 1 GW, the Commonwealth Edison zone by 16.5%, or 3.7 GW, and the PECO Energy zone by 5.1%, or 0.5 GW. In the same year, it cut its forecast for the American Electric Power zone by 10.4%, or 3.7 GW, the American Transmission Systems Inc. zone by 8.1%, or 1.2 GW, and the Pennsylvania Electric zone by 6.1%, or 0.2 GW. The PJM zones with the strongest 10-year average annual summer peak growth forecasts are: PPL Electric at 6.4% (up from 5.9% last year); Dominion at 5.4% (down from 6.3%); AEP at 5.3% (down from 5.5%); DPL at 5.2% (up from 1.2%); and ComEd at 3.9% (up from 1.6%), according to PJM's report.

After PJM stakeholders failed to agree last year on reforming the grid operator's processes for adding large loads to its system, PJM's board is expected to "outline its determination of a path forward on the [Critical Issue Fast Path] issues in the next few weeks," PJM said in the news release. Reforms may include changes to PJM's process for considering large load forecasts.

Insidelines PJM
http://insidelines.pjm.com/

15 January 2026

Record breaking auction for offshore wind secured to take back control of Britain's energy

Britain has taken a monumental step towards ending the country's reliance on volatile fossil fuels and lowering bills for good, by delivering a record-breaking offshore wind result in its latest renewables auction.

The results deliver the biggest single procurement of offshore wind energy in British and European history - confounding the global challenges facing the industry - a major vote of confidence in the UK's new era of energy sovereignty and abundance. The government inherited the fiasco of the previous government's failed Auction Round 5, in which not a single offshore wind project was secured. The last auction round, AR6, got the industry back on its feet. Now this auction round, known as Contracts for Difference AR7, has secured a record capacity of 8.4GW of offshore wind which will generate enough clean electricity to power the equivalent of 12 million homes. The ground-breaking result puts Britain firmly on track to achieve its clean power mission by 2030.

These results show offshore wind is cheaper to build and operate than new gas. In new figures published today using the LCOE industry metric, the cost of building and operating a new gas fired power station is £147 per megawatt hour. By contrast, the results for fixed offshore wind in today's auction were £90.91 per megawatt hour on average - or £65.25 in the commonly used benchmark of 2012 prices - 40% cheaper than the cost of building and operating new gas.

This auction will unlock around £22 billion in private investment, supporting around 7,000 jobs, bringing growth and good jobs to all regions of the country – and particularly to the country's industrial heartlands. Clean power is also essential to tackle the climate crisis, the greatest long-term threat the country faces.

Projects have won in every part of the United Kingdom - including fixed offshore wind in:

- Dogger Bank South off the coast of Yorkshire and Norfolk Vanguard off East Anglia – two of the largest offshore wind farms in the world, supporting thousands of jobs;
- Berwick Bank in the North Sea - the first new Scottish project since 2022 and the largest planned offshore wind project in the world;
- and Awel Y Môr - the first Welsh project to win a contract in more than a decade.

These results also represent major progress in our efforts to lead the world in the emerging technologies of the future, floating offshore wind. Winning projects include Erebus, in the Celtic Sea, and Pentland in Scotland, backed by pioneering investment from Great British Energy and the National Wealth Fund.

The auction round has secured major infrastructure projects which will be drivers for growth and prosperity in local communities for decades to come. As Britain races to meet rising electricity demand, expected to more than double by 2050, and cut energy bills, these results and new analysis published today shows that offshore wind, alongside solar and onshore wind, remain cheaper to build and operate than gas generation.

In an increasingly unstable world, by accelerating investment in homegrown clean power, the government is also reducing the UK's exposure to volatile global fossil fuel markets, which have contributed to half of all recessions since the 1970s and in 2025 alone, saw prices spike over 15% within a week due to global price shocks after global instability in the Middle East.

This announcement to build more clean, homegrown power follows measures in the budget to cut people's energy bills, with the government removing an average £150 of costs off energy bills from April this year.

GOV.UK
http://www.gov.uk/

15 January 2026

'World's First' 20 MW Wind Turbine Installed Offshore Wind Turbines

The site where the 20 MW offshore wind turbine was installed is located more than 30 kilometres offshore, in water depths exceeding 40 metres.

The wind turbine has a rotor diameter of 300 metres and 147-metre-long blades, and a swept area equivalent to 10 standard football fields, with the hub height reaching 174 metres, equivalent to a 58-story building. The 20 MW model is expected to generate over 80 GWh of electricity per year, enough to meet the annual electricity needs of approximately 44,000 households, CTG said on 14 January.

The new model also has a lightweight design, with the weight per megawatt of the entire unit (including the nacelle, hub, and blades) being less than 40 tonnes, which is more than 20 per cent lower than the industry average, according to CTG. The wind turbine's intelligent monitoring system features a multi-dimensional perception and early safety warning system, with integrated LiDAR and blade root load sensors, which ensures autonomous and safe operation of the unit in unattended offshore scenarios, CTG says.

The 20 MW model's offshore installation follows the deployment of the world's first 16 MW offshore wind turbine in the Pingtan waters of Fujian in 2023, also a project by CTG and Goldwind. The two companies and Mingyang Smart Energy are closely following each other in the new single-unit capacity installations. Mingyang installed its 16 MW offshore wind turbine prototype shortly after CTG and Goldwind in 2023, and in 2024, the company installed a 20 MW prototype at an onshore test site in Hainan, China.

The 20 MW turbine was installed as part of the Renewable Energy Technology project under the National Key Research and Development Programme and was selected into the fifth batch of major technological equipment for the first set in the energy field by the National Energy Administration. Under the guidance and support of the National Energy Administration and the Fujian Provincial Development and Reform Commission, it was jointly designed, constructed, and demonstrated by the Three Gorges Group and Goldwind Technology.

Offshore
http://www.offshorewind.biz/

16 January 2026

Another US Offshore Wind Project Cleared to Resume Construction

Equinor said on 15 January that its underlying lawsuit challenging the US Department of the Interior’s (DOI) suspension order will continue to proceed.

“Empire Wind will now focus on safely restarting construction activities that were halted during the suspension period. In addition, the project will continue to engage with the U.S. government to ensure the safe, secure and responsible execution of its operations”, the company said.

Empire Offshore Wind LLC, an Equinor subsidiary, filed a civil suit against the order that suspended construction on five offshore wind projects, including its Empire Wind 1, on 2 January 2026. As part of that case, the company filed for a preliminary injunction to allow construction to continue while the litigation proceeds. Located 25-48 kilometres (15-30 miles) southeast of Long Island, Empire Wind 1 will comprise 54 Vestas 15 MW wind turbines and is planned to produce first power in late 2026, with full commissioning in 2027.

The 810 MW Empire Wind 1 has a contract with the New York State Energy Research and Development Authority (NYSERDA) to deliver electricity for New York and is the first offshore wind farm to connect to New York City’s grid.

On 9 January, New York Attorney General (AG) Letitia James also filed lawsuits against the DOI’s stop-work order for two of the state’s offshore wind farms under construction, Empire Wind 1 and Ørsted’s Sunrise Wind, which together are expected to power more than one million New York homes. The clearance for Equinor to resume Empire Wind 1 construction comes shortly after the US District Court for the District of Columbia granted a preliminary injunction to the joint venture between Ørsted and Skyborn Renewables for the Revolution Wind project, which had only seven wind turbines to install when it was ordered to pause construction by the US government.

Once commissioned, the 704 MW Revolution Wind is set to power Connecticut and Rhode Island, with first power expected to be produced soon. The stop-work order affects five large-scale projects under construction in US federal waters, with Coastal Virginia Offshore Wind (CVOW), Sunrise Wind, and Vineyard Wind 1 still subject to the construction pause and lease suspension.

Offshore
http://www.offshorewind.biz/

16 January 2026

State Grid plans massive investments for 15th Five-Year Plan

State Grid Corporation of China expects to invest 4 trillion yuan ($553 billion) in fixed assets during the 15th Five-Year Plan period (2026–2030), a 40 percent increase over the previous cycle, in order to accelerate the development of a high-quality supply chain for its new power system.

The massive capital expenditure aims to align with China's national climate goals, with the utility giant targeting an annual increase of around 200 gigawatts (GW) in wind and solar capacity within its operating zones.

By 2030, the company expects non-fossil energy to account for 25 percent of total consumption, while electricity is projected to reach 35 percent of terminal energy consumption, it said.

To support this influx of intermittent renewable energy, State Grid plans to optimize the layout of pumped-storage hydropower sites and support the large-scale development of new energy storage technologies. These measures are designed to enhance grid stability and improve the integration and consumption of green power, it said. The utility also intends to consolidate its west-to-east energy transmission networks.

By accelerating the construction of Ultra-High-Voltage (UHV) direct current export channels, the company aims to boost cross-regional and cross-provincial power transmission capacity by more than 30 percent compared to levels at the end of 2025.

China Daily
http://www.chinadaily.com/

19 January 2026

PJM Board of Managers Selects CIFP Proposal to Address Large Load Growth

The PJM Board of Managers has selected a path forward for addressing a groundswell of large load interconnections expected over the coming decade. It announced a framework to speed the development of capacity resources, overhaul load forecasting and conduct a holistic review of how each of the RTO’s markets can better support resource adequacy needs. (See PJM Stakeholders Reject All CIFP Proposals on Large Loads.)

What's Next

PJM staff will conduct an analysis in the first half of 2026, followed by a stakeholder process to create a set of recommendations for the board to consider.

“This decision is about how PJM integrates large new loads in a way that preserves reliability for customers while creating a predictable, transparent path for growth,” said board Chair and interim CEO David Mills. “This is not a ‘yes/no’ to data centers; this is ‘how can we do this while keeping the lights on and recognizing the impact on consumers at the same time?’ We look forward to implementing, along with our stakeholders, these proposals to manage the phenomenal demand growth we are experiencing.”

The proposal is the culmination of the Critical Issue Fast Path (CIFP) process initiated in August 2025 to address large load growth, which resulted in a dozen packages drafted by PJM staff and stakeholders being rejected by the membership in November. The proposal directs staff to accelerate the reliability backstop to procure additional capacity and define how the related costs will be allocated to load-serving entities (LSEs). This includes exploring mechanisms to assign costs to utilities that are capacity deficient.

The board wrote that the current trigger for the backstop, which requires three consecutive capacity auctions falling short of the reliability requirement, is insufficient in light of the 6.6-GW shortfall in the 27/28 base residual auction (BRA). It also noted that FERC’s December 2025 order on co-located loads requested information about proposals to use the reliability backstop to address “acute resource adequacy shortfalls.” The board wrote that the backstop is considered a “transitional measure” to maintain reliability while the holistic market review is ongoing.

The board pointed to a joint CIFP proposal from Amazon, Calpine, Constellation Energy, Google, Microsoft and Talen Energy that included an alternative reliability backstop triggered if a capacity auction clears below 98% of the reliability requirement. It would open an auction for multiyear capacity commitments for new resources or those outside the capacity market. While the board did not mirror the coalition proposal, it wrote that proposals should “specify price, term and quantity as core award parameters.”

PJM’s CIFP proposal requested a second phase of the process to evaluate changes to the reliability backstop and incentives for large loads to bring their own generation or participate in demand-side capacity resources.

A backstop auction was requested by governors of PJM states and the White House in a statement of principles released Jan. 16. It calls for the auction to be conducted by September 2026 to allow “15-year price certainty” for new capacity resources. The costs resulting from the auction should be allocated to LSEs that have not procured their own capacity or agreed to be curtailable. (See White House and PJM Governors Call for Backstop Capacity Auction.)

Another parallel between the statement of principles and the board's proposal lies in the price collar limiting capacity prices to between $175 and $325/MW-day for the 2026/27 and 2027/28 capacity auctions. The statement requested that the collar be extended for two years, while the board requested feedback from stakeholders on such an extension. During a press conference following the announcement of the 2027/28 BRA results, PJM said the auction would have cleared at $529/MW-day without the collar and the Dominion zone would have separated at $542/MW-day.

The board's proposal adopts staff's recommendation to create a bring-your-own-new-generation pathway allowing new capacity paired with large loads to qualify for a fast-tracked interconnection process, expected to be rolled out by August 2026. Large loads exceeding available incremental new resources within an LSE would be subject to curtailment under the proposal, under a model similar to the CIFP proposal sponsored by several state legislators, consumer advocates and the NRDC. The large loads would be curtailed prior to pre-emergency load management, which the board wrote is intended to avoid disrupting other demand response participants.

"Should system conditions over a given period force PJM to invoke its emergency procedures, the board finds it reasonable for certain large loads, including data centers, to move to their backup generators, or curtail their demand, for a limited number of hours during the year to prevent a larger-scale outage for residential and other consumers. Such curtailment would be expected to occur infrequently, for limited durations and only when necessary to prevent broader system impacts, consistent with PJM's longstanding operational practice of avoiding curtailment whenever possible," the board wrote.

The board directed a slate of changes to PJM's load forecasting process, including a pathway for state utility commissions to review large load adjustments (LLAs) submitted by utilities, requirements for utilities to inquire with customers seeking service for large loads about whether they are exploring multiple sites for a single project, and a third-party review of the forecast to identify national trends that may impact PJM's assumptions.

The holistic review of PJM's markets is intended to improve how the energy, reserve and capacity markets create the incentives needed to meet resource adequacy. Staff will conduct an analysis in the first half of the year, followed by a stakeholder process to create a set of recommendations for the board to consider.

"PJM is establishing clear, transparent guardrails for integrating large new loads under defined conditions," PJM Chief Operating Officer Stu Bresler said in the Jan. 16 announcement of the board's proposal. "This proposed course of action will require intense work by all of us in 2026 and involve significant changes. But it's clear that bold action will be required to support the positive growth that is happening throughout the PJM region and the nation."

RTO Insider
http://www.rtoinsider.com/

19 January 2026

China's 2025 power consumption tops 10 trillion kWh for first time

China's annual electricity consumption surpassed 10 trillion kWh for the first time in 2025, the National Energy Administration said on its official WeChat account Jan. 17, cementing the country's position as the world's largest single-country power consumer.

The milestone highlights China's ongoing economic and energy transition, underpinned by robust green infrastructure and a resilient power system, industry analysts said. Total power consumption reached 10,368.2 TWh in 2025, up 5% year over year, driven primarily by the services sector and residential demand, which accounted for 50% of the overall growth. Services sector power use climbed 8.2% to 1,994.2 TWh, while residential consumption rose 6.3% to 1,588.0 TWh. The primary and secondary sectors consumed 149.4 TWh and 6,636.6 TWh, respectively, increasing 9.9% and 3.7% year over year.

Within the services sector, electricity demand for electric vehicle charging and battery swapping surged 48.8%, while power use in IT-related industries grew 17%, reflecting expansion in green mobility and the digital economy. China's annual power consumption now exceeds the combined total of the EU, Russia, India, and Japan, and is more than twice that of the US, the NEA said, noting that the country's power demand has doubled from 5 trillion kWh in 2015, underscoring the scale and speed of its economic transformation.

To support the record demand, China has accelerated the construction of renewable energy capacity and grid infrastructure, the NEA said. By the end of November 2025, the country's wind and solar installed capacity reached 1,760 GW, up 34% year over year. Non-fossil fuel power generation accounted for over 60% of total installed capacity, making it the dominant source of electricity.

China also put four new ultra-high voltage transmission lines into operation in 2025, raising cross-provincial transmission capacity to 370 GW. The country now operates 46 ultra-high voltage lines, enhancing the delivery of clean energy from resource-rich western regions to high-demand eastern and southern provinces. To address renewable intermittency, China has accelerated the construction of energy storage facilities. By the end of 2025, China's pumped hydro storage capacity exceeded 66 GW, with more than 80% of stations having storage capacity of 1 GW or above. New types of energy storage surpassed 100 GW, up more than 30-fold from the end of 2020, NEA data showed.

The breakdown of power use also highlights China's ongoing economic restructuring, the NEA said. The secondary sector (manufacturing) remained the largest power consumer, accounting for 64% of total demand, but growth momentum has shifted from traditional heavy industries to high-end manufacturing. In Zhejiang's Ningbo, electricity use in new energy vehicle manufacturing, aerospace, and advanced equipment sectors all saw double-digit growth. In Jiangsu, annual power consumption by the computer, communications, and electronics industries topped 50 TWh for the first time, overtaking steel and chemicals to lead all manufacturing segments.

Strategic emerging industries in Jiangsu posted an 11.2% increase in power use, outpacing overall manufacturing growth by 7.6 percentage points, evidence of the province's shift toward advanced, intelligent, and green production, the NEA said, citing State Grid Jiangsu data. On the consumer side, the proliferation of EVs pushed electricity demand for charging services up nearly 50% in Hangzhou, where 5,011 charging stations were built in 2025. The digital economy is also fueling regional power growth -- Guizhou's internet data services consumption soared 95% year over year, and the Huawei Cloud data center in Gui'an saw a 56.9% increase.

SP Global
http://www.spglobal.com/

20 January 2026

Australia's Origin Energy to extend operations of NSW coal-fired power plant to 2029

Origin Energy opens new tab said on Tuesday it will extend the operation of all four units of its coal-fired Eraring Power Station to April 2029, to support energy supply in New South Wales state.

The 2,880 MW Eraring power plant had been scheduled to shut down in August 2027. However, a December report by the Australian Energy Market Operator (AEMO) said

Sydney could face blackouts in the second half of this decade if the plant retires as planned. Australia is targeting 82% of its electricity needs to be fulfilled via renewable energy by 2030.

"Our decision to keep Eraring operating until April 2029 provides more time for renewables, storage and transmission projects to be delivered, and reflects uncertainty regarding the reliability of Australia's aging coal and gas fleet," Origin CEO Frank Calabria said in a statement. The power producer said it does not intend to invest in any major maintenance overhauls ahead of the plant's retirement in 2029.

Origin said the battery development project at the Eraring plant started commenced commercial operation in late 2025, with the final stages expected to come online in the first quarter of 2027. The plant supplies around 25% of the state's power and its government made an initial agreement with Origin in 2024 to underwrite Eraring until the initial closure date of August 2027, although the company has not opted to use government funds as yet.

"My number one job is keeping the lights on and putting downward pressure on power prices," NSW Energy Minister Penny Sharpe said in a statement. "Since the election, we have increased the amount of renewable energy capacity in operation by almost 70%. That's equivalent to Eraring's capacity," Sharpe said, referring to the New South Wales state election in 2023.

Last week a separate coal plant in Queensland suffered an outage which Clean Energy Council CEO Jackie Trad said underlined the urgency of getting more renewables into the grid to replace Australia's ageing coal fleet, which has an average age of 38 years. "Every renewable energy, storage and transmission project that reaches delivery reduces our reliance on ageing coal and moves the system closer to being cleaner, more affordable and more reliable," she said.

Reuters
http://www.reuters.com/

21 January 2026

TEPCO to review commercial operation of suspended reactor in central Japan

Tokyo Electric Power Company says it will review the process to resume the commercial operation of the No. 6 reactor at its Kashiwazaki-Kariwa nuclear power plant, after reactivation was suspended due to a malfunction earlier this month. On January 21, TEPCO reactivated the No.6 reactor at the plant in the central Japanese prefecture of Niigata. But about 29 hours later, the operator halted the reactor after an alarm sounded during the extraction of control rods. TEPCO has been investigating the cause, including sending components related to the control rods to the maker for inspection.

The head of the plant, Inagaki Takeyuki, told reporters that no abnormalities were found in inspections of the electrical components. He said the company is checking whether any problems are occurring under conditions similar to actual operation. Inagaki added that he has mostly identified the cause and he hopes to explain the situation in the near future. The operator plans to resume commercial operation on February 26. But Inagaki said he will review the resumption process based on findings of the investigation. He also said he will announce the timing of reactivation after the investigation results are compiled. It is the company's first reactor to go back online after the disaster at the Fukushima Daiichi nuclear power plant in 2011.

NHK World
https://www.nhk.or.jp/

21 January 2026

The success of green energy in Sweden and Finland sends her to the knockout

The boom of wind farms in Sweden and Finland is turning against them. Reduced electricity prices bankrupt the owners of green generation. The average annual wholesale price of electricity fell in Sweden to 16-60 euros per MWh, and in Finland to 41 euros. These are the lowest prices compared to the cost before the energy crisis. At the same time, the first victims were those who caused prices to fall.

The boom in wind energy has turned into a crisis for her in Sweden and Finland. According to Tekniikka&Talous, the time has come for bankruptcies and complete stagnation. So, if last year 1.1 GW of wind power plants were built in Finland, then this year they are not planning any. The Finnish Renewable Energy Association explains the situation with the situation in neighboring Sweden, where Aldermyrberget and Kalix Wind went bankrupt in 2025.

According to Green Power, wind and solar generation account for 26% of electricity production in Sweden and investor interest has faded.

"Unlike the previous two quarters, one turbine order was placed in the third quarter. In total, the order amounted to 25 megawatts (MW). Despite the relatively small order size, this is a positive signal compared to previous months. However, market signals for investments in renewable energy sources remain weak and need to be strengthened to continue growth," Green Power reports.

Low prices are beginning to affect Finland as well. In December, Estonian Enefit left the local market, selling a 72 MW plant. In part, the crisis in both countries is due to the fact that in Scandinavia, state support programs for green energy are being curtailed and it becomes difficult for them to survive in market conditions, unless they receive a large corporate contract.

EA Daily
http://eadaily.com/

22 January 2026

Solar met 61% of US electricity demand growth in 2025

Solar energy met nearly two-thirds of the growth in US electricity demand in 2025. According to a report from Ember, solar generation increased by 83 TWh, a 27% increase over 2024. US electricity demand rose by 3.1% in 2025. This was the fourth-largest rate of increase in the last decade. Solar now generates 8.5% of all US electricity, said the report.

Solar generation grew most in regions where demand rose the fastest. In Texas and the Midwest, solar growth met 81% of the increase in electricity demand. In the Mid-Atlantic, solar met 33% of the demand rise. In Florida, solar growth exceeded demand growth, leading to a decrease in fossil fuel generation. In the Southwest, Northwest, Southeast, and California, solar met nearly all the rise in demand.

The rise of batteries is changing solar from a daytime resource to dispatchable all-day electricity. Battery capacity additions grew 133% in 2025, reaching 26 GW, said the report.

In California, utility-scale solar and battery generation rose 58% over the last six years, but generation during the sunniest hour of the day only rose 8%. This indicates that the majority of new solar energy is being stored and delivered during the evening, said Ember. While generation reached record levels, new utility-scale solar capacity additions were 6% lower than in 2024. The report attributes this to project delays caused by tariff uncertainty and long wait times for grid connections.

The residential market also saw a slowdown. California, the largest residential market, saw lower contributions from behind-the-meter systems following changes to net metering rules. Ember’s report said that solar is only beginning to scale in most of the United States. There is currently no “duck curve” at the national level. Non-solar electricity generation needed during the day is still higher than what is needed overnight.

During peak sun hours, solar provides 20% of US electricity generation on average, said the report. While California and Nevada have solar shares of 37% and 34%, 37 states still have a solar share of less than 10%.

New Mexico was the fastest-growing state for solar share, rising from 7% to 17% in the 24 months ending October 2025. The report concluded that solar has the potential to meet 100% of demand growth as costs continue to fall and battery storage scales.

Pv-magazine
http://www.pv-magazine.com/

23 January 2026

Turkey Plans to Launch Its First Offshore Wind Power Tender by End of 2026

Recently, İbrahim Erden, President of the Turkish Wind Energy Association (TÜREB), stated that Turkey is preparing to hold its first offshore wind power tender by the end of 2026, with the goal of installing the first offshore wind turbines between 2030 and 2031.

He reviewed the completion of the Renewable Energy Resource Zone (YEKA) tenders in 2024 and 2025, which provided a total capacity of 2,350 megawatts to investors across the two rounds. Erden emphasized that holding YEKA tenders regularly and predictably is crucial for boosting investor confidence. He indicated that an annual addition of 1,000 to 1,500 megawatts of new installed capacity is expected to be maintained in the coming years. Foreign investor interest is gradually increasing, and this momentum will further strengthen if supported by YEKA projects and additional capacity allocations.

He noted that YEKA projects awarded in previous years will begin operation from 2025 onwards, with more projects expected to come online in 2026. Taking all factors into account, Turkey is expected to achieve over 2,000 megawatts of new wind power capacity additions by the end of 2026.

World Energy
http://www.world-energy.org/

24 January 2026

Massive winter storm strains US power grid as operators scramble to avoid blackouts

As a massive winter storm barrels across the U.S., power grid operators are taking extraordinary steps to keep the lights on and avoid rolling blackouts.

The storm, stretching more than 2,300 miles, has triggered sharp price volatility in electricity markets and forced some regions to temporarily lean on oil-fired generation to meet demand, Reuters reported. PJM Interconnection, the nation's largest regional power grid serving 67 million people across the East and Mid-Atlantic, saw wholesale electricity prices briefly surge above $3,000 per megawatt-hour early Saturday, up from under $200 earlier in the day, Reuters reported.

In New England, fuel oil generation has ramped up to help the region conserve natural gas, its primary fuel source. At the center of the strain is the nation's heavy dependence on natural gas delivery, according to Didi Caldwell, founder and CEO of site-selection firm Global Location Strategies.

Natural gas now fuels roughly 40% of U.S. electricity generation, up from about 12% in 1990, making uninterrupted supply critical during extreme weather, Caldwell said.

"What we lack is sufficient capacity to store and deliver gas in real time," Caldwell told FOX Business, noting that the U.S. has abundant reserves. Unlike coal plants, which have historically stockpiled months of fuel on site, most natural gas plants rely on just-in-time delivery. Any disruption to pipelines or infrastructure can quickly threaten power generation, according to Caldwell.

"If anything happens to disrupt the supply of gas to the generating stations, they have little to no practical backup," she said. Winter storms amplify the risk. Gas demand spikes as households crank up heat, while electricity demand surges at the same time, much of it fueled by natural gas. "Every region is exposed, but for different reasons," Caldwell said. "In the southeast, the lack of storage and limited transport capacity means that, during cold snaps, natural gas is competing with itself."

One of the most vulnerable areas is Transcontinental Gas Pipe Line Co. Zone 5, which runs through Georgia, South Carolina, North Carolina and Virginia, according to Caldwell.

"Limited storage and pipeline capacity mean that during major winter events, atypical for this region like the one predicted for this weekend, prices for gas and the transport capacity — basically the reserved volume on the pipeline — skyrocket," she said. The vulnerabilities of this system were laid bare during Texas' deadly Winter Storm Uri in 2021, when frozen gas infrastructure triggered widespread power outages. While upgrades followed, the current storm is among the first major tests of those improvements, Caldwell said.

A similar near-failure occurred in 2022, when gas systems in the Southeast and Mid-Atlantic were pushed to their limits during an Arctic cold event. The grid held only through emergency measures and thin margins, according to Caldwell. Caldwell said long-term solutions will require grid modernization, targeted upgrades to gas delivery and better coordination between gas and electric systems. "Adding more natural gas generation will not fix and may exacerbate the risks," she said. PJM Interconnection did not immediately respond to FOX Business request for comment.

Fox Business
http://www.foxbusiness.com/

26 January 2026

Winter storm grips much of US in snow, ice, Arctic cold

A powerful winter storm spread a paralyzing mix of heavy snow, sleet and freezing rain from the Ohio Valley and mid-South to New England on Sunday, compounded by bitter, Arctic cold gripping much of the U.S. east of the Rockies.

Winter storm warnings were posted for most of the eastern third of the United States covering 118 million people, as the deep freeze strained energy supplies in some areas, and the National Weather Service predicted widespread, prolonged travel disruptions. An estimated 157 million Americans were warned to bundle up against cold ranging from sub-zero temperatures along the Canadian border to below-freezing as far south as the Gulf of Mexico.

The Arctic blast was accompanied by gusty conditions that sent wind-chill conditions — a measure of how cold it feels based on the rate of heat loss from the body — plunging as low as minus 50 degrees Fahrenheit in the northern Plains. Some of the heaviest snowfall, up to one foot or more since the storm developed on Friday, was measured on Sunday in parts of Colorado, Illinois, Indiana, Missouri, New Jersey, New York and Pennsylvania. New York Governor Kathy Hochul said she had mobilized National Guard troops in New York City, Long Island and the Hudson Valley to assist with the state's emergency storm response.

The onslaught of snow, ice and winds hit air travel especially hard, with major carriers forced to cancel more than 11,000 U.S. flights scheduled for Sunday. Ronald Reagan National Airport, located in northern Virginia just across the Potomac River from Washington, was effectively closed altogether.

Airports serving other major metropolitan areas, including New York, Philadelphia and Charlotte, North Carolina, had at least 80% of their Sunday flights canceled, FlightAware data showed. Power outages were widespread across the South, where freezing rain deposited layers of ice up to an inch thick, toppling tree limbs and transmission lines. More than 1 million homes and businesses in eight states from Texas to the Carolinas were without electricity at the height of the storm on Sunday, according to utility data posted online. Tennessee bore the greatest brunt of energy cuts, accounting for about a third of all the outages. More than 800,000 electricity customers remained without power as of 9:29 p.m. EST (0229 GMT).

In parts of the mid-Atlantic, heavy snow early in the day gave way to sleet and freezing rain, adding to treacherous driving conditions and making it more difficult for street crews to safely clear road surfaces. Heavy ice was reported by the weather service to be accumulating across the interior sections of the Eastern seaboard as far south as Atlanta, as the low-pressure system driving the storm moved through the Appalachian Mountains.

Calling the storm "historic," President Donald Trump on Saturday approved federal emergency disaster declarations for a dozen states, mostly in the mid-South. Seventeen states and the District of Columbia declared weather emergencies on Saturday. The Department of Energy on Saturday issued an emergency order authorizing the Electric Reliability Council of Texas to deploy backup generation resources at data centers and other major facilities, aiming to limit blackouts in the state.

On Sunday, the DOE issued an emergency order to authorize grid operator PJM Interconnection to run "specified resources" in the mid-Atlantic region, regardless of limits due to state laws or environmental permits. While the storm system was expected to drift away from the East Coast into the Atlantic on Monday, more Arctic air was forecast to rush in behind it, prolonging bitter cold, icy conditions over the next few days, the weather service said.

"The situation with this storm is pretty unique, just because it's going to stay cold for a period of time," Homeland Security Secretary Kristi Noem said on the "Fox News Sunday Briefing" program. "This ice that has fallen will keep those (power) lines heavy, even if they haven't gone down immediately."

Reuters
http://www.reuters.com/

27 January 2026

RheEnergise commissions first 'high density hydro' long-duration storage in UK

A UK startup has commissioned a pilot energy storage project designed to allow smaller, flexible hydro installations to be built in hills rather than mountains. RheEnergise secured a grant from the UK government to support development of the now operational Cornwood project in Plymouth, England.

The energy system uses a low-viscosity, denser-than-water fluid, but otherwise operates like a typical hydro energy storage plant, pumping uphill when electricity demand is low and discharging when demand is high. The low viscosity and higher density of the fluid mean the system requires two-and-a-half times less vertical elevation than a standard hydro plant, according to the RheEnergise, potentially expanding the number of viable sites for pumped energy storage.

The idea has attracted significant backing from UK and European innovation funds. RheEnergise has secured GBP 8.25 million ($11.3 million) from the UK government, as well as grant support from the European Innovation Council (EIC) Accelerator program. The company aims to have commercial-scale projects in operation within the next three years and is currently progressing potential sites in the United Kingdom, Italy, Poland, Spain and North America.

Pv-magazine
http://www.pv-magazine.com/

28 January 2026

Minister says she can't stop massive Microsoft data center in Amsterdam

Caretaker Minister Mona Keijzer of Spatial Planning says there is nothing she can do to stop a massive new data center in Amsterdam for the sole use of the American tech company Microsoft. “This permit was granted five years ago,” Keijzer (BBB) said during question time in parliament, NOS reports. “So there’s nothing I can do about it anymore.”

Several parties are highly critical of the construction of the data center. “The power capacity is very limited. We believe that this shouldn’t be at the expense of Dutch and local parties,” said CDA MP Jantine Zwinkels.

“The irony is: there are currently 10,000 homes that aren’t being built, businesses on waiting lists that can wait until doomsday, but Microsoft can suddenly do this,” said ChristenUnie MP Pieter Grinwis. “I can’t understand it.”

In 2022, the previous government implemented a nationwide ban on “hyperscale data centers” - data centers with an electricity connection of at least 70 megawatts and a surface area of 100,000 square meters or more. These data centers are typically used by only one company. The rules came following criticism of Meta's plans to build a massive data center in Flevoland. The company behind Facebook, Instagram, and WhatsApp ultimately abandoned the plan.

The data center in Amsterdam has a total connection capacity of 78 megawatts, but consists of three 85-meter-high towers with a surface area of only 23,000 square meters. So even if the permit wasn’t already issued before the ban, the ban would not have stopped it. Once the new data center in Amsterdam uses its full electricity connection, it will consume the same amount of power in a year as a small city. Grinwis thinks it's time for stricter rules. “The definition of a hyperscale facility is both 10 hectares and more than 70 megawatts,” he said. “Isn’t it time to tighten that definition a bit? That it has to be either more than 10 hectares or more than 70 megawatts?”

Keijzer repeated that there was nothing she could do about this. It is up to the new Cabinet to critically examine the rules that are supposed to prevent the construction of enormous data centers in locations where the government doesn’t want them, she told parliament. “I think you can certainly look at it critically, but that’s really up to a new Cabinet.”

NL Times
,http://nltimes.nl/

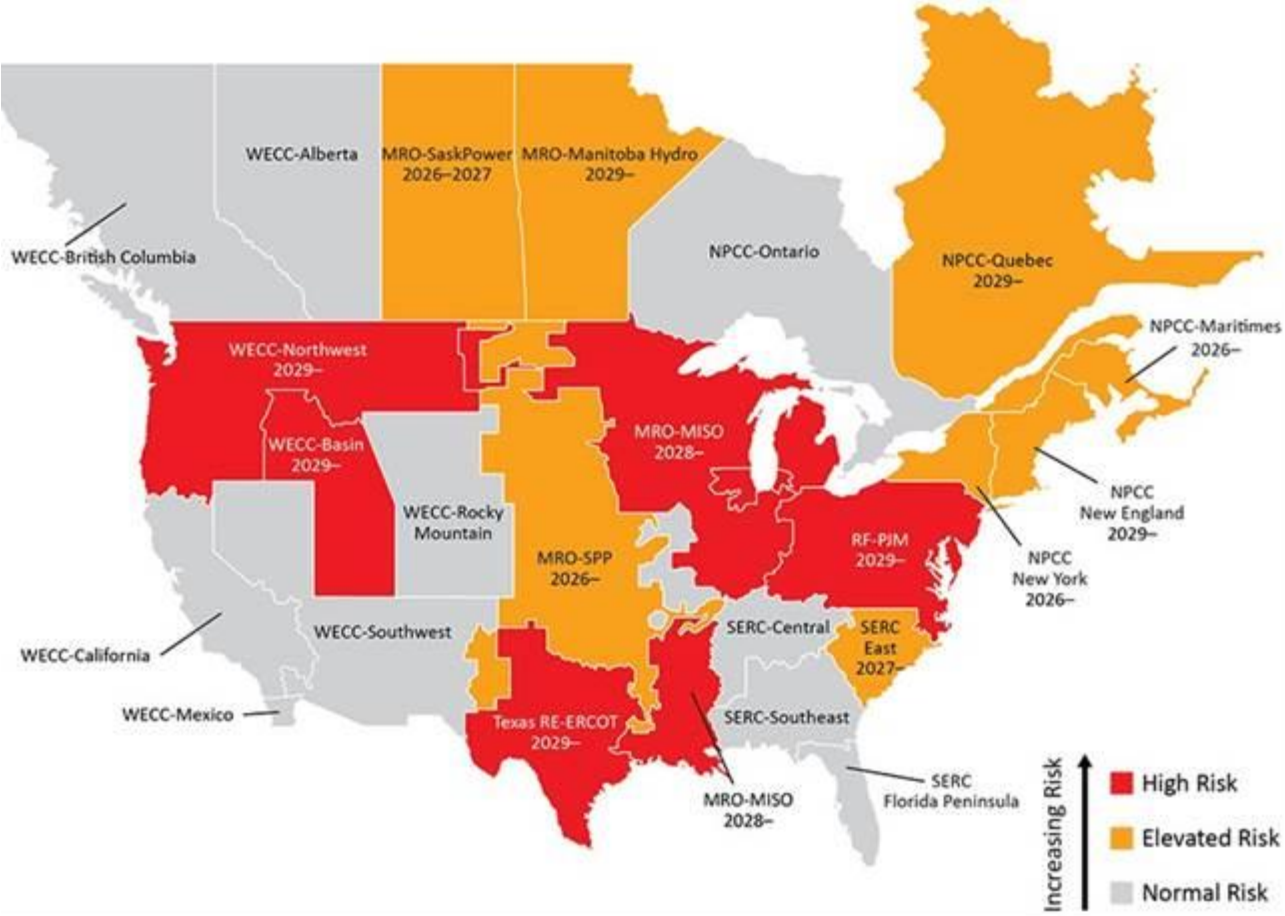
29 January 2026

Resource Adequacy Risks Intensify Across North America as Demand Growth Surges

NERC’s 2025 Long-Term Reliability Assessment (LTRA) and infographic spotlight intensifying resource adequacy risks throughout the North American bulk power system (BPS) over the next 10 years. Summer peak demand is forecast to grow by 224 GW, a more than 69% increase over the 2024 LTRA forecast with new data centers for artificial intelligence and the digital economy accounting for most of the projected increase. Winter demand growth continues to outpace summer demand growth with 246 GW of growth forecast over the next 10 years, reflecting the evolution of electricity usage. Uncertainty and lag in the pace of new resource additions are driving heightened concerns that industry will not be able to keep up with rapidly increasing demand.

"This assessment is not a prediction of failure but an early warning on the trajectory of risk," said John Moura, director of Reliability Assessment and Performance Analysis. "The path forward is still manageable but only if planned resources come online and on time.

The risk of electricity supply shortfalls is increasing during winter conditions, as generators with diverse fuels retire and are replaced predominantly by solar and batteries and natural-gas-fired generators. This trend in resource additions is reflected in the 2025 LTRA, released today, which finds that new battery resource projects have grown to match solar projections. In addition, natural-gas-fired generator additions represent 15% of the projected capacity additions, followed by wind and hybrid at 8% each. While interconnection queues continue to grow, considerable uncertainty surrounds the timing and amount of resource additions.



"As these concerns have grown more acute, more action has been taken by industry and regulators to bolster resources," said Mark Olson, NERC's manager of Reliability Assessments. "Although projected retirements remain high with 105 GW of peak seasonal capacity planned for retirement over the next 10 years, this number has reduced by 10 GW since the previous LTRA. In addition, market mechanisms such as capacity accreditation have been launched, more precisely highlighting the loss-of-load risks posed by a generation mix that has increasing amounts of variable resources. Also, industry is reacting to the changing conditions with growing demand and evolving planning methods that highlight the potential need to keep resources on-line longer than previously anticipated."

To mitigate the reliability challenges over the next 10 years, NERC recommends streamlining infrastructure development (both gas and electric), managing generator deactivations, undertaking robust adequacy assessments, and coordinating electric-natural gas system planning and operations. Specific recommendations include the following:

- Integrated Resource Planners, market operators, and regulators should expedite new resources to meet growing demand and carefully manage generator deactivations.
- NERC, industry, and regulators should understand and manage reliability risks accompanying large-load growth and leverage potential capabilities in new types of loads to provide flexibility to operators during times of grid stress.
- NERC, the Regional Entities, and industry should improve the LTRA by incorporating wide-area analysis, risk scenarios, and criteria to inform stakeholders of future reliability risks.
- Regulators and policymakers should streamline siting and permitting processes to remove barriers to resource and transmission development.
- Regional Transmission Organizations, Independent System Operators, and the Federal Energy Regulatory Commission (FERC) should continue to ensure that essential reliability services are maintained.

Undertaken annually in coordination with the Regional Entities, NERC's 2025 LTRA is the Electric Reliability Organization's independent assessment and comprehensive report on the adequacy of planned BPS resources to reliably meet the electricity demand across North America over the next 10 years. The 2025 LTRA includes a probabilistic assessment and the use of energy risk metrics to identify potential supply shortfalls.

NERC
https://www.nerc.com/