

WORLD POWER SYSTEMS REVIEW

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15 May 2025

FERC Releases 2025 Summer Assessment

The Federal Energy Regulatory Commission today released staff's 2025 Summer Assessment on the outlook for energy markets and electric reliability during the June to September time frame.

The assessment details that if normal operating conditions prevail, all regions of the country will have adequate generating resources to meet expected summer demand and operating reserve requirements; however, margins are getting tighter as generation resources retire and load increases largely due to hyperscale users, such as data centers.

Regions such as Northeast Power Coordinating Council (NPCC)-New England, Midcontinent Independent System Operator (MISO), the Electric Reliability Council of Texas (ERCOT), Southwest Power Pool (SPP) and PJM Interconnection may face a higher likelihood of tight generation availability due to above-normal electricity demand, periods of low wind and solar output, wildfires that disrupt available transfers and generator availability, and retirements of generation capacity.

If anticipated warmer-than-average temperatures occur, the electric grid will likely be challenged throughout the continental United States with increased uncertainty due to weather events, weather forecasting, and energy demand. In addition, load is expected to be higher this summer compared to the past four summers. "We are losing dispatchable generation at a pace that is not sustainable and we are not adding sufficient equivalent generation capacity," FERC Chairman Mark Christie said. "Today's assessment brings that point home, and I'm looking forward to discussing resource adequacy issues in great depth at the technical conference we are having on June 4 and 5 here at FERC."

In addition, wholesale electricity prices are expected to be higher this summer as compared to last summer in most regions, especially in Northeast U.S. The increase in prices is partially due to higher natural gas prices at all major trading hubs across the country because of lower natural gas storage levels due to a colder winter than previous years.

FERC

<http://www.ferc.gov/>

16 May 2025

La interconexión eléctrica Francia-España por el Golfo de Vizcaya alcanza un nuevo hito con la colocación de la primera piedra de la estación de conversión de Cubnezais

El consejero delegado de Redeia, Roberto García Merino, el presidente del Consejo de Administración de RTE, Xavier Piechaczyk, Céline Maquet, subprefecta de Blaye, en representación de Etienne Guyot, prefecto de la región Nouvelle-Aquitaine, y Jean-Luc Desperiez, alcalde de Cubnezais, han colocado este viernes la primera piedra de la futura estación conversora de Cubnezais para la interconexión eléctrica entre Francia y España. El acto marca el avance de las obras iniciadas en 2023 y confirma el cumplimiento del calendario previsto para la puesta en servicio de la línea en 2028.

La futura interconexión, catalogada como Proyecto de Interés Común por la Comisión Europea, permitirá duplicar la capacidad de intercambio eléctrico entre ambos países hasta alcanzar los 5.000 MW, equivalente al consumo de 5 millones de hogares. Frente a los desafíos de la transición ecológica y la soberanía energética de Europa, el objetivo es claro: reforzar la seguridad del suministro eléctrico europeo y aprovechar las capacidades de las redes eléctricas francesa y española para ofrecer una electricidad más segura, asequible y sostenible en ambos sistemas

Esta primera piedra supone un hito importante en el avance de las obras iniciadas en 2023. La estación conversora de Cubnezais, actualmente en construcción en Gironde,

y la de Gatika, en ejecución en Bizkaia, constituirán los dos extremos de la interconexión. Estarán conectadas por un doble circuito de unos 400 km, de los cuales 300 km son submarinos y el resto soterrados, y permitirán interconectar las redes eléctricas francesa y española, transformando la corriente continua en corriente alterna.

En España, en los últimos meses, se ha estado trabajando en la adecuación del terreno para el tramo del trazado terrestre y en el movimiento de tierras de la nueva estación de conversora, que Red Eléctrica desarrolla en Gatika con la obra civil de los dos edificios que la componen. Ambos edificios estarán completamente cubiertos de vegetación para una mejor integración paisajística y un impacto visual limitado. Cerca de la costa, en Lemoniz, también están en marcha los trabajos de la perforación dirigida para el aterraje en el mar, que comenzará en aproximadamente un año y se extenderá hasta 2027.

En Francia, la construcción de esta infraestructura generará beneficios locales para los territorios y empresas: 600 millones de euros, de los cuales 175 millones están localizados en el suroeste (casi el 30%). Los edificios de la estación conversora están en construcción y se prevé que finalicen en 2025. Los equipos eléctricos se instalarán posteriormente, hasta mediados de 2027, para iniciar la fase de pruebas. Más del 50% de las zanjas necesarias para instalar las dos líneas eléctricas ya están terminadas, al igual que las perforaciones en las zonas de conexión entre las partes marítimas y terrestres en Le Porge (Gironde), Seignosse y Capbreton (Landas).

«Las interconexiones, como la del Golfo de Vizcaya, son el camino necesario para lograr un verdadero Mercado Interior Europeo de la Energía, porque de lo que realmente estamos hablando es de un proyecto europeo. En España y Francia estamos comprometidos con seguir trabajando juntos como países y como TSOs para seguir reforzando nuestras interconexiones, también a través de los dos nuevos proyectos previstos a través de los Pirineos. La experiencia nos ha demostrado que todos ganamos», ha destacado Roberto García Merino, consejero delegado de Redeia.

“Esta primera piedra materializa nuestro compromiso con una Europa, energéticamente, cada vez más descarbonizada. Esta nueva interconexión facilitará el acceso a una electricidad más limpia y económica para los consumidores franceses y españoles. Este vínculo adicional reforzará la solidaridad eléctrica entre ambos países, permitiendo cubrir mejor nuestras respectivas necesidades. La cooperación ejemplar con Redeia nos permite dar hoy un paso más y proyectarnos hacia el futuro”, ha señalado Xavier Piechaczyk, presidente del Consejo de Administración de RTE.

Más allá de reforzar la solidaridad y la soberanía energética de Europa, las interconexiones contribuyen a acelerar la transición hacia economías más descarbonizadas. El proyecto del Golfo de Vizcaya es de importancia crucial para Europa: dentro del conjunto de Proyectos de Interés Común, es el que ha recibido la mayor subvención de la UE. La mutualización de medios de producción que permite contribuir a reforzar la seguridad y calidad del suministro eléctrico tanto en Francia como en España. Esta interconexión también favorece una mejor integración de las energías renovables, reduciendo así las emisiones de gases de efecto invernadero, en línea con los objetivos nacionales y europeos.

Las obras están a cargo de la empresa Inelfe, propiedad al 50% de Red Eléctrica y al 50% de RTE, con el apoyo de proveedores europeos especializados como NKT HV Cables y Prysmian Powerlink para la instalación de cables submarinos, el consorcio FASSET para los cables subterráneos, y el consorcio HITACHI ENERGY / VINCI para las estaciones de conversión.

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19 May 2025

Low consumption causes grid failure, power outage in North Macedonia

A grid failure caused a brief power outage in North Macedonia in the early hours on Sunday, May 18. Disruptions at the affected 400/110 kV transformer stations were triggered by high voltage levels in the grid, caused by low consumption, typical for nighttime hours and weekends at this time of year, according to a statement by the country's transmission system operator, MEPSO.

MEPSO said its teams restored normal electricity supply in about an hour and were working to fully normalize the stability of the power system. According to the update, grid instability caused by low consumption at nighttime and on weekends is a problem shared by almost all transmission system operators in the region and around Europe.

At the same time, Bulgarian Minister of Energy Zhecho Stankov said that a grid failure had affected several countries in Southeast Europe, though not Bulgaria. He added that his country's balancing facilities were crucial in stabilizing North Macedonia's grid, restoring supply, and preventing the crisis from spreading further. In Bulgaria, the Electricity System Operator (ESO) is responsible for the transmission network.

He claimed Serbia and Croatia have also experienced problems due to a lack of balancing facilities. "The colleagues from Serbia also had certain difficulties in the morning hours, and we managed to balance them out," Stankov stated.

However, Serbia's transmission system operator Elektromreža Srbije (EMS) told Balkan Green Energy news that the country's grid did not experience any disruptions or outages and that there was no need for assistance from Bulgaria. EMS said it would not specifically comment on the Bulgarian minister's statement because it was unclear what it was referring to. In its reply to Balkan Green Energy News, EMS underscores that there were no consequences for the transmission system of the Republic of Serbia, explaining that EMS, at the request of MEPSO, to facilitate the repairs in North Macedonia, temporarily shut down the 400 kV transmission line between the Vranje 4 transformer station and the North Macedonian border.

Stankov also stressed that solar power plants did not play a role in the crisis, unlike in Portugal and Spain in late April. The grid failure occurred in the early morning hours and amid low renewable energy generation, he said, adding that "renewable energy had no share in the problem." Bulgaria's system remained stable thanks to its generating and balancing capacities, in Stankov's view. He told the press that the country possesses 90% of all the reactive energy compensation capabilities in Southeast Europe.

Bulgaria is working with the European Investment Bank (EIB) to build at least three pumped storage hydropower plants in the Rhodope region, aimed at further enhancing regional grid resilience, Stankov pointed out. The minister vowed to keep the country's grid on standby to support other regional networks in need of stabilization. Stankov revealed that one such project is being developed for the Vacha dam. The other two pumped storage hydropower plants are planned to be built on the Dospat and Batak dams.

BEN

<http://balkangreenenergynews.com/>

18 May 2025

Portugal targets France in power link dispute after blackout

Minister Maria da Graca Carvalho. The move follows the April 28 blackout that left millions across Spain, Portugal, and parts of southern France without electricity for up to ten hours.

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Portugal is reportedly blaming Paris for failing to complete and expand critical electricity interconnections with Spain – shortcomings that Lisbon argues exacerbated the blackout by restricting cross-border energy support. The power outage has been described as the largest in recent European history.

Carvalho claims that Brussels has the authority to arbitrate the matter under EU law, noting that the weak interconnections between France and Spain continue to hamper the bloc's internal energy market.

"We will involve the president of the EC on this to make sure that we are all integrated," she said, expressing hope for a resolution. "This is a European question, it's not a question between the three countries."

She urged the Commission to step in if the internal market is being compromised, emphasizing its power to pressure France into accelerating work on infrastructure. The Iberian Peninsula has some of the lowest energy connectivity levels in the EU, the FT noted. Power links between France and Spain were automatically disconnected to safeguard the wider European grid after Spain's system began to fail.

Earlier this week, Spanish Minister for Ecological Transition Sara Aagesen said an initial investigation had revealed that the chain reaction of grid disconnections were triggered by power generation failures in the provinces of Granada, Badajoz, and Seville. A preliminary technical assessment by Entso-E, the European association of transmission system operators, reported that 2.2 gigawatts of capacity went offline in southern Spain less than a minute before the full system collapse. The root causes of the substation failures remain under investigation.

RT

<http://www.rt.com/>

19 May 2025

Reactor closure marks Taiwan's nuclear exit

Unit 2 of the Maanshan nuclear power plant - Taiwan's last operating reactor - has been disconnected from the grid and will be decommissioned following the expiry of its 40-year operating licence, in accordance with Taiwan's nuclear phase-out policy.

The output of the 938 MWe pressurised water reactor (PWR) was gradually reduced from 13:00 (local time) on Saturday 17 May and was disconnected from the grid at about 22:00, according to the Ministry of Economic Affairs. The reactor was declared in a safe shutdown state about two hours later.

Construction of Maanshan 2 began in February 1979. The unit attained first criticality on 1 February 1985 and was connected to the grid later that month, entering commercial operation three months later. In July 2021, state-run Taiwan Power Company (Taipower) submitted an application to the Atomic Energy Council to shut down the two-unit Maanshan plant. According to existing legislation, the utility must file an application to decommission the units at least three years prior to energy production stopping. Unit 1 of the Maanshan plant - a 936 MWe PWR - shut down on 27 July last year on the expiry of its operating licence.

Taiwan's Democratic Progressive Party (DPP) was elected to government in January 2016 with a policy of creating a "nuclear-free" Taiwan by 2025. Under this policy, Taiwan's six operable power reactors would be decommissioned as their 40-year operating licences expire. Shortly after taking office, the DPP government passed an amendment to the Electricity Act, passing its phase-out policy into law. The government aims for an energy mix of 20% from renewable sources, 50% from liquefied natural gas and 30% from coal.

However, in a referendum held in November 2018, voters chose to abolish that amendment. The Ministry of Economic Affairs said the amendment was officially removed

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from the Electricity Industry Act on 2 December. Nevertheless, then Minister of Economic Affairs Shen Jong-chin said in January 2019 "there would be no extension or restarts of nuclear power plants in Taiwan due to subjective and objective conditions, as well as strong public objection".

Unit 1 of Taiwan's oldest plant, Chinshan, was taken offline in December 2018, followed by Chinshan 2 in July 2019. The 40-year operating licence for Kuosheng 1 was due to expire on 27 December 2021, when it was due to be shut down. However, in May of that year, Taipower announced it would only be able to operate the reactor until June owing to a lack of storage in the unit's used fuel pool. Unit 2 of the Kuosheng plant was shut down in March 2023. The construction of two units at Lungmen began in 1999, but the project has been beset with political, legal and regulatory delays. The completed unit 1 was mothballed in July 2015, while construction of unit 2 was suspended in April 2014.

As Taiwan's last operating reactor, Maanshan 2 had been providing about 3% of its electricity. "This year, four large gas-fired units with a capacity of nearly 5 million kilowatts, including Datan, Hsingda and Taichung power plants, and about 3.5 million kilowatts of wind and photovoltaic power will join the power supply ranks, ensuring that the people have no worries about electricity," the Ministry of Economic Affairs said.

WNN

<http://www.world-nuclear-news.org/>

19 May 2025

Germany drops opposition to nuclear power in rapprochement with France

Germany has dropped its long-held opposition to nuclear power, in the first concrete sign of rapprochement with France by Berlin's new government led by conservative Chancellor Friedrich Merz.

Berlin has signalled to Paris it will no longer block French efforts to ensure nuclear power is treated on par with renewable energy in EU legislation, according to French and German officials. The move resolves a major dispute between the two countries that has delayed decisions on EU energy policy, including during the crisis that followed Russia's full-scale invasion of Ukraine.

"The Germans are telling us: we will be very pragmatic on the issue of nuclear power," said a senior French diplomat involved in the talks. This meant that "all the biases against nuclear power, which still remain here and there in EU legislation, will be removed." "This will be a sea-change policy shift," said a German official. The reversal comes as Merz is seeking to explore ways for Germany to join France's nuclear shield as a deterrent against future Russian aggression. "We are now actually finally open to talk to France about nuclear deterrence for Europe. Better late than never," the German official said.

"It's a welcome rapprochement that will make the topic of energy easier in the EU," said Guntram Wolff, senior fellow at think-tank Bruegel. "Politically, Merz is also thinking about the nuclear umbrella." Berlin's reversal on nuclear power is part of efforts by Merz to revive Franco-German co-operation, a precondition for major decisions at EU level that stalled under former chancellor Olaf Scholz. "When France and Germany agree, it is much easier for Europe to move forward," said Lars-Hendrik Röller, a professor at Berlin-based ESMT business school who was chief economic adviser to former chancellor Angela Merkel. "While several challenges remain, I believe this issue will be solved." Merz, who won elections in February, has been critical of his country's decision to exit nuclear energy in 2011, under party rival Merkel, which he said was depriving Germany of cheap and reliable electricity.

Merz also criticised his predecessor Scholz for shutting down Germany's last three nuclear power stations even as the country was grappling with high energy prices. While he

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does not plan to reopen conventional nuclear power stations, he has vowed to invest in new technologies, including small modular reactors and nuclear fusion, which, unlike fission, produces no long-lived nuclear waste. The new Franco-German entente on energy builds on a groundswell of enthusiasm for nuclear power since gas prices reached record highs following Moscow's war in Ukraine.

It leaves Austria as the only EU state strictly opposed to nuclear power. Countries including the Netherlands and Belgium have recommitted to atomic energy, having previously pledged to shut reactors. In a letter sent to the European Commission on Friday, seen by the Financial Times, ministers from 12 EU member states with nuclear reactors said it was "imperative" that the EU recognised the "complementary nature of nuclear and renewable energy sources". They called for an update to an existing survey of the bloc's nuclear sector to pave the way for governments to give state aid to nuclear projects and send a "clear signal" to businesses and investors about the benefits of atomic power.

Germany, which covered more than 60 per cent of its electricity consumption with renewable energy last year, long opposed Paris' push to label atomic power as "green". France derives about 70 per cent of its electricity from atomic power. Berlin's concerns in part stemmed from concerns that French industry would gain a competitive edge thanks to its 56-strong fleet of reactors, while German industry still struggles with the impact of high gas prices following the cut-off from cheap Russian fuel. It has also been an ideological issue in Germany, where the anti-nuclear Green party were a part of Scholz's government.

The stand-off resulted in long debates over the inclusion of the words "low carbon" — seen as a synonym for nuclear power — across EU legal texts, particularly those relating to renewable power and the production of hydrogen, which Berlin sees as a critical energy carrier for decarbonising German industry. "To ensure our energy sovereignty while respecting national choices, we are calling for an end to all discrimination at European level against low-carbon energies, whether nuclear or renewable," said French President Emmanuel Macron during Merz's trip to Paris on May 7. For example, Germany's new stance means that hydrogen produced from nuclear power should now be treated on par with hydrogen made from wind or solar energy, the French official said.

FT

<http://www.ft.com/>

22 May 2025

ISO Board of Governors approves 2024-2025 transmission plan

The California Independent System Operator Board of Governors has approved the ISO's 2024-2025 transmission plan, recommending 31 infrastructure projects to help meet projected load growth and changing grid conditions.

The plan identifies 28 transmission projects required to reliably supply the increase in forecasted demand related to electrification, particularly in the Greater San Francisco Bay Area, and to address load growth from electric vehicle use. Three additional projects are needed to meet renewable generation requirements established in the state's energy portfolios developed by the California Public Utilities Commission (CPUC).

Altogether, the 31 projects would cost an estimated \$4.8 billion at full buildout, which is projected to occur over the next 10 to 15 years.

Included in the approved upgrades are five reconductoring projects that use advanced conductors to add transmission capacity without having to incur the cost of building new lines. These and other grid-enhancing technologies have been part of the ISO's transmission planning process for a number of years.

"This year's transmission plan continues to reflect the ISO's proactive approach to transmission planning and the ongoing collaboration we have with our local, state and

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regional partners,” said Neil Millar, the ISO’s vice president for transmission planning and infrastructure development. “We are working together to make sure California has the vital infrastructure needed to deliver clean, reliable energy as cost-effectively as possible to consumers.”

Transmission planning is a core responsibility of the ISO. The system operator produces an annual transmission plan based on a comprehensive assessment of the electrical system’s needs. In the past, those annual plans typically assessed a 10-year horizon, but this year, in response to state legislation passed in 2022, the timeline was extended to 15 years to ensure enough lead time to analyze and approve transmission development, and for permitting and construction of approved projects.

Drafted in close consultation with the CPUC, the California Energy Commission and other local regulatory authorities, the 2024-2025 plan is based on state projections provided to the ISO in 2024 indicating that California needs to add more than 76 gigawatts (GW) of capacity by 2039.

This year’s plan was heavily influenced by the escalating rate of load growth forecast in the state and the need to provide reliable service during these rapidly changing circumstances. The plan reflects a projected increase in the year-over-year rate of peak demand growth from 0.99% to 1.53%. In the Greater San Francisco Bay Area, the load growth is forecast to increase from 1.22% to 2.14%, with most of the growth due to electrification of the transportation and building sectors of the state’s economy and an anticipated increase in data centers used for artificial intelligence.

In putting together its annual transmission plan, the ISO also considers hundreds of options and detailed assessments of alternatives to find the most cost-effective transmission solutions possible. Those alternatives include transmission upgrades, preferred resources such as storage, grid-enhancing technologies, and remedial action schemes.

Specific reliability-driven and policy-driven projects approved in the plan, most notably related to load growth in the Greater Bay area, include:

- Greater Bay Area 500-kilovolt (kV) Transmission Reinforcement – new 500 kV line to supply the south Greater Bay area;
- San Jose B – Northern Receiving Station 230 kV Line – a new 230 kV line in the San Jose area;
- South Bay Reinforcement – reconductoring of five 115 kV lines and 115 kV system reconfigurations in the San Jose area;
- North Oakland Reinforcement – integrating two new 115 kV sources into the north Oakland area and upgrading the capacity of existing 115 kV lines and substations in the area;
- South Oakland Reinforcement – reconductoring of three 115 kV lines; and
- A host of smaller upgrades improving supply of load and access to other smaller resource zones.

The plan was developed following extensive stakeholder engagement and multiple public presentations and solicitation of stakeholder comments.

CAISO

<http://www.caiso.com/>

22 May 2025

Total Energies starts its largest European solar project

French oil major TotalEnergies, opens new tab has started up a cluster of five solar projects in Seville, Spain, in what will be the company's largest solar project in Europe, it said on Thursday.

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It cements Total's role as Spain's fourth-largest provider of electricity and gas services, and contributes to Spain's goal of getting 80% of its electricity from renewable sources by 2030, Olivier Jouny, Total's senior vice president of renewables, said in a statement. The five sites have a total capacity of 263 megawatts. They will produce 515 gigawatt-hours of renewable electricity annually — enough to power 150,000 households.

Major energy companies have been reversing a short-lived shift towards renewable power in pursuit of high profit margins, and following pressure from some shareholders and the political shift led by U.S. President Donald Trump towards fossil fuels.

However TotalEnergies has 28 gigawatts of gross installed renewable capacity worldwide, with a goal of reaching 35 GW by the end of this year - part of a strategy to expand investment in renewables alongside oil and gas. Most of the electricity produced will be sold via long-term power purchase agreements, with the rest sold on the wholesale market. The Seville project was declared of strategic interest by the regional Andalusian government and generated 800 direct and indirect jobs.

Reuters

<http://www.reuters.com/>

23 May 2025

New Zealand finishes build of 100 MW / 200 MWh battery system

Construction of the Meridian Energy's Ruakākā BESS is now complete, adding a significant boost to the New Zealand grid.

The 100 MW / 200 MWh Ruakākā BESS, located in the Ruakākā Energy Park, 130 kilometres north of Auckland, was billed at a USD \$119 million cost. The BESS consists of 80 containerised lithium-ion Saft Intensium shift battery modules from French energy storage systems maker Saft with grid integration support from national grid operator Transpower, which has also played a key role in planning, construction and commissioning.

Meridian's General Manager Development Guy Waipara said the BESS adds a North Island storage asset into New Zealand's electricity system, and one that will perform a number of key roles. "This BESS is a new and exciting addition to our asset portfolio. It gives us the ability to load shift between price periods, smooth out peak periods, provide greater resilience to Northland and enable Meridian to participate in the North Island electricity reserves market," Waipara said.

"Although construction and commissioning are now complete, some steps remain before the BESS is fully operational, including approval of final commissioning test results." Meridian's focus will now turned to the neighbouring and essentially co-located 130 MW Ruakākā Solar Farm, with construction set to begin in August 2025. Together with the BESS, this forms Meridian's Ruakākā Energy Park. "There is a tremendous amount going on across the industry to ensure Kiwi homes and businesses continue to have all the electricity they need at prices that continue to be internationally competitive," Waipara said. "Meridian is stepping up to the challenge with the Ruakākā Energy Park, part of \$3 billion we will invest over the next five years."

ESS news

<http://www.ess-news.com/>

26 May 2025

President Trump Signs Executive Orders to Usher in a Nuclear Renaissance, Restore Gold Standard Science

Today, President Trump signed several key executive orders to usher in a nuclear renaissance and restore America's gold standard in science and innovation, directing the Department of Energy to take a leading role in unleashing the American nuclear

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renaissance. President Trump is taking decisive action to strengthen scientific discovery in America, rebuild public trust in science, and accelerate advanced nuclear technologies.

After decades of stagnation and shuttered reactors, President Trump is providing a path forward for nuclear innovation. Today's executive orders allow for reactor design testing at the Department of Energy's (DOE) National Labs, clear the way for construction on federal lands to protect national and economic security, and remove regulatory barriers by requiring the Nuclear Regulatory Commission to issue timely licensing decisions.

"For too long, America's nuclear energy industry has been stymied by red tape and outdated government policies, but thanks to President Trump, the American nuclear renaissance is finally here," Energy Secretary Chris Wright said. "With the emergence of AI and President Trump's pro-American manufacturing policies at work, American civil nuclear energy is being unleashed at the perfect time. Nuclear has the potential to be America's greatest source of energy addition. It works whether the wind is blowing, or the sun is shining, is possible anywhere and at different scales. President Trump's executive orders today unshackle our civil nuclear energy industry and ensure it can meet this critical moment. Over the last 30 years, we stopped building nuclear reactors in America – that ends now. Today's executive orders are the most significant nuclear regulatory reform actions taken in decades. We are restoring a strong American nuclear industrial base, rebuilding a secure and sovereign domestic nuclear fuel supply chain, and leading the world towards a future fueled by American nuclear energy. These actions are critical to American energy independence and continued dominance in AI and other emerging technologies," said White House Office of Science and Technology Director Michael Kratsios.

"President Trump's executive orders expand America's Energy Dominance agenda. As energy demand continues to surge, expanding our existing nuclear fleet and investing in advanced nuclear technologies ensures we have reliable energy to power our homes, fuel for President Trump's manufacturing revolution, and a stronger electric grid," said Interior Secretary Doug Burgum.

The President also signed an executive order implementing Gold Standard Science to rebuild public trust in the national science enterprise. The EO defines Gold Standard Science and requires federal research agencies to conform their existing programs and activities to these fundamentals. In addition to federal agencies, the Trump Administration is issuing a call to excellence for all American researchers and academic institutions to go back to the basics by restoring Gold Standard Science.

Gold Standard Science is just that—science that meets the Gold Standard. It's reproducible, transparent, falsifiable, subject to unbiased peer review, clear about errors and uncertainties, skeptical of assumptions, collaborative, interdisciplinary, accepting of negative results, and free from conflicts of interests. "President Trump is making Gold Standard Science the cornerstone of the federal science enterprise and rebuilding public trust in science. With this executive order, we are recommitting ourselves to scientific best practices and empowering America's researchers to achieve groundbreaking discoveries. Gold Standard Science starts in the policies and programs of our great federal research institutions, and continues with partnership across academia, industry, and philanthropy," said Director Kratsios.

ENERGY.GOV

<http://www.energy.gov/>

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Belgians accused of 'stealing wind' from the Dutch

A Dutch weather forecaster has accused Belgium of inadvertently stealing wind from its neighbours' wind turbines in the North Sea.

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Wind farms in Belgium are reportedly taking up to 3 % of wind energy from Dutch installations, according to Remco Verzijlbergh, CEO of Dutch weather forecasting service Whiffle. In an interview with Belgian broadcaster VRT, Verzijlbergh said: "A wind turbine is designed to extract wind from the air. If you measure behind a wind turbine, the wind blows less hard. Behind a wind farm with many wind turbines together, you really see lower wind speeds."

Verzijlbergh explained that Belgian wind farms have an advantage over Dutch ones. "They are located southwest of the Dutch parks and the wind often comes from the southwest, so you often steal some of our wind," he said. He believes better coordination is needed to ensure no country is disadvantaged in this area. "First of all, within a country itself, but we will also have to do it internationally. The North Sea is slowly being built with wind farms, so there will be more and more of that wind theft," said Verzijlbergh. "Coordination is needed so that it is not handled unwisely or that no 'race to the water' is organised, where whoever builds first also gets the most favourable wind."

The use of wind farms is crucial for countries aiming to become carbon neutral. By 2030, Belgium wants to build six gigawatts of wind turbines in the North Sea to meet its targets.

The Brussels Times

<http://www.brusselstimes.com/>

26 May 2025

French authorities blame sabotage for second power blackout on the Riviera

French authorities on Sunday, May 25, blamed sabotage and ordered heightened security after a fire at an electricity sub-station in Nice caused the second major power blackout in two days along the Riviera. The latest fire cut power to about 45,000 homes in western Nice for several hours, authorities said. Nice airport was briefly without electricity, the city's Deputy Mayor Gaël Nofri told Agence France-Presse (AFP).

A similar arson attack on a power substation on Saturday partially disrupted the final day of the Cannes Film Festival, forcing organizers to use backup generators to keep the event going. Prosecutors said they had opened an investigation and were looking into a claim Sunday by two anarchist groups of "responsibility for the attack on electrical installations on the Côte d'Azur." The claim was posted on an alternative website.

"I vigorously condemn these criminal acts hitting our country," Nice Mayor Christian Estrosi wrote on X, adding, "We are making images from our monitoring center available to investigators and will strengthen the city's network at strategic electrical sites in the coming days." "Until the perpetrators of these acts have been arrested, we will not ease up our attention anywhere," Estrosi told reporters.

Nice's chief prosecutor Damien Martinelli said studies had been carried out "to clarify the damage and the methods used to carry out the act" and that police were investigating "arson by an organized group." Police said that tyre marks had been found near the Nice transformer and someone had broken into a room in the building.

An arson attack at a power substation and a bid to cut the legs of an electricity pylon near Cannes cut power to 160,000 homes in the region for five hours on Saturday. The cut knocked out traffic lights and bank machines in Cannes, as well as threatening the finale to the film festival. The festival "switched to an alternative electricity power supply" to keep the closing ceremony and award events going. Firefighters battled for five hours to put out the flames at the sub-station, officials said. In the attack on the high-voltage pylon, three of its four legs had been damaged, said prosecutors.

Le Monde

<http://www.lemonde.fr>

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Documents Show E.P.A. Wants to Erase Greenhouse Gas Limits on Power Plants

The Environmental Protection Agency has drafted a plan to eliminate all limits on greenhouse gases from coal and gas-fired power plants in the United States, according to internal agency documents reviewed by The New York Times.

In its proposed regulation, the agency argued that carbon dioxide and other greenhouse gases from power plants that burn fossil fuels “do not contribute significantly to dangerous pollution” or to climate change because they are a small and declining share of global emissions. Eliminating those emissions would have no meaningful effect on public health and welfare, the agency said. But in the United States, the power sector was the second biggest source of greenhouse gases, behind transportation, according to the most recent data available on the E.P.A. website. And globally, power plants account for about 30 percent of the pollution that is driving climate change. The E.P.A. sent the draft to the White House for review on May 2. It could undergo changes before it is formally released and the public is given the opportunity to offer comments, likely in June.

The proposed regulation is part of a broader attack by the Trump administration on the established science that greenhouse gases threaten human health and the environment. Scientists have overwhelmingly concluded that carbon dioxide, methane and other greenhouse gases from the burning of oil, gas and coal are dangerously heating the planet. “Fossil fuel power plants are the single largest industrial source of climate destabilizing carbon dioxide in the United States, and emit pollution levels that exceed the vast majority of countries in the world,” said Vickie Patton, general counsel for the Environmental Defense Fund, an environmental group.

She called the proposed regulation “an abuse of the E.P.A.’s responsibility under the law” and added, “It flies in the face of common sense and puts millions of people in harms way to say the single largest industrial source of carbon dioxide in the United States is not significant.” The draft reviewed by The New York Times said the agency “is proposing to repeal all greenhouse gas emissions standards for fossil fuel-fired power plants.” That would include Biden-era requirements that existing coal-fired units capture carbon pollution before it leaves the smokestack and store it, and that require some new gas plants use technologies that pollute less.

“We are seeking to ensure that the agency follows the rule of law while providing all Americans with access to reliable and affordable energy,” Lee Zeldin, the E.P.A. administrator, said in a statement. Mr. Zeldin’s spokeswoman, Molly Vaseliou, declined to offer more information about the plan other than to say “the proposal will be published once it has completed interagency review and been signed by the administrator.”

The Trump administration is methodically uprooting policies aimed at curbing climate change, and the E.P.A. is at the epicenter of that effort. In recent weeks, Mr. Zeldin has shuttered offices responsible for regulating climate and air pollution, and has launched the repeal of more than two dozen regulations and policies. The agency is feeling pressure from the White House to finalize its deregulations by December, according to two people briefed on internal discussions who spoke on the condition of anonymity in order to describe them. That would be an extraordinarily fast pace. Rewriting regulations can typically take more than a year.

One target is a 2009 E.P.A. finding that greenhouse gases endanger public health. That determination underpins most federal climate regulations, and repealing it would erase the agency’s legal authority to regulate carbon pollution from power plants, vehicles, oil and gas infrastructure and other sources. Mr. Zeldin said deregulation would drive “a dagger straight into the heart of the climate change religion.” In proposing to lift regulations on power

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plants, the E.P.A. points to the fact that the U.S. share of global power sector emissions represented about 3 percent of worldwide greenhouse gases in 2022, down from 5.5 percent in 2005. So, it argued, even if American power plants erased all their greenhouse gases from the power sector, the risk to public health would not be “meaningfully” improved.

But in the U.S., power plants were responsible for about 25 percent of greenhouse gas emissions in 2022. They emitted about 1.5 billion metric tons of emissions in 2023, which is more than the total greenhouse gas emissions produced by most countries. Just a year ago, when the Biden administration announced tough new limits on pollution from existing coal-fired power plants as well as some new gas-burning plants, the E.P.A. said the restrictions would mean that by 2035 the nation would annually avoid up to 1,200 premature deaths, 870 hospital visits, 1,900 cases of asthma, 48,000 school absences and 57,000 lost work days.

Michael Oppenheimer, a professor of geosciences and international affairs at Princeton University, noted that solving climate change means undertaking a large number of seemingly small measures, like curbing emissions from automobiles, oil and gas wells, air travel, landfills, buildings and more. “Just because there are multiple contributors to a problem doesn’t mean we should excuse all but the top one,” Dr. Oppenheimer said. “Just because a polluter’s emissions are decreasing doesn’t mean that they aren’t still far too high.”

Attorneys who represent utility companies said they agree that the sector is a small part of the global climate problem. “The argument is a solid argument,” said Jeffrey R. Holmstead, who served in the E.P.A. during both Bush administrations and now represents utility companies as a lawyer for the firm Bracewell. But he wondered if it would hold up under a legal challenge. “I just don’t know if you’re contributing 3 percent of greenhouse gas emissions the court will say ‘that’s not significant’ when there’s hardly anybody that contributes more than that.” Only China releases more pollution from its power plants than the United States.

The E.P.A. plan is likely to face lawsuits once it is finalized. If it survives, it could block future administrations from regulating carbon dioxide emissions from power plants, eliminating a tool that Democratic administrations have relied on to tackle climate change. It also could make it easier to unravel other climate regulations, some experts said. “If the administration is going to do this, it is the strategically smartest way,” said Jonathan Adler, a conservative law professor at Case Western University. “If they’re successful with regard to power plants, they’re pretty much going to be successful with everything else,” he said.

New York Times

<https://www.nytimes.com/>

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Imperial Irrigation District to join both ISO-operated electricity markets

The Imperial Irrigation District (IID) has signed implementation agreements formalizing its commitment to join both the existing Western Energy Imbalance Market (WEIM) and the planned Extended Day-Ahead Market (EDAM) that will launch next spring.

In announcing its decision on the IID website, the utility cited reduced costs for customers, enhanced system reliability, and the ability to modernize its systems as key reasons for its decision.

“As a large public power provider in California, IID is pleased to join both the Western Energy Imbalance Market and the Extended Day-Ahead Market,” said IID General Manager Jamie Asbury. “This is a significant step toward modernizing how we purchase and manage power, which will translate into savings for our ratepayers annually by giving us the ability to react much faster to energy market conditions. This also aligns IID more closely with

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emerging regional energy practices, yet allows us to retain our independence as an energy Balancing Authority.”

With implementation agreements now signed, IID becomes the first utility to concurrently pursue joining both ISO-operated markets. When IID’s participation begins in 2028 as targeted, it will mark the first time all California balancing authorities are participating in ISO-operated electricity markets. IID is the largest irrigation district in the nation and a key player in managing the Colorado River water supply chain. The 114-year-old utility supplies electricity to 166,000 customers in the Imperial Valley and surrounding areas of Southern California.

Elliot Mainzer, president and CEO of the ISO, said he was “honored to welcome the IID to the WEIM and EDAM family. “It is exciting to know that for the first time all of the California balancing authorities will be participating in the ISO markets. Together with our regional partners outside of California, this will provide even greater reliability and financial benefits across the EDAM footprint.”

In addition to the Turlock Irrigation District, which also has recently committed to join EDAM, four other energy providers have signed EDAM implementation agreements committing their market participation. PacifiCorp and Portland General Electric will join the market in 2026. The Los Angeles Department of Water and Power and the Balancing Authority of Northern California, which includes the Sacramento Municipal Utility District, have signed agreements to join in 2027.

The ISO and its stakeholders have designed the day-ahead market to build on the proven track record of the WEIM. Just under \$7 billion in cost-saving efficiencies have been delivered to the WEIM’s 22 participants across 11 Western states since the market began managing real-time, least-cost energy transactions in 2014.

The real-time market has also helped to avoid more than one million metric tons of greenhouse gas emissions and continues to grow, with two additional participants expected to begin participating in 2026. The EDAM has been set up to unlock those benefits for WEIM participants in the day-ahead timeframe, where the bulk of energy transactions occur, and the reliability, economic and environmental benefits will be even greater.

CAISO

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DOE orders 1.6-GW coal-fired power plant to delay shutdown over MISO outage concerns

In an emergency order, the U.S. Department of Energy on Friday directed Consumers Energy to delay, by about three months, shutting down a 1,560-MW, coal-fired power plant in Michigan, saying the Midcontinent region faces possible power outages this summer.

In determining that the J.H. Campbell power plant in West Olive, Michigan, should run until Aug. 21, past its planned May 31 shutdown, DOE cited a North American Electric Reliability Corp. report that found that the Midcontinent Independent System Operator faces an elevated risk of power outages during high demand or lower power output periods this summer.

Public Citizen plans to challenge the DOE’s “abuse of emergency authorities” when Consumers Energy seeks to recoup its costs for running the Campbell power plant longer than expected in an expected proceeding at the Federal Energy Regulatory Commission, the consumer advocacy group said.

The Federal Power Act’s section 202(c) gives the DOE secretary the authority to temporarily order power plants to operate during wars and emergencies. It has been used 16 times since August 2020, according to DOE. In January, President Donald Trump declared that the United States faces an “energy emergency” and in April he ordered DOE

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Secretary Chris Wright to develop a process for issuing emergency orders to keep power plants operating in areas of the country deemed to have potential grid reliability problems.

DOE cited two reports in finding that an emergency exists in MISO: NERC's 2025 Summer Reliability Assessment issued on May 14 and the grid operator's capacity auction results released in late April. The NERC assessment found that MISO, the Electric Reliability Council of Texas, ISO New England and the Southwest Power Pool were at elevated risks of not having enough power supplies during stressed peak demand periods. No region was at high risk of electricity shortfalls, according to the report.

Citing a MISO report on the auction results, Wright said, "while the results 'demonstrated sufficient capacity,' the summer months reflected the 'highest risk and a tighter supply-demand balance' and the results 'reinforce the need to increase capacity.'" Wright ordered MISO to dispatch the Campbell power plant economically to minimize ratepayer costs. "Following conclusion of this order, sufficient time for orderly ramp down is permitted, consistent with industry practices," Wright said. DOE issued the emergency order without a request from the plant owner, transmission provider or grid operator, according to Ari Peskoe, director of the Electricity Law Initiative at the Harvard Law School Environmental and Energy Law Program.

"Prior to this order and the previous week's order about Puerto Rico, DOE's practice was not to actively search for emergencies but instead wait for affected parties to request an emergency order," Peskoe said in an email. "It's not clear from the order why DOE acted here without a request."

Consumers Energy plans to comply with the DOE order, according to Brian Wheeler, a spokesman for the utility. "We are pausing decommissioning activities at the Campbell plant and will operate it in compliance with the order, working in conjunction with MISO," Wheeler said in an email. Consumers Energy is working to determine appropriate cost recovery, consistent with applicable law and the DOE order, he said. Like in other regions, power plant owners in MISO must get permission from the grid operator to retire a generating unit. MISO studies whether a power plant shutdown will hurt grid reliability. If reliability would be hurt, MISO can enter into a special contract with the power plant owner to keep the generating unit running until a solution to the reliability issue is put in place.

MISO in March 2022 approved Consumers Energy's plan to suspend operations at the Campbell power plant by June 1, according to the CMS Energy utility. The grid operator has also approved Northern States Power's plan to suspend operations on May 31 at its 190-MW, coal-fired Wheaton power plant in Wisconsin. The Xcel Energy utility is converting the Wheaton power plant to burn gas.

The Campbell power plant produced 6.6 million MWh in 2023, making it Michigan's eighth biggest power supplier that year, down from 7.7 million MWh in 2022, according to the U.S. Energy Information Administration. Earlier this month, Consumers Energy said it had adequate power supplies to meet its needs this summer. The Jackson, Michigan-based utility said it expects to expand its gas-fired Zeeland power plant by 50 MW by mid-June.

Utility Dive

<http://www.utilitydive.com/>

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Greece now interconnected with Crete via 1 GW transmission line

Greece's Independent Power Transmission Operator (IPTO) has revealed that a new grid line linking mainland Greece to Crete began operating on May 24.

The line consists of two 500 kV direct current (DC) subsea cables, each 335 km long and laid at depths of up to 1,200 meters, connecting the converter station in

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Koumoundouros, Attica, to the Damasta substation in Crete. Together, the cables provide 1 GW of total transmission capacity.

Ariadne Interconnection, an IPTO subsidiary established for the project, developed and owns the grid line. In November 2024, China's State Grid International Development Ltd., a wholly owned subsidiary of State Grid Corp., acquired a 20% stake in Ariadne Interconnection.

The Ariadne Interconnection holds strategic significance for Greece and regional energy networks. Integrating Crete into Greece's mainland electricity grid will free about 2.5 GW of new renewable power capacity. Crete will also phase out high-cost fossil fuel units, such as diesel stations, currently used to ensure power adequacy and compensated by electricity consumers through their bills. As a result, IPTO said the new line will reduce these costs, leading to lower electricity bills across Greece.

The project will also have a significant environmental impact, cutting carbon dioxide emissions by more than 400,000 tons in its first year of operation. Internationally, the new grid line holds broader significance, as Crete is expected to serve as the starting point for two planned submarine lines: one linking Crete to Cyprus and Israel, and another connecting Crete to Egypt.

IPTO said the project was completed in record time. The Ariadne Interconnection subsidiary was established in 2018, and construction lasted only 4.5 years. By comparison, IPTO said similar projects by European grid operators have taken more than seven years to complete. The Attica-Crete grid line cost €1.1 billion (\$1.24 billion) and received joint financing from the European Union and domestic sources.

The new Attica-Crete direct current (DC) link is distinct from a separate 174 km subsea connection from the Peloponnese Peninsula to Crete, completed in 2021. That project connected Crete to mainland Greece via a line with 2×200 megavolt-amperes (MVA) transport capacity. The Ariadne Interconnection marks Greece's first high-voltage direct current (HVDC) cable system. IPTO plans to apply the experience gained to develop a second HVDC link integrating the Dodecanese Islands into the mainland high-voltage grid.

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