15 February 2023

Singapore and Vietnam will develop wind projects for export to Singapore

Singapore's Sembcorp Utilities and Vietnam's PetroVietnam Technical Services Corporation (PTSC) have signed a joint development agreement (JDA) to develop offshore wind projects in Vietnam, with a total capacity of 2.3 GW, whose generated electricity will be exported to the city-state via subsea high voltage alternative current (HVAC) cables.

This agreement follows a Memorandum of Understanding signed between the two parties at the end of October 2022 to research the feasibility of the project. The collaboration marks the first renewable energy cooperation between the two companies and aims to strengthen the relationship between the governments of Vietnam and Singapore. The two countries have collaborated in the past to develop renewable projects. In 2019, Sunseap International (Singapore) and InfraCo Asia commissioned a 168 MW solar PV project in the Ninh Thuan province, on the south-central coast of Vietnam.

Enerdata
http://www.enerdata.net/

15 February 2023

Siemens plans future energy grid laboratory in Australia

Siemens and Swinburne University of Technology in Australia have agreed to set up an energy transitions hub, with the aim to build a future energy grid laboratory to develop and test clean energy technologies.

The hub is being touted by the partners as the most advanced future energy transition hub of its kind in Australia. Located at the University's Hawthorn campus in Melbourne, the hub will feature advanced digital energy technology from Siemens and the technical, Research and Development (R&D) and teaching expertise of Swinburne. The AU$5.2 million (US$3.6 million) hub aims to build a future energy grid laboratory accessible to students and industry to work on solutions for greener, more efficient future energy systems through Siemens Xcelerator, their open digital business platform and marketplace.

The hub will enable users to leverage digital twins of energy grids, map scenarios, research new findings, develop original and creative hypotheses and test results. It will be home to a digital twin of Australia's energy grid that commercial research teams can use to run simulations of new, innovative solutions and software. In addition to microgrid and planning stations, the hub will also feature Siemens' Microgrid Management System (MGMS) and Decentralised Energy Optimization Platform (DEOP) software.

Smart Energy
http://www.smart-energy.com/

15 February 2023

Pallas construction permit granted

The Foundation Preparation Pallas-reactor applied in June 2022 to ANVS for a permit under the Nuclear Energy Act to construct and operate the Pallas reactor. As part of the application, an Environmental Impact Assessment (EIA) and Safety Report were also submitted. The EIA systematically and objectively describes all the environmental consequences of the reactor and several alternatives to these, while the Safety Report describes, among other things, how the installation works: from the design and operation of the cooling pipes and ventilation systems, to how accident situations will be dealt with.

The foundation - which is responsible for obtaining a licensable design, obtaining private investors and constructing and operating the Pallas reactor - also applied to the Rijkswaterstaat (RWS) for a permit under the Water Act for the intake of cooling water from

the North Holland Canal and the discharge of cooling water into the North Sea. ANVS has now granted the construction license for Pallas. The license becomes valid on 31 March pending any appeals. "It is the first time in decades that a permit has been granted in the Netherlands for the construction of a new nuclear reactor," ANVS noted. "Our permit issuers and lawyers have worked hard on the assessment of the Pallas permit application," said ANVS board member Marco Brugmans. "Including the preliminary consultations about the permit requirements, it was a process of many years. Pallas had to demonstrate extensively that the reactor can run safely if it is built in this way. Now that all the necessary steps, including public participation, have been completed, we will grant the construction permit and we will ensure that Pallas adheres to the regulations we have set." The RWS has also granted the licence for the reactor's cooling water.

"With these permits coming into effect, the permit under the Environmental Law (General Provisions) Act for the construction of the buildings and cooling water pipes will also come into force," the Pallas foundation said. ANVS noted that the permit it has now issued only means that the Pallas reactor may be built. "In order to use the reactor in the future, a permit for 'commissioning' is still required," it said. "Before we grant it, there is another period of [public] participation. This will probably be in 2028."

The 45 MW HFR started operating in September 1960, since when its use has largely shifted from nuclear materials testing to fundamental research and the production of medical radioisotopes. The reactor - operated by NRG on behalf of the European Union's Joint Research Centre - has for a long time supplied about 60% of Europe's and 30% of the world's use of medical radioactive sources. Pallas will be of the "tank-in-pool" type, with a thermal power of around 55 MW, and able to deploy its neutron flux more efficiently and effectively than the HFR. The Dutch government has yet to make a final decision on constructing the Pallas reactor.

Funding has been allocated in the coming years for the construction of the reactor, Minister of Health, Welfare and Sport Ernst Kuipers announced in September. He said the ministry was reserving EUR30 million (USD30 million) for the project in 2022 and EUR129 million per year from 2023. The Pallas foundation noted the decision on funding for the overall Pallas programme is currently being debated by the government and is expected to be made this year. The Minister of Health, Welfare and Sport has instructed Pallas to continue with project preparations to avoid unnecessary delays, it added. "This means that preparations for the realisation of the construction pit will continue pending a final funding decision from the Dutch government".

World-Nuclear News
http://www.world-nuclear-news.org/

15 February 2023

Brazil okays 457.5 MW of renewable projects from Oct 14 tender

Brazil's power sector regulator Aneel approved on Tuesday 457.5 MW of winning renewable energy projects from the A-5 tender held on October 14, 2022. The approvals were granted to 20 of the 22 winning proposals for wind, solar, hydro, biomass-based power and one waste-to-energy plant.

A-5 finished with around 557.5 MW of capacity, with solar accounting for most of the capacity - 200 MW across four projects. The awarded schemes represent future investments of some BRL 3 billion (USD 581m/EUR 540m). As Aneel previously said, power purchase agreements (PPAs) for wind and solar in this tender will have a term of 15 years. Projects for other sources can count on 20 years. Power supply is set to start on January 1, 2027.

RenewablesNow
http://renewablesnow.com

15 February 2023

Pakistan plans to quadruple domestic coal-fired power, move away from gas

Pakistan plans to quadruple its domestic coal-fired capacity to reduce power generation costs and will not build new gas-fired plants in the coming years, its energy minister told Reuters on Monday, as it seeks to ease a crippling foreign-exchange crisis.

A shortage of natural gas, which accounts for over a third of the country's power output, plunged large areas into hours of darkness last year. A surge in global prices of liquefied natural gas (LNG) after Russia's invasion of Ukraine and an onerous economic crisis had made LNG unaffordable for Pakistan. "LNG is no longer part of the long-term plan," Pakistan Energy Minister Khurram Dastgir Khan told Reuters, adding that the country plans to increase domestic coal-fired power capacity to 10 gigawatts (GW) in the medium-term, from 2.31 GW currently.

Pakistan's plan to switch to coal to provide its citizens reliable electricity underscores challenges in drafting effective decarbonisation strategies, at a time when some developing countries are struggling to keep lights on. Despite power demand increasing in 2022, Pakistan's annual LNG imports fell to the lowest levels in five years as European buyers elbowed out price-sensitive consumers. "We have some of the world's most efficient regasified LNG-based power plants. But we don't have the gas to run them," Dastgir said in an interview.

The South Asian nation, which is battling a wrenching economic crisis and is in dire need of funds, is seeking to reduce the value of its fuel imports and protect itself from geopolitical shocks, he said. Pakistan's foreign exchange reserves held by the central bank have fallen to $2.9 billion, barely enough to cover three weeks of imports. "It's this question of not just being able to generate energy cheaply, but also with domestic sources, that is very important," Dastgir said.

The Shanghai Electric Thar plant, a 1.32 GW capacity plant that runs on domestic coal and is funded under the China-Pakistan Economic Corridor (CPEC), started producing power last week. The CPEC is a part of Beijing's global Belt and Road Initiative. In addition to the coal-fired plants, Pakistan also plans to boost its solar, hydro and nuclear power fleet, Dastgir said, without elaborating. If the proposed plants are constructed, it could also widen the gap between Pakistan's power demand and installed power generation capacity, potentially forcing the country to idle plants. The maximum power demand met by Pakistan during the year ended June 2022 was 28.25 GW, more than 35% lower than power generation capacity of 43.77 GW. It was not immediately clear how Pakistan will finance the proposed coal fleet, but Dastgir said setting up new plants will depend on "investor interest," which he expects to increase when newly commissioned coal-fired plants are proved viable. Financial institutions in China and Japan, which are among the biggest financiers of coal units in developing countries, have been backing out of funding fossil-fuel projects in recent years amid pressure from activists and Western governments.

Reuters
http://www.reuters.com/

16 February 2023

FERC Approves Extreme Cold Weather Reliability Standards, Directs Improvements

FERC today approved two new extreme cold weather reliability standards aimed at implementing key recommendations from the joint inquiry into 2021’s Winter Storm Uri to prevent a recurrence of the unprecedented power outages affecting millions of people in Texas and the South Central U.S. The reliability standards, proposed by the North American Electric Reliability Corporation (NERC) in October 2022, contain new and revised

requirements to advance reliability of the grid during extreme cold weather temperatures. They include implementation of generator freeze protection measures, enhanced cold weather preparedness plans, identification of freeze-sensitive equipment in generators, corrective actions for when equipment freeze issues occur, annual training for generator maintenance and operations personnel, and procedures to improve the coordination of load reduction measures during a grid emergency.

Although FERC approves the new extreme cold weather reliability standards, FERC also identifies areas for improvement, and directs NERC to modify the extreme cold weather preparedness and operations reliability standard to address concerns related to applicability, ambiguity, a lack of objective measures and deadlines, and prolonged, indefinite compliance periods. Also, along with the approval and directives for modifications, FERC directs NERC to collect and assess data over time to monitor and assess entities' implementation of the new requirements.

"These new standards will help to prepare our nation's grid and our grid operators so they can provide power to consumers in the face of extreme weather," FERC Chairman Willie Phillips said.

The reliability standards FERC approves today implement approximately half of the standards-related recommendations from the joint inquiry into the 2021 winter storm. The remaining recommendations will be addressed in a second phase of NERC's standards development, which now under way.

Recent extreme cold weather events across large portions of North America have shown the importance of ensuring that the Bulk-Power System is prepared for extreme cold weather. In February 2021, Winter Storm Uri led to the largest controlled firm load shed event in U.S. history, with over 4.5 million people losing power and at least 210 people losing their lives during the event. Shortly thereafter, the Commission, along with NERC and Regional Entities, initiated a joint staff inquiry into Winter Storm Uri that resulted in the issuance of a joint report in November of 2021. The report included recommendations for Reliability Standard enhancements to improve extreme cold weather operations, preparedness, and coordination.

The order is a step towards addressing the ongoing risk posed by extreme cold weather events to the Bulk-Power System. The order would approve two NERC Reliability Standards, EOP-011-3 (Emergency Operations) and EOP-012-1 (Extreme Cold Weather Preparedness and Operations). The proposed Standards respond to several key recommendations from the joint inquiry report into Winter Storm Uri, and a NERC standards drafting team is continuing to work on additional, related recommendations from the joint report. NERC's proposed Reliability Standards contain new and revised requirements to advance system reliability by requiring generator owners to:

- implement freeze protection measures on their applicable generating units based on the extreme cold weather temperatures for their units' locations, including enhanced cold weather preparedness plans;
- identify generator cold weather critical components that are susceptible to freezing;
- implement corrective actions to ensure that the identified causes of equipment freezing do not recur;
- design and implement annual training for generation maintenance and operations personnel; and
- develop procedures to improve the coordination of load reduction measures during a grid emergency.

The order also would find that new Reliability Standard EOP-012-1 needs improvement to address concerns relating to (1) the ambiguity of facility applicability, (2)

generator-defined declarations of technical, commercial, or operational constraints that exempt a generator owner from implementing the appropriate freeze protection measures; (3) the 12 continuous hour requirement for new generating units under Requirement R1; (4) the one-hour continuous operations requirement for existing generating units under Requirement R2; (5) the extensive period before generators must implement freeze protection measures or develop corrective action plans; and (6) the lack of a time limit for completion of corrective action plans once they are developed. Thus, the draft order would direct NERC to modify Reliability Standard EOP-012-1 to clarify certain language, enhance certain Standard requirements, include criteria on permissible constraints, and identify the appropriate entity that would receive the generator owners' constraint declarations under the Standard. Lastly, to ensure that Reliability Standard EOP-012-1 is adequately addressing reliability concerns related to generator owner constraint declarations and the adequacy of the newly developed Extreme Cold Weather definition, the draft order would direct NERC to work with Commission staff to submit a plan no later than 12 months after the date of issuance of this order on how it will collect and assess data periodically to monitor the implementation of the new requirements for generator owners.

FERC
http://www.ferc.gov

17 February 2023

France's Need to Burn Gas Pushed Power Emissions to Five-Year High

France's greenhouse gas emissions from its power sector jumped to a five-year high in 2022 as nuclear outages forced it to use more gas to keep the lights during the energy crisis. Emissions from generating electricity rose 16% to 25 million tons of carbon dioxide equivalent, grid operator RTE said in a report on Thursday. The increase shows how the country's green goals have faced short-term threats from nuclear maintenance and repairs.

"Emissions of greenhouse gases in electricity production rose, albeit in a reasonable fashion," RTE President Xavier Piechaczyk said at a press conference. France ranked third on that measure in Europe, behind Sweden and Finland, he said. France's atomic output plunged to the lowest since 1988, turning the country into a net importer of power for the first time in four decades and exacerbating Europe's energy crunch. Costs of electricity, gas and carbon permits soared across the continent last summer, but have eased in recent months amid a mild winter and as Electricite de France SA made some progress on reactor repairs.

"We're more optimistic for the winter 2023-24 than for winter 2022-23" as regards France's power output, said Thomas Veyrenc, executive director in charge of strategy at RTE. "Even if nuclear output will remain low, it shouldn't as low as in 2022." France's gas-fired power generation climbed 34% last year, while solar and wind power production also rose as the country commissioned a record amount of new renewable capacity. Still, total electricity production slumped 15% to a 30-year low, with nuclear output dropping by almost a quarter. Hydropower generation slipped 19% to the lowest since 1976 because of heat waves and drought. Adjusted for weather effects and working days, power consumption fell 1.7% as high prices and conservation efforts curbed demand.

BNN Bloomberg
http://www.bnnbloomberg.ca/

17 February 2023

Finland Approves the Life Extension of the 1 GW Loviisa Nuclear Plant to 2050

The Finnish Government has granted an operating licence to Finland's power group Fortum for the life extension of the Loviisa-1 and Loviisa-2 nuclear power units. The new

operating licence allows energy production at the 1 GW Loviisa nuclear power plant, located in southern Finland, until the end of 2050. The nuclear plant's two reactors were commissioned in 1977 and 1981, and the current operating licences were due to expire at the end of 2027 for unit-1 and at the end of 2030 for unit-2.

In addition, an operating licence was granted by the government for the units until the end of 2055, as required by preparations for their decommissioning. Fortum was also granted an operating licence to use the buildings and warehouses necessary for nuclear fuel and nuclear waste management until the end of 2090. Fortum also operates the Olkiluoto nuclear plant, located in southwestern Finland, which currently holds three units: Olkiluoto 1 and 2 (880 MW each) and Olkiluto 3 (1.6 GW).At the end of 2020, nuclear represented 16% of Finland's total installed capacity with 2.8 GW (without Olikiluoto 3). Nuclear production reached 23.6 TWh in 2021, or 33% of Finland's total power generation.

Power Grid
http://www.power-grid.com/

17 February 2023

Mexico opens solar plant, kicking off renewable energy revolution in Sonora

The Mexican government has formally kicked off its ambitious renewable energy-focused Sonora Plan with the early opening of the first stage of the Puerto Peñasco photovoltaic facility. The first stage of the facility has capacity to generate 120MW, according to the CEO of state-owned power utility CFE, Manuel Bartlett. That capacity will be increased to 1,000MW by 2027 over two more stages, making it one of the largest in Latin America. State authorities originally expected to open the first stage in April 2023.

The Sonora Plan involves strengthening the northern state's supply chains with the US, spurring electric vehicle (EV) production and building several large renewable power plants, in addition to promoting associated lithium production for batteries. It entails officially estimated investments of US$48bn. President Andrés Manuel López Obrador is currently in the northwestern state on a three-day visit, during which he hopes to deliver the first lithium concessions to state-owned company LitioMx, after signing a decree to give the energy ministry (Sener) the rights to national reserves of the metal, which is key for electromobility

and energy storage. Speaking about the Puerto Peñasco plant from state capital Hermosillo, López Obrador said: “Starting today [February 17], it will supply electricity to 60,000 homes and this is just the beginning."

“This solar power plant already represents the first step of the Sonora Plan for sustainable energy that will put our state and our country at the forefront of the fight against climate change, the drive for the decarbonization of the economy and will put us at the head of the worldwide energy transition," Durazo added. When construction of the facility began in May last year, the Sonora government stated that "investment in this project will be US$1.64bn, it will benefit 1.6mn consumers and a 2,000ha grid of solar panels will be installed, which is equivalent to 315 times the size of the Azteca stadium.” Federal authorities, however, recently estimated the total investment in Puerto Peñasco at US$1bn.

The government has reported that the new solar parks in the state will be built with US-backed financing at preferential rates, and the debt burden will be assumed directly by the Mexican treasury, which will allow state-owned company CFE to own large solar parks without increasing its debt. In late 2022, Mexico committed to doubling its current installed renewable energy generation capacity, prompting skepticism from many market observers given the country's recent hostility towards the expansion of wind and solar energy by private sector parties.

Bnaamericas
http://www.bnamericas.com/

17 February 2023

India Invokes Emergency Law to Force Coal-Based Power Plants to up Output

India on Monday invoked an emergency law to force power plants that run on imported coal to maximise output ahead of an expected record surge in power usage this summer, according to an internal power ministry notice seen by Reuters.

Many of India’s power plants that use imported coal, including those owned by Adani Power and Tata Power in the western state of Gujarat, have not operated at full capacity recently because they have found it difficult to compete with power generated from cheap domestic coal. last month on India’s plans to use the law to maximise coal power output.

In the notice sent to all imported coal-based power plants, the ministry said it expects them to operate at full capacity and sell power to buyers on exchanges. India’s imported coal plants have a total capacity of 17 gigawatts. The directive comes into effect on March 16, giving plants the time to import coal ahead of the expected surge in consumption. It would remain valid till June 15.

The variable tariff for these plants will be fixed by a panel appointed by the government, the notice said, adding that the panel will use the index with lowest cost of imported coal for calculating the variable tariff for every plant. The ministry expects a peak demand of 229 gigawatts in April and to address that India would need to operate thermal capacity of 193 gigawatts that month, the notice said. India expects its power plants to burn about 8% more coal in the financial year ending March 2024, with increased economic activity and erratic weather to continue to boost growth in demand for power. The emergency law has been invoked for the second time in as many years.

Reuters
http://www.reuters.com/

21 February 2023

Germany and Belgium to increase energy links with three new projects

Germany and Belgium have agreed to link their hydrogen networks, to double gas flow into Germany, and to explore the possibility of a second-high voltage electricity

interconnector for cross-border flows. The announcement was made following the first Belgian-German Energy Summit on 14 February. Belgian prime minister Alexander De Croo and German chancellor Olaf Scholz, together with the countries' respective energy ministers, met on that date to set priorities on energy cooperation and ensure their implementation. In a joint statement, the two countries announced they had agreed to:

- Further develop hydrogen infrastructure between Belgium and Germany, with the clear goal of connecting it by 2028;
- Facilitate a major increase in the flow of liquefied natural gas (LNG) from Belgium to Germany, with the goal of doubling transit;
- Jointly examine possibilities offered by carbon capture and storage;
- Intensify co-operation on offshore energy in the North Sea and focus on joint hybrid and cross-border offshore projects;
- Implement a second high-voltage interconnector for cross-border electricity flows;
- Promote the introduction of market coupling between the European continent and the United Kingdom and Ireland.

Germany and Belgium have co-operated on energy matters for some years – the first interconnector went into operation at the end of 2020 – but the Russian invasion of Ukraine and the acceleration of the energy transition "have further increased the need for co-operation and accelerated the implementation of joint projects," Mr De Croo commented. LNG from Belgium, alongside that of Norway and the Netherlands, helped make up for reduced gas flows via Germany's Nord Stream 1, contributing significantly to the country's energy security, commented Mr Scholz. Until recently, Germany had no infrastructure to enable the importing of LNG.

Modern Power Systems
http://www.modernpowersystems.com/

22 February 2023

Price signals continue to be needed in the electricity market

Across Europe, a lively debate has been sparked on the reforms needed in the electricity market. The development that started in the autumn of 2021 as a consequence of the increase in the price of natural gas, as well as the supply restrictions that followed, brought about a previously unseen turbulence in the market. The combined effects of the Russian attack on Ukraine, the French nuclear power plant outages, and the low levels of hydro in Europe further worsened the electricity supply problems. These resulted both in high price spikes and extended periods of high prices in the electricity market.

After the rapid deployment of short-term measures, the European Commission has taken the functioning of the current electricity market model and its eventual development needs under review. The Commission's consultation on the market model ended in mid-February, with the questions arising therein pointing to the various tools the Commission is considering in order to repair the current market design.

The electricity market is not broken, however. Instead, it continues to function as expected, despite the ongoing energy crisis. In fact, a balance has been struck in the market in terms of supply and demand. The occasionally high prices have incentivized consumers to use electricity prudently. At the same time, the high prices have signalled the tight supply situation and distributed the scarcity of supply across Europe, all while utilising the interconnectors in an efficient manner. There has been enough available electricity, and there has been no need to resort to the planned outages. Nevertheless, the occasionally high prices have incentivized consumers to use electricity prudently. In various parts of Europe, including Finland, high electricity consumption savings have been reported. It's likely that these would not have been realized without the steering effect of high electricity

prices. High prices and prolonged periods of high prices have caused concern and economic difficulties for households and businesses alike. The culprits for these problems have been sought from the marginal pricing applied in the day-ahead market to the lack of long-term contracts and hedging possibilities.

In marginal pricing, all the available cheapest bids are used, and the market price is set by the last bid needed to meet demand. The European day-ahead market combines the supply-demand balance with optimising the use of cross-border transmission capacities. This means that the current solution generated by the day-ahead market provides the most efficient market result, in which the price steers electricity generation, consumption, and flows throughout Europe.

To avoid high prices and price variations in the future, a solution has been proposed in which a buffer will be set up between the prices paid by electricity consumers and the prices emerging in the short-term markets. The instruments used in such a solution could include various long-term agreements that would fix the price paid or received for a long time in the future.

When the electricity market was liberalised in mid-90s, one issue causing discomfort for a long time was the host of long-term contracts that had been entered into before the market opening. They tied the hands of market actors in the changing business environment.

Careful consideration must be given to whether long-term constructs improve the functioning of the market or whether, in fact, they create new brakes as the electricity system continues to undergo rapid change. It would be important, instead, to focus development efforts on organised hedging markets, the liquidity of which has collapsed in a short time.

The profound change in the electricity system has been linked to a paradigm shift – from 'generation follows consumption' towards 'consumption follows generation', especially as the generation structure increasingly becomes dependent on intermittent wind and solar energy.

Consumption can also be flexible where possible. It becomes important that consumption can also be flexible where possible. Through shifting electricity consumption to a point in time when there is an abundant and cheap supply of renewable electricity, the consumer will be able to purchase cheaper electricity at the same time as valuable flexibility is offered to the market.

The European debate on the electricity market design is now being confronted by several choices. What is certain is that the volume and share of renewable generation will grow alongside electricity consumption. Going forward, we will need significant investment in both generating and using clean electricity.

The laws of physics aren't changing, and the electricity system needs to be in balance at any given moment. If the cost of electricity for consumers and the market price are decoupled or this link is significantly weakened, an important steering signal is lost.

The importance of the steering effect has become very clear this winter, there are no two ways about it, and we cannot afford to lose it – price steers and generates the most efficient market result.

Fingrid
http://www.fingridlehti.fi

22 February 2023

EV Charging Network Gets Funding Boost in UK

Transport Minister Jesse Norman announced that the funding will help deliver up to a further 2,400 chargepoints set to be installed in the short term, while working to support local councils to deliver tens of thousands more in the long term. The funding will expand the current Local Electric Vehicle Infrastructure (LEVI) pilot, boost the existing On-Street

Residential Chargepoint Scheme (ORCS) and help councils across England secure dedicated resource to develop in-house expertise and capability to coordinate chargepoint plans and work with private operators – delivering a more comprehensive and reliable network of chargepoints for drivers.

In addition to expanding 3 of the original LEVI pilot schemes, there are also 16 new pilot scheme areas. Technology and Decarbonisation Transport Minister, Jesse Norman said: "The government is giving local authorities across England additional help today to energise their chargepoint roll-out plans. Today's commitment will lead to thousands of new chargers being installed, and plans for tens of thousands extra in due course, so that more people than ever can make the transition to using EVs."

In total, £22 million of government funding for the pilot areas is supported by an additional £17 million of private funding, and £2 million from public funds across local authorities. In addition to expanding the pilot scheme, today also sees the launch of the £8 million LEVI Capability Fund which will equip local authorities with the skills and ambition to scale up their plans when it comes to their charging strategy.

The funding will help local authorities work in tandem with private business and chargepoint operators to drive the sustainable growth of local networks, building and utilizing their collective knowledge and expertise to deliver the most ambitious chargepoint plans for their area.

Climate action
http://www.climateaction.org

24 February 2023

China Southern Weighing Bid for $3 Billion Enel Peru Assets

China Southern Power Grid Co. is considering a binding bid for Enel SpA's distribution operations in Peru, according to people familiar with the matter, in what could be one of the largest cross-border deals by a Chinese buyer this year.

The Guangzhou-based state power firm is working with a financial adviser after entering into a second round of bidding and conducting due diligence, the people said, asking not to be identified because the matter is private. Enel's Peruvian distribution assets, which could be valued at about $3 billion, have drawn interest from other firms in the industry as well as infrastructure funds, the people said.

Separately, the generation assets could fetch about a $2.5 billion valuation in an acquisition, the people said. China Southern is not in the running for that business, they said. Shares in Enel were trading 1% higher at 10:09 a.m. in Milan on Friday, giving the company a market value of €54 billion ($57 billion). Italy's biggest utility said in November it plans to sell assets worth as much as €21 billion to cut its record debt pile, exiting markets in South America and Europe. Considerations are ongoing and there's no certainty China Southern Power will proceed with an offer, the people said. Representatives for China Southern Power and Enel declined to comment.

Enel's generation and distribution operations in Peru have more than 1.5 million customers, according to the company's website. Enel Distribucion Peru provides electricity to the northern area of metropolitan Lima, the constitutional province of Callao and the provinces of Huaura, Huaral, Barranca and Oyon. It distributed 8,441 gigawatt hours in 2021, according to a press release.

Acquiring Enel's distribution assets in Peru would help boost China Southern Power's presence in Latin America after it bought a 28% stake in Chilean utility Transelec SA from Brookfield Infrastructure Partners for about $1.3 billion in 2018.

The pace of China's offshore purchases has declined in recent years after the high-profile implosions of serial acquirers HNA Group Co. and Anbang Insurance Group Co., as

well as governments including the European Union and India tightening rules around inbound deals during the Covid pandemic. The volume of such transactions fell to about $13.5 billion last year, the lowest since 2007, according to data compiled by Bloomberg.

Latin America has in recent years turned into a key region for Chinese companies seeking to expand overseas amid heightened scrutiny in Europe and the US. Other active players that have grown via acquisitions in the region include SGCC and China Three Gorges Corp.

Bloomberg
http://www.bloomberg.com

27 February 2023

PJM launches fast-track capacity market reform process in face of shrinking reserve margins

The PJM Interconnection on Friday started a fast-track stakeholder process to bolster its capacity market following widespread power plant outages during Winter Storm Elliott and a report showing the grid operator could face narrow reserve margins in 2028. The PJM board, in a letter to stakeholders, directed the grid operator's Resource Adequacy Senior Task Force to consider ways to improve risk modeling, especially for the winter; enhance accreditation so a resource is paid in line with its reliability contribution; and ensure that capacity suppliers are fully paid for the risks they take.

PJM's board aims for any proposed changes to be filed with the Federal Energy Regulatory Commission on Oct. 1. The board asked PJM management to consider delaying future capacity auctions so they could include any changes.

The board's letter was released the same day PJM issued a report indicating the grid operator faces growing reliability risks as power plant retirements and load growth are on track to outpace the addition of new generating resources.

About 40 GW, or 21% of PJM's installed capacity, is at risk of retiring by 2030, according to the report. At the same time, the grid operator expects its load will grow by 1.4% a year.

Although about 290 GW is in PJM's interconnection queue — mainly renewable and energy storage-hybrid projects — the grid operator expects only 15.1 GW to 30.6 GW of accredited capacity, which is less than nameplate capacity, to come online by 2030.

"The potential for an asymmetrical pace in the energy transition, in which resource retirements and load growth exceed the pace of new entry, underscores the need to enhance the accreditation, qualification and performance requirements of capacity resources," PJM said in the report.

Under a "low" new entry scenario, PJM expects its reserve margin will plunge to 8% in 2028 and 5% in 2030, down from 23% this year. If generation comes online at a faster pace under a "high" new entry scenario, the reserve margin would fall to 16% in 2028 and 15% in 2030. Reserve margins could be even tighter if people switch to electric vehicles and electric heating at an accelerated rate, according to the report.

"The amount of generation retirements appears to be more certain than the timely arrival of replacement generation resources, given that the quantity of retirements is codified in various policy objectives, while the impacts to the pace of new entry of the Inflation Reduction Act, post-pandemic supply chain issues, and other externalities are still not fully understood," PJM said.

The study's findings highlight the importance of ongoing stakeholder initiatives on resource adequacy, regional clean energy procurement and the interconnection process, as well as efforts between PJM and state and federal agencies to manage the reliability effects of policies and regulations, staff said in the report.

"As I have been saying in recent concurrences … we need to look at the big question whether the PJM capacity market can still deliver reliability at just and reasonable rates," FERC Commissioner Mark Christie said Friday on Twitter in response to the report. Earlier this month, FERC said it planned to hold a forum to review PJM's capacity market.

PJM and its 13-state region have options for addressing its reliability risks, according to Tom Rutigliano, senior advocate at the Sustainable FERC Project, which is housed at the Natural Resources Defense Council.

They include continuing to improve the interconnection process, reducing barriers to new transmission between neighboring regions, and states taking a proactive role in assuring resource adequacy, such as by directing energy storage to be built at retiring power plants, he said Friday.

PJM should proactively plan transmission like the Midcontinent Independent System Operator's multi-value project, or MVP, process for regional transmission planning, according to Rutigliano. That process led to the Long-Range Transmission Planning tranche 1 set of power lines that aim to address future reliability needs.

The PJM's offshore wind interconnection study represents the beginnings of that type of planning, he said. "We have five years warning here," Rutigliano said. "There's certainly no time to waste, but that is enough time for PJM to come up with some MVP-light or focused-MVP transmission plan to deal with these issues." The report's results aren't surprising, according to Glen Thomas, PJM Power Providers president. "Reliability will be compromised when demand is increasing and state and federal policies are actively promoting the retirement of resources that are needed to maintain reliability," he said in an email Monday.

PJM and FERC have been undermining the capacity market, such as by the commission's order approving changes to the grid operator's market rules in the middle of an auction, he said. "That represents a direct threat to reliability and will cost consumers more money than they should be paying for that reliable supply of power," Thomas said.

Meanwhile, the Resource Adequacy Senior Task Force on Tuesday will discuss a proposal by Monitoring Analytics, PJM's market monitor, on a "return to basics" capacity market plan that includes requiring capacity resources to have firm fuel, including dual fuel or multiple pipelines and a firm commodity supply. Intermittent, storage and demand-side resources must also be firm, according to the proposal.

PJM's "capacity performance" framework is a failed experiment, the market monitor said, pointing to the high power plant outage rate during Winter Storm Elliott in December.

"There is no reason that in a rational market design, two cold days would result in a crisis and a level of administrative complexity that threatens to undermine the incentives to invest in existing and new supply resources at a time when those resources are needed," the market monitor said.

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Terna: the first digital platform for requests to connect renewable energy plants to the electricity grid in Italy

Terna, the Italian transmission system operator, in collaboration with the Ministry of the Environment and Energy Security, has developed a digital platform that, for the first time, centralises all information on high-voltage connection requests from renewable plants in Italy. Designed by the company led by Stefano Donnarumma and the only system of its kind in the world, Econnextion will enable stakeholders and electricity sector operators to visualise information on the geographic location and authorisation status of new, onshore

and offshore photovoltaic and wind initiatives across Italy. The data available the dashboard (https://www.terna.it/en/electric-system/grid/econnextion), which are updated every three months, are divided by source and shown in terms of output, and can be viewed by users as a graph or as a table.

"The new Econnextion digital platform, which we have developed using an innovative geopositioning system to locate requests to connect renewable plants to the national transmission grid, represents an important leap forward in the green evolution and will benefit all electricity sector operators. It is an effective tool for identifying trends and pinpointing the areas with the highest density of energy plants and, therefore, can facilitate the coordinated planning needed to develop all of the infrastructure necessary to achieve the ambitious international targets for the decarbonisation of the energy system in a coordinated way," declared Francesco Del Pizzo, Grid Development Strategies and Dispatching Manager at Terna.

"This initiative by Terna is very useful for transparency to effectively and efficiently managing the goals set by the challenges for the energy transition. Ambitious goals, which will provide enormous benefits for the country in terms of the environment, the economy and energy security and independence. It is crucial, however, that these decarbonisation goals are achieved efficiently, with the optimal use of resources. A coordinated development of grids, renewables and storage is therefore essential. The tool made available by Terna will provide useful elements both to institutional stakeholders and to sector operators for better investment planning" stated the Italian Ministry of the Environment and Energy Security.

Specifically, the "Connection Requests" section enables users to filter requests by source (solar, onshore wind, offshore wind) in an aggregated format (number, output and percentage distribution). Using the interactive map, it is possible to view details at a regional, provincial or municipal level, and, thanks to the search filters, to select all active requests in a certain municipality and their authorisation status, for example, and compare renewable energy plant initiatives in various provinces or regions based on the so-called "General Minimum Technical Solution" (GMTS) produced by Terna.

The "Fit for 55 Target" section shows the most significant data on photovoltaic and wind power initiatives (onshore and offshore) broken down by market area, with reference to the target set by the "Fit for 55" package for 2030, which envisages a reduction in greenhouse gas emissions of at least 55% by 2030 compared to 1990 levels.

To meet the challenging European decarbonisation targets set out in the "Fit for 55" programme, approximately 70 GW of new renewable capacity will need to be installed in Italy by 2030, in particular wind and solar, in order to cover 65% of all electricity consumption with energy from clean sources. According to Terna's data, at the end of January 2023 requests for connection to the high-voltage grid from new renewable power plants reached 340 GW of cumulative power, of which 37% was from solar and 54% from wind power, around five times higher than the targets Italy has set itself for 2030.

In confirmation of Terna's increasing commitment to provide and distribute quality data to all stakeholders, the Econnextion platform enables the constant and continuous monitoring of all these initiatives, and represents a key tool for the coordinated planning of electricity infrastructures, renewable energy sources and storage systems, and for planning new photovoltaic and wind power plants in the areas with the greatest potential for renewable energy, avoiding the phenomenon of virtual grid saturation.

Terna
http://www.terna.it