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Cyprus-Greece reach agreement on electricity interconnection

Cyprus and Greece have reached an agreement on the regulatory framework for the Cyprus-Crete electricity interconnection after lengthy negotiations. The deal, brokered late Monday, involved the governments of Cyprus and Greece, the EU's Directorate-General for Energy, regulatory authorities from both countries and IPTO, the Greek electricity transmission system operator.

According to Phileleftheros, IPTO initially resisted the proposal agreed upon last Friday by the energy ministries of Cyprus and Greece and the Cyprus Energy Regulatory Authority (CERA). The Greek operator eventually accepted the terms following pressure and the risk of exposure to cable manufacturer Nexans. Under the agreement, the Cypriot government will fund IPTO's expenses from 2025 to 2030 with 25 million euros annually, totalling 125 million euros. This funding will come from state revenue from emissions trading, not directly from consumers. Additional reasonable expenses incurred by IPTO during construction will be recovered through consumer charges after the project's commencement.

The regulatory framework approved by CERA in 2023 remains unchanged regarding geopolitical risk. It maintains that CERA may approve the recovery of the implementing entity's expenses from consumers in the event of external risks interrupting the project. Sources say the agreement extended the duration of IPTO's privileged return on capital from 12 to 17 years, with a rate of 8.3% compared to the typical 4.6% granted for regulated energy projects in Cyprus. The agreement awaits formal approval from the Cypriot Council of Ministers and CERA's higher authority in the coming days. The Cyprus-Crete interconnection is part of the broader EuroAsia Interconnector project, aimed at linking the electricity grids of Israel, Cyprus, and Greece.

In-cyprus

<http://in-cyprus.philenews.com/>

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Texas PUC Sets Reliability Standard for ERCOT

Texas' regulatory commission has adopted a reliability standard for the ERCOT region, one of several policy parameters that will be used in upcoming analyses for the proposed performance credit mechanism (PCM) market design.

As approved by the Public Utility Commission during its Aug. 29 open meeting, ERCOT must meet three criteria to comply with the reliability standard: frequency, duration and magnitude. To meet the standard, ERCOT outages should not occur more than once in 10 years on average, last more than 12 hours or lose more power than can be safely rotated (54584).

"Our system must continue to evolve to meet the growing demand for power in our state ... it's critical we clearly define the standard at which we expect the market and system to operate," PUC Chair Thomas Gleeson said in a statement. "By establishing a reliability standard for the ERCOT region today, we are setting a strong expectation for the market and charting a clear path to further secure electric reliability."

The new rule also establishes a process to regularly assess the ERCOT grid's reliability. The commission directed ERCOT staff to conduct a probability-based assessment every three years, beginning Jan. 1, 2026, to determine whether the system is meeting the standard and is expected to continue to do so over the next three years.

Should that assessment indicate the system fails to meet the reliability standard, the Independent Market Monitor (IMM) must conduct an independent review and commission

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staff must recommend their own potential market design changes. The PUC then would review ERCOT's assessment, the IMM's review, commission staff's recommendations and public comments to determine whether any market design changes are necessary.

ERCOT and IMM staff confirmed during the meeting that they have all they need to begin their respective analyses. Draft results are due to the PUC in early November; the commission will consider the final results in December. The ISO said it will use 19 GW as the amount of load it can safely rotate during an outage in its cost/benefit analysis, as it proposed in an April research paper. The reliability standard was just one of several actions the PUC took to establish regular assessments of the grid's ability to meet demand and help determine any necessary future improvements.

It adopted a value of lost load of \$35,000/MWh, using information from a survey of ERCOT consumers and a Brattle study. Staff proposed a \$30,000 VOLL, but Gleeson recommended Brattle's suggested \$35,685, saying it was "reasonable" after a "detailed and thorough" analysis (55837). "We don't need the extra numbers in there," Gleeson said.

ERCOT will use VOLL for cost/benefit analyses in its planning models. The PUC said it will not be used to update the operating reserve demand curve or any current market-design elements. The commission also accepted staff's final recommendations for each of the PCM's 37 base case parameters, including a firm \$1 billion gross cost cap to comply with state law (55000). ERCOT had proposed a counterfactual of energy-only market equilibrium reserve margin instead of the cost cap, a "purely theoretical number," according to Stoic Energy principal Doug Lewin.

PUC staff and ERCOT also differed on four other parameters: the metric to determine performance credit (PC) hours; a duration-based cap for consecutive PC hours; the net-cost cap compliance framework; and non-performance penalties for PCs offered but not cleared in the forward market. The PUC selected the PCM from among five other suggested market reforms as its design of choice and approved it in 2023. That same year, the Texas Legislature passed a bill setting a \$1 billion annual cap for the PCM.

The PCM will use the reliability standard and a corresponding quantity of PCs that must be produced during the highest reliability risk hours to meet the standard. Load-serving entities can purchase PCs, awarded to resources through a retrospective settlement process based on availability during hours of highest risk, and trade them with other LSEs and generators in a forward market; generators must participate in the forward market to qualify for the settlement process.

ERCOT told the PUC it has changed course on must-run alternatives for three retiring CPS Energy coal units, postponing an inspection of the largest unit until after the winter season (55999). The San Antonio municipality told the commission this year it planned to retire the three coal units, which date back to the 1960s, in March 2025. However, ERCOT said the Braunig Power Station units, with a combined summer seasonal net maximum sustainable rating of 859 MW, were needed for reliability reasons and issued a request for reliability-must-run proposals in July. (See ERCOT Evaluating RMR, MRA Options for CPS Plant.)

The grid operator said in an update to the commission that while it continues to negotiate a potential agreement with CPS Energy to inspect the 412-MW Unit 3, it would be "more prudent" to allow the resource to operate through the winter's peak demand period. ERCOT staff said the inspection could be held in mid-February or early March. "If we waited until after winter peak load, we believe we'd still have plenty of time, barring unforeseen circumstances, to have the unit inspected and repaired during another shoulder season for outages and before the summer peak load season," ERCOT's Davida Dwyer said.

The ISO extended the deadline for RFP responses to Oct. 7 after receiving fewer than 10 proposals to its initial request. Chad Seely, the ISO's general counsel, told the

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commission the deadline would provide an “important data point” in seeing whether the industry has responded with enough MW to provide relief for a constrained area south of San Antonio.

“The additional time affords us a more deliberative process on these critical policy issues to see if the industry is going to respond to the must-run alternative,” Seely said, “and then continue to move forward [on] a path where we still think it’s appropriate and prudent for reliability to start to open up the unit in advance of any April 1 RMR agreement.” Noting that ERCOT has amended the RFP after stakeholder feedback, he said, “We’re hopeful, with the amendments that we put forward and allowing almost another month of time for people to go do their due diligence, and talk to their shops about options, that we will see a higher [number] of offers come in in October.”

“Ultimately, I don’t want RMR to be the norm, right?” Cobos responded. Seely said the three units are in a “prime” location to relieve the constraint’s interconnection reliability operating limits (IROLs), which makes the pre-RMR inspection work such an “extraordinary situation.” “[Braunig] is one of the best assets right now in the system, until we see other solutions to help relieve the overloads of the IROL for the next couple of years,” he said. “That’s why it’s critically important to be deliberative and these critical policy issues on how we approach this.” CPS has said it will cost about \$22 million to inspect, repair and prepare Braunig Unit 3 to remain in service past March and an additional \$35 million for the other two units. Utility and energy storage company Eolian announced Aug. 28 an agreement for two storage facilities south of San Antonio totaling 350 MW of capacity. The projects are not expected to come online until 2026, but work to upgrade the transmission infrastructure and relieve the South Texas constraint isn’t expected to be completed until the middle of 2027.

RTO Insider

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

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EDF begins start up process for Flamanville EPR

The Autorité de Sûreté Nucléaire (ASN) on 7 May authorised the commissioning of the Flamanville EPR reactor, clearing the way for EDF to begin loading the 241 fuel assemblies into the reactor and to carry out start-up tests and subsequent operation of the reactor. The loading of fuel was completed on 22 May. "After loading the reactor last May, Flamanville EPR teams carried out numerous technical tests and put the facilities into the required conditions to initiate nuclear fission," EDF said today.

On 30 August, EDF sent ASN the information required to issue an agreement for the first nuclear reaction - referred to as 'divergence' - to proceed, in particular the results of the installation tests carried out since the commissioning authorisation. In a resolution of 2 September, ASN authorised the launch of divergence operations at the Flamanville EPR reactor. "The examination of EDF's request and the checks carried out by ASN did not reveal any factor likely to call into question EDF's ability to diverge the reactor," ASN said.

EDF said divergence involves creating a stable nuclear reaction at very low power. It is achieved by reducing the boron concentration in the primary system's water, then gradually raising the reactor core's control rods. When neutron production is higher than absorption, divergence will be achieved and the chain reaction will start. The chain reaction's intensity and thus the reactor's power will be controlled by the control rods and the boron concentration. Once divergence is completed, the reactor will be at 0.2% of its rated power.

In a post on LinkedIn, Xavier Ursat, EDF Group Senior Executive in charge of Engineering and New Nuclear Projects Division, announced that the nuclear reaction at Flamanville 3 was initiated at 3.54pm on 3 September.

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A test programme to achieve a power level of 25% will be implemented when the reactor reaches 0.2% power, EDF said. Once at 25% capacity, the Flamanville EPR will be connected to the national electricity grid for the first time and will generate electricity. "This first connection is scheduled before the end of autumn 2024," the company noted. "Testing will continue throughout reactor ramp-up, which will be carried out in successive stages over several months."

ASN said it will monitor the subsequent stages of the reactor's start-up, until it reaches its rated power. "In particular, EDF will have to seek the agreement of ASN to go through certain stages of the reactor's ramp-up," it said. Construction work began in December 2007 on the third unit at the Flamanville site in Normandy in northern France - where two reactors have been operating since 1986 and 1987. The dome of the reactor building was put in place in July 2013 and the reactor vessel was installed in January 2014. The reactor was originally expected to start commercial operation in 2013 but has faced a series of delays.

The first EPR units came online at Taishan in China, where unit 1 became the first EPR to enter commercial operation in 2018 followed by Taishan 2 in September 2019. In Europe, Olkiluoto 3 in Finland entered commercial operation in 2023 and two units are under construction at Hinkley Point C in the UK.

EDF also announced that it has raised its estimate for nuclear power generation in France in 2024. Initially estimated between 315-345 TWh, nuclear power generation is now estimated between 340-360 TWh. It said this higher estimate is based on "improved performance of outages and industrial control of stress corrosion inspections and repair work, and the absence of major climatic event during summer". EDF noted that since early 2024, eleven reactors have been reconnected to the grid before the scheduled date.

World Nuclear News

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

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Nationwide blackout eases in Venezuela as Maduro govt blames opposition 'sabotage'

Power began to return to some parts of Venezuela on Friday afternoon after capital Caracas and much of the rest of the country were earlier plunged into a blackout that the government blamed on sabotage by the opposition, without providing evidence.

President Nicolas Maduro, who is locked in a dispute with the opposition over the outcome of a July 28 presidential election, often blames what he says are "attacks" on the power grid on his political rivals, accusations the opposition has always denied. All 24 of the country's states reported a total or partial loss of electricity supply, Freddy Nanez, the minister of communication and information, said on state television early on Friday morning.

"We have been victims once again of electrical sabotage," he said. He gave no evidence of a deliberate attack. By about 1pm local time (1600 GMT), power had returned to some parts of western city Maracaibo, central city Valencia, eastern city Puerto Ordaz and capital Caracas, according to Reuters witnesses.

Interior Minister Diosdado Cabello told state television on Friday morning that power would return gradually, beginning with the capital. The blackout hit some operations of state oil company PDVSA, including its largest terminal, Jose, where vessel loading and discharging was interrupted by the outage, according to sources and a shipping document seen by Reuters. A key oil upgrader that produces exportable crude, Petropiar, was also affected.

About 70% of Venezuela's oil exports are handled through Jose, which does not have its own power system. Most of U.S. firm Chevron's Venezuelan crude exports go out from Petropiar. PDVSA's Caracas headquarters lost power but the company's largest refining complex Paraguana was unaffected, as its own power plant was in service, the sources

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said. In Venezuela's largest oil region, the Orinoco Belt, the impact of the blackout was minimal as many oilfields and operations have their own generators, sources said.

In the western city of Barquisimeto, residents were stocking up on gasoline and food. Lawyer Alexa Rivas, 29, avoided what she said were five kilometer (three mile)-long lines at urban gas stations by driving to a service station outside the city.

"I can't be without gasoline, I have a 3-year-old boy and my mom is 70, I need to have reserves for any emergency," she said. "We've lived through two national blackouts, it makes us very nervous." Critics have long blamed power cuts on deteriorating infrastructure amid the country's fiscal woes. Major opposition figure Juan Pablo Guanipa scoffed at the sabotage accusations on Friday.

"This narrative isn't believed by even the most radical Chavistas," Guanipa said on X, referring to loyalists of the ruling socialists. In Caracas, workers gathered outside office buildings in the central Plaza Venezuela in the morning, awaiting instructions from bosses about whether or not to go home. Bakery worker Alejandro Rondon, 25, said the store's card payment machine was still working and he was selling what he could. "We can't make anything today because the ovens aren't working. My fear is for the yeast, which needs to be cold," he said. Services on the city's metro were halted and had been replaced by more than 250 buses, Transport Minister Ramon Velasquez said. About 79 public hospitals were open to patients, the health ministry said.

Venezuela's government and opposition both say their candidate won last month's election, with the electoral authority and Supreme Court backing Maduro. Authorities have not released full vote tallies despite international calls to do so. Arrests of opposition figures have risen sharply over the last week. Venezuela last suffered national blackouts in 2019, with some lasting as long as three days. Authorities also attributed those power outages to attacks on the network - such as damage to power lines - by saboteurs and opponents of Maduro's government.

Reuters

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

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ACP: US energy storage installations rise 62% in Q2, to 2.9 GW

The energy storage sector's healthy second-quarter growth follows an even larger year-over-year increase last quarter. U.S. utility-scale storage installations increased 84% from Q1 2023 to Q1 2024, according to a June report from ACP and Wood Mackenzie.

Developers commissioned 33 energy storage projects across 10 states in Q2 2024, ACP said in its report. California added the most capacity of any state, with 1,353 MW/5,397 MWh of newly energized battery storage, and accounts for 46% of installed U.S. storage capacity, ACP said. With 574 MW/1,033 MWh commissioned in the second quarter, Texas added the second most capacity, and Arizona (560 MW/2,240 MWh), Nevada (185 MW/740 MWh) and Hawaii (102 MW/408 MWh) rounded out the top five.

California, Texas, Arizona, Nevada and Florida are the top five markets for cumulative operating energy storage capacity, according to ACP's Q2 report. Utility-scale battery storage projects are operational in 43 states, and 12 states have more than 100 MW of operating utility-scale storage capacity as of June 30, ACP said. Of the 33 storage projects commissioned in the second quarter, 18 were paired with solar or wind generation facilities and 15 were standalone, ACP said.

Developers commissioned about 1.4 GW of onshore wind capacity and 6.7 GW of solar capacity in Q2 2024, marking respective increases of 41% and 124% from Q1 2023, according to the report. The U.S. onshore wind sector saw a significant uptick in construction activity during the first half of 2024, according to the report. More than 14 GW of onshore

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wind projects were under construction in the U.S. as of June 30, an increase of 5.5 GW from the same point in 2023, ACP said.

More than 4 GW of offshore wind are now under construction in U.S. waters, the highest amount to date, with a further increase in construction volumes expected in the near future, ACP said. Total cumulative wind, solar and storage deployments reached 19 GW year-to-date, more than doubling the 5-year average for H1 installations, according to the report. With H2 installations typically much stronger than H1, the industry is on track for its second consecutive record-breaking year in 2024, ACP said.

The brisk pace of renewables and storage deployments belies challenges from expected rapid load growth and the imperative to decarbonize the power sector, ACP's Grumet said in a statement. "With rapidly growing demand and the need to make significant strides in decarbonizing our economy, the stakes are high," he said. "Our recent progress is encouraging, but we are not moving fast enough." Project delays continue to hinder clean energy deployments, with more than 63 GW of solar, wind and battery storage projects delayed since 2021, ACP said in the report.

Utility Dive

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

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Uprates, batteries and DR may offer near-term responses to record PJM capacity prices

After the PJM Interconnection released the results of its latest capacity auction in late July with record-setting high prices, one of the key questions was how quickly would independent power producers respond.

In recent years, PJM's capacity market had been signaling through its prices that there were ample power supplies in the grid operator's footprint, leading to generator retirements, according to Glen Thomas, president of the PJM Power Providers, a trade group for independent power producers. Before this year, PJM's previous three auctions returned capacity prices of \$50/MW-day, about \$34/MW-day and \$29/MW-day. In the July auction, for most of its footprint capacity prices jumped to nearly \$270/MW-day for the 2025/26 delivery year, which begins June 1. Prices hit zonal caps of about \$466/MW-day for the Baltimore Gas and Electric zone in Maryland, and \$444/MW-day for the Dominion zone in Virginia and North Carolina.

"These results will get noticed," Thomas said. "It's a build signal." However, generators won't have much time to respond before PJM's next auction, he said. It is set to be held in early December for the capacity year that starts June 1, 2026, giving new resources about 18 months to be available after the auction is held.

The initial response will likely be power plant owners deciding to keep their generating units running instead of retiring them and in some cases expanding their capacity, according to Thomas. "There's a lot of conversations happening internally at companies on just how to respond to these results," he said. Independent power producer Calpine on Aug. 22 said it is restarting its power plant development program in PJM, with a focus on Ohio and Pennsylvania. "The PJM market needs and values reliable, dispatchable, non-duration-limited power," said Caleb Stephenson, executive vice president for commercial operations at Calpine, which mainly owns gas-fired power plants.

While not directly related to PJM, Thomas noted that late last month LS Power Group said it closed an oversubscribed \$2.7 billion equity fund to invest in energy infrastructure. The high capacity prices may also spur retail demand response, battery and distribution reconfiguration efforts that effectively reduce wholesale electricity demand, according to Kent Chandler, a resident senior fellow at the R Street Institute. "Your avoided cost of generation capacity just increased eight or nine times in some of these places so a retail,

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distribution-side battery program all of a sudden makes a whole lot more financial sense,” said Chandler, whose term as chairman of the Kentucky Public Service Commission ended June 30.

The capacity auction’s high price decreases the payback period and increases the benefit-cost analysis of a lot of retail programs that reduce demand and have a downward pressure on future capacity prices, according to Chandler. “Those things pencil out far faster now, and they can be put in fairly quickly, without having to do anything at the [regional transmission organization] level, without having to change any law, and a utility can just go and apply to their retail regulator and ask for this new program,” Chandler said “The response time on all of that could be a year and a half or less, all before the delivery year.”

On the generation side, the rates that are paid to “qualifying facilities” under the Public Utility Regulatory Policies Act are typically based on avoided costs, Chandler noted. Qualifying facilities are relatively small and potentially could be easier to site and build than larger power plants, he said. The auction results will likely encourage power plant owners to invest in increasing the capacity of their facilities, referred to as uprates, and could result in an increase in output of 5% to 10% depending on the investment, according to Chandler.

Utility Dive

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

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Envision pushes energy storage density to new highs with 8 MWh, 20-foot container

Shanghai-headquartered Envision Energy launched its latest grid-scale energy storage system at the third Electrical Energy Storage Alliance (EESA) Energy Storage Exhibition held in Shanghai this week. The product’s energy density stands at 541 kWh/m², making it the leading one in the industry to date.

The product release follows the launch of the 6.25 MWh energy storage system by CATL in April and several other companies launching 6 MWh+ storage systems packed in a standard 20-foot container, ushering in a new energy density era for the battery energy storage systems. However, Envision’s latest product far surpasses all earlier system-level achievements. It packs more than 8 MWh using 700 Ah lithium iron phosphate battery cells made by Japan-headquartered AESC, in which Envision holds a majority stake.

“We made a huge jump from 315 Ah battery cells used in our previous generation products to 700 Ah and we did this to lower the cost on the system level,” a company representative told ESS News at the show in Shanghai. The latest generation product has an energy density of more than 440 Wh/l, a roundtrip efficiency of 96%, and a cycle lifetime of nearly 16,000 charge-discharge cycles. The liquid-cooled system has a voltage range from 1500 V – 2000 V and is configurable for storage durations of two to eight hours. The container weighs around 55 tons.

Pv-magazine

<http://www.pv-magazine.com>

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Flamanville EPR: Restart after shutdown due to human error

The Flamanville EPR reactor in the Manche region of France has restarted after an automatic shutdown last Wednesday. This incident, linked to human error during post-divergence tests, triggered an automatic shutdown order for the reactor.

EDF points out that the event was not due to a hardware problem, but to a misconfiguration of the electronic control systems. This situation, while regrettable, is commonplace during the commissioning phase of nuclear reactors, when precise

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procedures are essential. The French nuclear safety authority (ASN) confirms that the shutdown was the result of a failure to comply with operating procedures.

According to Karine Herviou of the Institut de Radioprotection et de Sûreté Nucléaire (IRSN), this type of incident shows that the safety devices are working as intended, stopping the reactor when an anomaly is detected. The reactor is currently stabilized at 0.2% power, and teams are continuing the tests required to prepare it for connection to the power grid, expected by late autumn. The Flamanville EPR project, launched over fifteen years ago, is experiencing numerous delays and budget overruns. Initially estimated at 3.3 billion euros, the cost has now been re-evaluated at 13.2 billion euros.

Twelve years behind schedule, the project faces recurring technical challenges. Each ramp-up stage is accompanied by a series of checks and tests to ensure the reactor's safety and efficiency. EDF recognizes that technical contingencies, including automatic shutdowns, may still occur before full capacity is reached. Reactors of this scale, especially those commissioned for the first time after several decades, often face unforeseen challenges requiring real-time technical adjustments. The ramp-up procedure, segmented into stages, enables these challenges to be managed gradually and in a controlled manner.

The restart of the Flamanville EPR is part of a wider context of increased nuclear power generation in France. In 2022, President Emmanuel Macron announced the construction of six new EPR2-type reactors, an optimized version of the EPR, with the possibility of eight additional reactors in the future.

The aim of this strategy is to secure the country's energy supply, while meeting the need to renew the existing nuclear fleet. France's nuclear fleet, with 56 reactors in operation, requires major investment to maintain its production capacity and anticipate the closure of older reactors. The Flamanville EPR, with its planned capacity of 1,600 MW, represents a major strategic addition in this context. Its capacity to generate electricity for around two million households makes it a key component of this revival.

The Flamanville reactor moves closer to grid connection. The first divergence, carried out last Tuesday, marks the start of a step-by-step power ramp-up process. For the moment, the aim is to reach 25% power, the threshold required to couple the reactor to the grid by late autumn. However, previous experience suggests that adjustments and delays are still possible. The Flamanville EPR is the fourth reactor of its type built anywhere in the world, and the most powerful in France. Its start-up, despite its obstacles, remains a central element of the French energy landscape, and its success or failure will influence future nuclear projects. The coming months will be crucial in assessing the viability of this type of reactor and the adjustments needed for future projects.

Energy News

<http://energynews.pro/>

9 September 2024

Biden-Harris Administration Leaders Announce New Onshore Renewable Energy Progress in Nevada to Create Jobs and Lower Energy Costs

Acting Deputy Secretary of the Interior Laura Daniel-Davis and White House National Climate Advisor Ali Zaidi visited Las Vegas today to announce the advancement of multiple clean energy projects in Nevada that will create good-paying jobs, lower families' energy costs, and help meet the Biden-Harris administration's renewable energy goals. The announcement comes as the Administration has released new data to demonstrate how the historic steps it has taken to accelerate and improve federal permitting processes are helping deliver more projects, more efficiently, across the United States.

The Department's Bureau of Land Management (BLM) is finalizing two projects and moving forward two more that will advance new transmission lines and solar facilities across

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the state, helping deliver clean, reliable energy from the Nevada desert to the Western electric grid and creating jobs for union workers. The two projects receiving approval – the Greenlink West Transmission Project and Libra Solar Project – will unlock up to 4.7 gigawatts of clean energy, enough to power nearly 5 million homes.

“From building large scale transmission lines to solar power generating facilities, the Interior Department and our team at the Bureau of Land Management are leading the way in the development of reliable, clean energy across the West,” said Acting Deputy Secretary Daniel-Davis. “The infrastructure projects we are advancing today in Nevada are helping meet President Biden’s ambitious renewable energy goals while making communities more energy resilient and creating good-paying jobs in the clean energy economy.”

“Under President Biden and Vice President Harris’s leadership, we are making critical investments to both strengthen our grid and feed more clean energy to homes and businesses – which will create good-paying union jobs, bolster resiliency, strengthen energy security, and lower Americans’ utility bills,” said White House National Climate Advisor Ali Zaidi. “In Nevada and across the country, our leaps forward to efficiently permit wind, solar, transmission, and other clean energy projects are part of a broader strategy to lead the world in the global clean energy race and the fight against pollution – all while protecting our communities and investing in local economies.”

Since the start of the Biden-Harris administration, the BLM has approved 41 renewable energy projects on public lands (10 solar, 13 geothermal, and 18 gen-ties), allowing for early achievement of the goal to permit 25 gigawatts by 2025. Leaders have also celebrated the groundbreaking of the TransWest Express Transmission Project, Ten West Link, and the SunZia Transmission Project, with Greenlink West becoming the fourth approval during this Administration. With today’s announced progress, the BLM has now permitted enough clean energy projects on public lands to power over 12.5 million homes and is currently processing another 55 utility-scale project proposals across the West.

“Future generations are depending on us to transition to a clean energy economy,” said BLM Director Tracy Stone-Manning. “As we continue to build clean energy projects in Nevada and across the West, we remain committed to collaborating with states, Tribes and communities to responsibly manage our public lands and create good paying jobs.”

Earlier this year, the Department issued a final Renewable Energy Rule that will lower consumer energy prices and the cost of developing solar and wind projects, improve project application processes, and incentivize developers to continue responsibly developing solar and wind projects on public lands. The BLM also released a proposed updated Western Solar Plan last month, which offers a roadmap for solar energy development on public lands and expansion of efficient and environmentally responsible solar project permitting across the West.

President Biden’s Investing in America agenda is growing the American economy from the middle out and bottom up – from rebuilding our nation’s infrastructure, to driving over half a trillion dollars in new private sector manufacturing and clean energy investments in the United States, to creating good-paying jobs and building a clean energy economy that will combat the climate crisis and make our communities more resilient.

Acting Deputy Secretary Daniel-Davis and Climate Advisor Zaidi joined BLM-Nevada State Director Jon Raby and renewable energy industry representatives to announce progress on the following projects:

Greenlink West Transmission Project

The BLM is issuing a Record of Decision for the Greenlink West Transmission Project that will create a system of new transmission lines and facilities crossing federal, state, Tribal and private lands from North Las Vegas to Reno through Clark, Esmeralda, Lyon, Mineral, Nye, Storey and Washoe counties. Upon completion, the project could transmit up to 4,000

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megawatts of clean energy, enough to power at least 4.8 million homes. This approval comes after a robust environmental review was initiated in 2023.

Libra Solar Project

The BLM is also issuing a Record of Decision for the Libra Solar Project, which is expected to generate and store up to 700 megawatts of energy on approximately 5,778 acres of public lands in Mineral County, Nevada. The project includes both a solar facility and a battery energy storage system, which could generate and store enough clean energy to power over 212,000 homes. The Libra Solar Project will be the largest solar-plus battery energy storage project in Nevada and one of the largest in the United States. The efficient review of this proposal also was initiated in 2023.

Greenlink North Transmission Project

The BLM has opened a comment period for the proposed Greenlink North Transmission Project Draft Resource Management Plan Amendment and Environmental Impact Statement. If approved, the project would designate a 210-mile long by 3,500-foot-wide utility corridor starting near Ely in White Pine County, crossing public lands through Eureka, Lander and Churchill counties, and ending near Yerington in Lyon County. This transmission project could unlock up to 4,000 megawatts of clean energy.

Bonanza Solar Project

The BLM has opened a comment period for the Bonanza Solar Project Draft Resource Management Plan Amendment and Environmental Impact Statement. The proposed 300-megawatt solar facility would include battery storage and a 5.4-mile gen-tie line on approximately 5,133-acres of public lands in Clark and Nye counties, near Las Vegas.

DOI

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

10 September 2024

US Power Use Expected to Reach Record Highs in 2024 and 2025, EIA Says

Coal India Ltd. is planning to invest about 670 billion rupees (\$8 billion) to build coal-fired power plants close to its mines, signaling the fast-growing economy will remain reliant on the fossil fuel for decades to come.

The state-owned miner has already won approval for 4.7 gigawatts of generation to be built over the next six to seven years, with most of the facilities to be in the state of Odisha on India's east coast, Business Development Director Debasish Nanda said in an interview. Another 2 gigawatts are currently under discussion and may take longer to complete, he said. The new power stations are in addition to a plan, announced by New Delhi late last year, to add 88 gigawatts of thermal generation capacity through 2032. The world's most populous country is forecasting electricity demand to surge over the next few years, making it tough to wean itself off coal, which accounts for around three-quarters of the power mix.

The fossil fuel will remain relevant to the country's electricity mix for at least three decades, Nanda said. Putting these plants near mines will allow the company to avoid transport costs, keeping them competitive, he said, adding that Coal India is also looking to build renewable power stations and get into mining critical minerals. India has a goal of getting to net zero by 2070, later than other major economies, reflecting the fact that both its population and economy are still growing quickly. However, environmentalists say the government should be doing more to decarbonize the power system.

"Coal is already unsustainable on the four key parameters of climate, environment, social justice and economics," said Sunil Dahiya, a New Delhi-based analyst at the Centre for Research on Energy and Clean Air. "The government needs to form policies that allow

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wise use of resources, instead of burdening the power system and the economy with expensive coal-fired electricity.”

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California and Texas lead the way in US battery grid rollouts

California and Texas are now the leading states in the deployment of grid-scale power sector battery systems in the US. Collectively, the two states account for 72% of operational battery networks and 65% of battery networks in development. According to the US Energy Information Administration (EIA), California registers 9.92GW of currently deployed utility-scale batteries, the largest total in the country. Texas lies second, registering 4.83GW. Grid connected utility scale batteries allow state energy supplies to store excess electricity at times of high output, allowing companies to then discharge the electricity stored during times of peak consumption.

Large-scale BESS are often viewed as a necessary step in the energy transition, with much of the electricity stored coming from renewables. Currently, the California Independent System Operator, the state’s main electricity provider, provides around 17% of its electricity from BESS at time of peak demand, according to gridstatus.io. The share of electricity provided is higher than the electricity provided by wind farms and hydropower dams over the same period. According to Power Technology’s parent company, GlobalData, cumulative installed capacity of energy storage technology in the US in 2023 registered 6.1GW. If the total battery projects in development in the US are completed by 2026, the network total would be 49.11GW. Texas is set to overtake California as the leading state with deployed utility scale batteries with 12.43GW in developments, with its total equalling 17.26GW. California has 6.07GW in planned capacity, taking its battery network to 16GW.

Both states will retain 70% of the total battery network after project development is complete. Arizona (1.81GW), Nevada (1.13GW) and Florida (561MW) are other states with significant battery network capacity. Arizona will be the third-largest power battery user in the US once its 2.62GW pipeline completes development.

Currently, 19 states do not have any plans to integrate battery power technologies into their electricity system. This can be attributed to an over-reliance on fossil fuels, or the fact that they use fossil fuels to balance their electricity grid when renewable generation is unable to deal with demand. However, declining costs and increasing electricity demand has made battery power systems more popular across the US, with 31 states having battery storage capacity plans in development.

Power-technology

<http://www.power-technology.com/>

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US Power Use Expected to Reach Record Highs in 2024 and 2025, EIA Says

U.S. power consumption is on track to rise to new records in 2024 and 2025, the U.S. Energy Information Administration (EIA) said in its Short-Term Energy Outlook (STEO) on Tuesday. With growing power demand from data centers, manufacturing and the electrification of transportation and buildings, the EIA projected power demand will rise to 4,101 billion kilowatt-hours (kWh) in 2024 and 4,185 billion kWh in 2025.

That compares with 4,000 billion kWh in 2023 and a record 4,067 billion kWh in 2022. Rising instances of extreme weather, which cause homes and businesses to crank up air conditioners or increasingly-electric heating systems, are also driving up demand. EIA forecast 2024 power sales will rise to 1,503 billion kWh for residential consumers, 1,413

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billion kWh for commercial customers and 1,039 billion kWh for industrial customers. That compares with all-time highs of 1,509 billion kWh for residential consumers in 2022, 1,391 billion kWh in 2022 for commercial customers and 1,064 billion kWh in 2000 for industrial customers. U.S. power supply, meanwhile, is expected to rise 3% this year from 2023 to meet growing demand, with solar and natural gas-fired power making up the bulk of new generation, the EIA said. Solar made up nearly 60% of all U.S. power generating capacity added in the first half of 2024, the EIA said.

Texas, with 16 billion kilowatt hours [BkWh] led the country in solar capacity expansions, followed by California, with 9 BkWh in additions, the EIA said. The EIA said natural gas' share of power generation would hold at 42% in 2024, the same as 2023, before sliding to 39% in 2025. Coal's share will ease from 17% in 2023 to 16% in 2024 and 2025 as renewable output rises. The percentage of renewable generation will rise from 21% in 2023 to 23% in 2024 and 25% in 2025, while nuclear power's share will hold at 19% in 2024 and 2025, the same as 2023. EIA projected 2024 gas sales would hold at 12.3 billion cubic feet per day (bcfd) for residential consumers, rise to 9.3 bcf for commercial customers and 36.1 bcf for power generation, and slide to 23.2 bcf for industrial customers. That compares with all-time highs of 14.3 bcf in 1996 for residential consumers, 9.6 bcf in 2019 for commercial customers, 23.8 bcf in 1973 for industrial customers and 35.4 bcf in 2023 for power generation.

Reuters

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