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## PJM prepares new capacity repricing rule in response to FERC order

PJM Interconnection released details on Wednesday about its approach to power generation resource subsidies as it considers fixes suggested by the Federal Energy Regulatory Commission (FERC) to its capacity market rules.

The regional transmission organization (RTO) considered a resource specific carve-out, or "ReCO," as an alternative to the minimum offer price rule (MOPR) that had been rejected by FERC. The ReCO option addresses FERC's concern about "paying subsidized resources any clearing price from the [base residual auction]," PJM noted in meeting slides discussing capacity market rules.

PJM released the proposal after asking FERC on Tuesday to allow it to delay its May 2019 capacity market auction if the federal regulators cannot issue a final decision on market rules by early January.

With the growth of state-level programs subsidizing renewables or nuclear power plants, coal and gas generators have argued that those benefits suppress the market clearing price for fossil fuel generation. The generators that are receiving state or federal subsidies argue that those policies level the playing field for them to compete in capacity auctions.

FERC's June 29 decision called for new capacity market rules, finding that PJM's were unjust and unreasonable because they allowed state policies to lower market prices.

PJM's Markets and Reliability Committee (MRC) held a special session on Wednesday to discuss with stakeholders the proposed market rule changes.

After FERC rejected PJM's two capacity reform options — a two-part capacity auction separating out subsidized resources and a price floor — the RTO was pressed to put a solution in place in time for its May capacity market auction.

FERC had approved a two-part capacity auction proposal from ISO-New England in a split vote. PJM will not be pursuing ISO-NE's approach at this time based on its complexity given the tight timeline to have new rules in place.

PJM instead is considering a MOPR floor price with the option of a repricing element, the ReCo — a name subject to change, depending on stakeholder input — since "FERC did not completely rule out repricing," according to the meeting slides.

FERC had ordered PJM to file its revised plans by Aug. 28 in order to keep to a schedule intended to assure market participants that a final decision would be issued with enough time to plan the auction. If FERC grants an extension deadline, the capacity auction would also be delayed until August 14, 2019.

*Utility Dive*  
<http://www.utilitydive.com>

16 August 2018

## CSG's subsidiary to develop 500 kV China–Laos interconnection project

China Southern Power Grid's (CSG) subsidiary Yunnan International Company Limited (YNIC) is developing the 132-km Laos section of the 500 kV China–Laos double-circuit power transmission and transformer project at an estimated cost of around USD300



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million. The line will connect a 500 kV substation at the China-Laos border with a 500 kV substation at Na Mor in Laos. The construction work will involve the procurement of transformers, switch cabinets, capacitors, electric relays, wires and cables, automatic control systems, reactors, and integrated power distribution monitors, among others.

Some of the suppliers expected to be engaged for implementing the project include Cooper Industries Inc, a subsidiary of Ohio-based Eaton Corporation Inc for the supply of switch cabinets; Japan-based Nissin Electric Company Limited for the supply of mutual inductors and capacitors; Swiss-Swedish ABB Limited for the supply of mutual inductors, gas-insulated switchgear (GIS) substations, transformers, and circuit breakers; Germany's Siemens AG for the supply switch cabinets and circuit breakers; and GE Grid for the supply of disconnectors.

YNIC serves as the platform of CSG to conduct international power cooperation, and is the main body on behalf of China to carry out power interconnection cooperation in the Great Mekong sub-region (GMS).

CSG recently signed another memorandum of understanding (MoU) with Laos for a feasibility study on cooperatively developing and building Laos' national power grid in Vientiane.

*Global Transmission*  
<http://www.globaltransmission.info>

**17 August 2018**

## **NuGen confirms Moorside as potential UK plant site**

NuGeneration (NuGen) has provided information to support the Moorside site in Cumbria being carried forward into the UK government's new national policy statement as a site for a new nuclear power plant following an assessment process.

NuGen – which was formed in 2010 as the UK joint venture between Japan's Toshiba and France's Engie – planned to build a nuclear power plant of up to 3.8 GWe gross capacity at the Moorside site in West Cumbria, using AP1000 nuclear reactor technology provided by Westinghouse. That reactor design completed the UK regulatory assessment process in March 2017. Toshiba owns Westinghouse, which filed for Chapter 11 protection with US courts that same month. In July last year, Toshiba became the sole owner of NuGen, after Engie exercised its right to require the Japanese conglomerate to purchase its stake. In December, Toshiba announced that Korea Electric Power Company (Kepeco) had been selected as the preferred bidder for NuGen.

In October 2009, NuGen secured an option to purchase land alongside the Sellafield fuel cycle site, from the Nuclear Decommissioning Authority for a total cash consideration of GBP70 million (USD89 million). The site was officially sanctioned by the UK government as suitable for new build in a national policy statement. The site was originally some 200 hectares in area, of which the company will select the most suitable 100 hectares for the nuclear power plant. NuGen said the site "has had its boundary aligned to reflect the boundary consulted on at the second stage of public consultation, in summer 2016".

The Department for Business, Energy and Industrial Strategy (BEIS) has requested all new nuclear developers to submit information to support their proposed plant sites. This is in order that those sites listed in the current National Policy Statement for Nuclear can



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be carried forward into a new national policy statement. This document will define government policy for development of new sources of energy from 2026 to 2035.

NuGen announced today that it has submitted details of the Moorside site to BEIS to support its inclusion as a potential new nuclear power plant site in the new national policy statement.

"The renewal of the national policy statements is a policy process that will enable an important part of the planning process, which is necessary for new nuclear developers such as NuGen to bring forward their plans," the company said.

NuGen CEO Tom Samson said, "NuGen remains committed to delivering a nuclear power station at Moorside in Cumbria." He added, "Support for the policy process to carry forward the Moorside site is another opportunity for the community of west Cumbria to re-state its desire to host this critical national infrastructure and bring a transformational stimulus to the local economy, including jobs and prosperity for thousands of people throughout the county."

The announcement follows the recent announcement that Kepco is no longer the preferred bidder to acquire 100% of NuGen from Toshiba. However, the Japanese company said it will continue to negotiate with Kepco, along with other companies, to acquire NuGen. NuGen said it is currently conducting a "review and restructure of its future size and shape".

*World Nuclear News*

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

**20 August 2018**

## **OMVG project on course for connection with Gambia by 2019**

The Gambia River Basin Development Project or the Organisation de Mise en Valeur du Fleuve Gambie (OMVG) announced that the OMVG project aimed to connect the power grids of Gambia, Guinea, Guinea-Bissau and Senegal is on course and expected to be connected with the Gambian power grid by 2019.

The OMVG project entails two components. The first involves the extension of West African Power Pool (WAPP) transmission network or the OMVG Interconnection, which comprises of construction of 1,677-km-long, 225 kV transmission lines linking the four countries. The second component involves construction of 15 225/30 kV substations in these four countries. The project is in line with Gambia's energy roadmap and will help open up the region's energy market.

Around 16 contractors for the construction of the OMVG transmission lines have been engaged so far. Construction works on the transmission line to connect the Samba Ngallo dam project in Guinea to Gambia, as well as from Gambia to Senegal, are underway.

*Global Transmission*

<http://www.globaltransmission.info>

**20 August 2018**

## **Ukraine to invest EUR350 million to integrate grid with ENTSO-E**

Ukraine's transmission system operator (TSO) Ukrenergo has estimated that investment worth about EUR350 million will be made by Ukrainian electricity market



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operators in measures to integrate the country's grid into the European Network of Transmission System Operators (ENTSO-E).

Ukrenergo estimates that around EUR150-200 million will be invested by generation companies. The amount will be directed towards upgradation of thermal power plants and modernisation of nuclear power plants. In addition, during 2018-19, Ukrainian power plants' power units will be tested for checks on the dynamic stability of the power grids. All technical conditions and configuration of tests have been agreed to, with ENTSO-E.

According to Ukrenergo, the work is carrying on as scheduled, without delay. The deadline for Ukraine to fulfill the requirements for accession to the united energy system of continental Europe is July 2022.

*Global Transmission*

<http://www.globaltransmission.info>

**21 August 2018**

## **New 1.5 GW pump-storage hydropower project unveiled in Jharkhand**

The Indian state-run utility Damodar Valley Corporation (DVC) is planning the construction of a 1,500 MW pumped storage hydropower project consisting of six 250 MW units at Laguru Pahar near Bokaro, in Jharkhand (India) for a total cost of RUP 5,200 crore (US\$750m). DVC has already secured an initial environmental clearance has been received and has completed the pre-feasibility-study of the project. The company is now moving on to prepare the detailed project report (DPR) and bidders will be invited to prepare the DPR.

DVC is headquartered in Kolkata (India) and operates both hydropower and thermal assets, including the 2,340 MW Meja, 1,200 MW Raghunathpur and 1,000 MW Durgapur thermal power plants in West Bengal along with the 1,050 MW Maithon and 1,000 MW Koderma thermal power plants in Jharkhand.

*Enerdata*

<http://www.enerdata.net>

**21 August 2018**

## **First virtual power plant enters balancing mechanism**

A 168MW virtual power plant operated by smart energy firm Limejump has become the first balancing mechanism unit (BMU) to be aggregated across multiple grid supply points.

The company said the development will finally allow small-scale embedded generators, storage operators and demand-side response providers to access the lucrative market, which until now has been the preserve of larger power stations.

"Limejump's entry into the balancing mechanism is another step in our efforts to disrupt the conventional operations of the UK energy market," said Limejump chief executive Erik Nygard.

"This move means that a farmer with a solar installation or a supermarket with excess energy from its cooling units will be on the same footing as a giant power station.

"Just as importantly, our move increases competition, enabling a cleaner, more sustainable energy future that benefits both the environment and the end consumer."



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Limejump said it is aiming to increase the size of its virtual power plant to 600MW within the next few months.

Renewable developer Anesco has announced its 10MW Breach Farm battery storage facility in Derbyshire, as part of the new BMU, has become the first ever to supply electricity to the balancing mechanism.

Anesco executive chairman Steve Shine, said: "It's a major step forward for the industry, with the balancing mechanism market offering frequent instances of profitable spreads for batteries to take advantage of. In addition, it removes much of the risk that suppliers face from uncertain system prices."

He added: "While our storage units have previously taken part in frequency response and the wholesale market, they are now able to take advantage of these additional revenue streams and pricing opportunities."

Anesco's 10MW Clayhill solar farm, which features 6MW of battery storage, is also part of the virtual power plant operated by Limejump.

Aggregators were already allowed to enter units into the balancing mechanism if they were the registered supplier for all the sites they were aggregating. Limejump was granted a supply licence in 2015.

However, the Grid Code also stipulated that BMU data submitted to the system operator at National Grid must be aggregated at the grid supply point (GSP) level.

In a recently published roadmap setting its plans to widen access to the balancing mechanism, National Grid said in practice this meant the "supplier route" was previously only used in "locationally specific cases". All involved single sites below the GSP level.

Limejump's virtual power plant is the first to be aggregated across multiple GSPs.

To enable this to happen, Ofgem has granted the company a derogation from the aforementioned Grid Code requirements. It will instead be allowed to aggregate BMU data at the GSP group level. A GSP group covers all of the GSPs within a distribution network licence area, of which there are 14 across Great Britain.

The derogation is specific to Limejump. Ofgem said it provides "no precedent for any future derogation requests and every such request will be assessed on its own merits and particular circumstances."

It is also time limited, applying until either a code modification called GC0097 is implemented, if approved, or Ofgem issues further direction, if not.

GC0097 aims to reform the Grid Code to enable market participants and the system operator at National Grid to take part in a new Europe-wide balancing platform called Project Terre (Trans-European Replacement Reserve Exchange). Allowing BMU data to be aggregated at the GSP group level is one of the changes it would introduce.

Ofgem is currently considering whether to approve the modification. It recently postponed the decision which was previously scheduled for the end of the July.

The regulator is also evaluating a similar modification to the Balancing and Settlement Code (BSC) called P344. Among the changes it would introduce in preparation for Project TERRE would be to create a new type of BSC participant called a "virtual lead party".



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A virtual lead party would be able to create an aggregated BMU without having to take responsibility for balancing the sites that make up the unit by becoming their registered supplier.

Back in April, Flexitricity announced plans to launch a new service called Flexitricity+ with the aim of “cracking open” the balancing mechanism to DSR.

*Utility Week*

<http://www.utilityweek.co.uk>

**21 August 2018**

## **MISO partners with customers, stakeholders on transition to five-minute settlements**

*Move aligns settlements with five-minute dispatch and pricing signals*

Midcontinent Independent System Operator Inc. has successfully implemented five-minute settlements across its energy market after a year-long collaboration with customers and stakeholders. The move aligns generator energy payments in real time with five-minute system dispatch and pricing signals.

“This is an important step forward for MISO and the industry that improves the efficiency of our market operations and ensures pricing transparency for the energy being delivered in real time,” said Shawn McFarlane, MISO executive director of Market Operations. “It is an effort that required close coordination with both internal MISO teams and external partners.”

MISO signals changing power needs and corresponding prices to electric generators every five minutes. Until now, those prices were averaged across the entire hour. The new five-minute settlement function allows energy payments based on each signal and actual price.

“This allows the market to compensate generators for the true value of energy and its production cost, which can vary from each five-minute interval depending on changing demand and market conditions,” McFarlane explained. “The five-minute settlement is expected to help incent generator flexibility in adapting to conditions as signals change.”

The transition was enabled by a new settlements system introduced in the spring that delivers flexibility to meet future needs and growth. MISO began five-minute settlements July 1 after several months of intensive systems testing and close collaboration with market participants.

“MISO established direct communication and ensured transparency among DTE vendors and our settlements team before the launch of five-minute settlements, and we are proud to have played a role in the successful implementation process,” said Nick Griffin, manager of Wholesale Market Development and Integration for Detroit-based DTE Energy. “DTE’s collaboration with MISO is an important element in our overarching commitment to providing reliable, affordable and quality energy to our customers across Southeast Michigan.”

The Federal Energy Regulatory Commission and MISO’s Market Monitor each identified five-minute settlements as an opportunity to bring greater operational consistency and pricing transparency between market operators and generators. FERC Order 825, which MISO supported, requires all regional transmission operators to implement five-minute settlements.



Todd Hillman, MISO senior vice president and chief customer officer, concluded, “This is an example of the industry, stakeholders and regulators working together to find effective solutions that improve operational effectiveness, create greater transparency and support competitive, reliable markets.”

MISO

<http://www.misoenergy.org>

### 22 August 2018

#### BEIS outlines Brexit plans to transfer EU energy laws

The government has announced plans for an upcoming statutory instrument (SI) to amend several pieces of EU energy legislation which will become “retained direct EU law” as the UK leaves the European Union.

In a letter published by the Department for Business, Energy and Industrial Strategy (BEIS), energy minister Claire Perry outlines draft plans to transfer “limited energy-related legislative functions” from the European Commission.

This SI, which is the first of several for energy legislation, relates to the transfer of network codes, REMIT [Regulation on wholesale Energy Market Integrity and Transparency] and the security of gas supply regulation functions.

It will be made under the European Union (Withdrawal) Act 2018 after parliament’s summer recess to transfer functions to the secretary of state in Great Britain and the department for the economy in Northern Ireland.

When the UK leaves the EU, the Withdrawal Act will integrate EU law into domestic law. SIs made under the Withdrawal Act will amend retained EU law to ensure it is operable after EU exit.

Perry said: “As amended, retained EU law will match closely the form and operation it held before EU exit to provide continuity for businesses in the United Kingdom.

“This includes transferring functions from EU public bodies to UK public bodies, as is intended by one of my department’s planned SIs. The SI will be subject to the affirmative parliamentary procedure.”

The SI includes powers to create, in limited circumstances, new network codes and to amend where necessary aspects of the network codes in response to future developments in the energy sector.

Perry explains the power to create new codes could not be used to create “wholly new” ones. Instead it will be limited to bringing into UK law those already contained in instruments which apply after Britain’s exit date and will not automatically become retained EU law.

“It provides a means of avoiding unexpected disruption to the energy regulatory framework and wasting of efforts and investments already undertaken to comply with the codes and guidelines which are already in force,” Perry outlines. The power is time limited to two years after exit day.

This SI also allows amendments to definitions and reporting requirements under REMIT and to reporting templates under the security of gas supply regulation.

“The ability to update all of these is necessary to ensure the UK’s market abuse prevention mechanisms and plans and risk assessments for ensuring security of gas



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supply can be kept up-to-date,” Perry writes. She adds: “Without this SI, the commission functions in the regulations would remain in place when the UK leaves the EU but would be inoperable. Without this instrument it would be necessary to introduce new domestic powers through primary legislation to enable changes to be made to the statute book. Achieving this through exercise of a delegated function instead is appropriate given the highly technical nature of the codes, templates and provisions and the context of existing pressures on parliamentary time.”

This instrument amends provisions which grant powers to make further legislation. The government intends to amend other provisions of regulations by separate SIs, which have not yet been published.

The SI is not dependent on the outcome of the ongoing UK-EU negotiations as it will be necessary to transfer the relevant legislative functions from the EU under any exit scenario.

EU regulations amended by this instrument are:

- The electricity regulation for access to the network for cross-border exchanges in electricity.
- The gas regulation for access to the natural gas transmission networks.
- REMIT on wholesale energy market integrity and transparency.
- The security of gas supply regulation concerning measures to safeguard the security of gas supply.

*Utility Week*

<http://www.utilityweek.co.uk>

**22 August 2018**

## **TEPCO, Hitachi and Toshiba in talks for 4-way nuclear alliance**

*Decommissioning and safety costs loom large for the Japanese power companies*

Tokyo Electric Power Co. Holdings, Hitachi, Toshiba and Chubu Electric Power have entered into negotiations to form a four-way alliance on nuclear power operations that would include jointly decommissioning obsolete reactors. The utilities and engineering companies are considering the launch of a joint engineering company that handles reactor maintenance with the possibility of combining all nuclear operations under one roof in the future. Further details are being hashed out.

TEPCO and Chubu Electric have already agreed to combine their fossil-fuel operations under joint venture JERA in the spring of 2019. A similar risk-sharing arrangement for nuclear would represent a major shift in that business following the 2011 Fukushima disaster.

TEPCO has 11 boiling-water reactors, not including those at its Fukushima Daiichi plant, the site of the catastrophic 2011 meltdown, while Nagoya-based Chubu Electric has five. All are currently offline in the aftermath of the disaster. A number of them likely will be unable to get the official approval to restart and will have to be decommissioned. In any case, TEPCO is expected to remain solely responsible for decommissioning Fukushima Daiichi.

The Tokyo-area power provider is seeking a partner to resume construction on a planned nuclear plant in northern Japan's Aomori Prefecture, but with little success. It



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hopes that the four-way partnership could breathe new life into the project. Chubu Electric also wants to devise a game plan for restarting its Hamaoka plant.

Hitachi has urged big Japanese utilities to invest in its ongoing nuclear project in the U.K., and Toshiba plans to withdraw from the overseas nuclear business that contributed to its financial crisis. A four-way partnership would not only be good for the power companies, but could also help Japanese plant builders maintain their technology.

Safety-related costs for running nuclear plants have skyrocketed over new standards put in place after the Fukushima disaster.

"It's now impossible for a private company to be in the business by itself," an official from the Ministry of Economy, Trade and Industry said. The ministry backs the potential partnership, which could spur a broader realignment of the sector.

*Nikkei Asian Review*  
<http://asia.nikkei.com>

**22 August 2018**

## **Leningrad II-1 set to enter commercial operation**

Unit 1 of the Leningrad Phase II nuclear power plant in northwest Russia is now ready for commercial operation, Rosenergoatom announced today following the completion of the final commissioning test.

Start-up operations of the new Leningrad unit began on 8 December last year, when the first fuel assemblies were loaded into the reactor core. The reactor was brought to the minimum controllable power level on 6 February and connected to the grid on 9 March.

The unit entered "experimental industrial operation" in late March, during which workers gradually raised the power output of the reactor to 40%, 50%, 75%, 90% and 100% of capacity. A series of tests was carried out at each power level.

Rosenergoatom – the nuclear power plant operating subsidiary of Russian state nuclear corporation Rosatom - announced today the completion of the final commissioning test, which involved operating the VVER-1200 reactor at nominal power for 15 days. By the end of the pilot operation, Leningrad-II unit 1 had produced more than 2.2 terawatt-hours of electricity.

"The successful completion of the commissioning tests confirmed the technical readiness for commercial operation of the unit 1 reactor," said Vladimir Pereguda, director of the Leningrad plant.

"The results of the final comprehensive test showed stable operation of all the main and auxiliary equipment, the reactor safety systems and its full readiness for power generation in accordance with the project."

He added, "We accomplished this task two months ahead of schedule and consider the milestone a great achievement for the team."

The readiness of the unit to enter commercial operation must now be confirmed by the Russian regulator Rostekhnadzor. The final decision on the preparedness of the reactor for commercial operation will be made by Rosenergoatom's acceptance commission.

The existing Leningrad plant site has four operating RBMK-1000 units, while Leningrad-II will have four VVER-1200 units. Leningrad II-1 is scheduled to enter



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commercial operation before the end of this year, becoming the second VVER-1200 reactor to start up, following the launch in 2016 of Novovoronezh unit 6.

*World Nuclear News*

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

**23 August 2018**

## **Elia, SettleMint and Actility launch one of Europe's first blockchain pilot projects**

Elia is launching a pilot project to analyse possible applications of blockchain technology in the energy sector.

The increase in renewable energy generation is making it increasingly difficult for transmission system operators (TSOs) to guarantee that generation and consumption are balanced at all times. Power generation from renewables fluctuates constantly, so flexible reserves that can be activated swiftly (like batteries, demand management via heat pumps, etc.) are needed to ensure a steady balance. Elia is exploring the opportunities offered by blockchain technology as a payment system to address the business side of such complex, rapid transactions. The pilot project, conducted together with SettleMint and Actility, will last three months.

The aim of the current pilot project is to test blockchain's suitability for automating a number of processes related to activating flexibility. The processes under scrutiny include validating contractual links between Elia and the participating actors, recording and validating assets' metering data and settling the associated financial operations. To this end, together with its partners Actility and SettleMint, Elia intends to develop a decentralised flexibility management solution based on blockchain and developed by the Energy Web Foundation, of which Elia is an affiliate.

For the purposes of the trial, Elia and Actility will perform multiple simulations to understand how blockchain technology works and also test its limits. Among the various hypotheses to be tested, Elia will seek to understand the extent to which blockchain can serve the widespread use of decentralised flexibility and how it can accelerate and simplify activation processes and make them more transparent.

If this pilot project proves successful, it will constitute a major step forward towards establishing a Belgian electricity grid that offers a wide variety of decentralized and sustainable energy sources. Elia hopes that introducing a new technology such as blockchain will facilitate the adjustment of balance management in the energy sector which should be beneficial for all market players.

*Elia*

<http://www.elia.be>

**26 August 2018**

## **Can PG&E Quit CAISO? FERC Wants to Know**

Responding to a ruling from a federal appeals court, FERC last week instructed Pacific Gas and Electric and the California Public Utilities Commission to brief it on whether California law allows PG&E to quit CAISO.

The question may be academic; there's no indication PG&E wants to leave CAISO. But FERC's ruling on the matter could be worth \$30 million a year to the company. The reason: If PG&E can leave CAISO when it wants, the utility is entitled to continue collecting



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a 50-basis-point return on equity to remain part of the state's organized electric market. If it can't quit, then it could lose its yearly incentive adder.

Ruling in response to a challenge by the PUC, a three-judge panel of the 9th U.S. Circuit Court of Appeals directed FERC in January "to inquire into PG&E's specific circumstances, i.e., whether it could unilaterally leave the Cal-ISO and thus whether an incentive adder could induce it to remain in the Cal-ISO."

If PG&E legally must remain part of CAISO, then the company is being paid for something it is already required to do, the panel wrote.

In its Jan. 8 ruling, the appeals court found that FERC had "arbitrarily and capriciously" awarded PG&E the incentive adder without determining whether the company was being incentivized to stay in CAISO, as required by the commission's regulations. The court remanded the case to FERC to make that determination.

In response, FERC on Monday asked PG&E and the CPUC to brief four issues, including whether California law requires PG&E to participate in CAISO and whether FERC must defer to the PUC's interpretation of state law (ER14-2529-005).

The controversy over whether PG&E is entitled to the incentive payments has been going on for years.

In the Energy Policy Act of 2005, Congress amended the Federal Power Act to require FERC to provide financial incentives to induce utilities to join RTOs.

FERC responded in 2006 with Order 679, which provided adders to the rate of ROE for utilities that participate in transmission organizations. The bonuses were meant to give utilities an extra reason to join or remain members of RTOs, which are generally voluntary.

The PUC, however, argues that membership in CAISO is mandatory for the state's three big investor-owned utilities, including PG&E.

PG&E contends participation is voluntary. For staying in CAISO, PG&E has requested and received adders under Order 679 since 2007.

The PUC protested in years past and again in November 2017, saying the \$30 million adder was an "unjustified windfall" at the expense of California ratepayers. The Sacramento Municipal Utility District joined the protest.

FERC dismissed the objections, but on appeal the 9th Circuit judges ruled FERC commissioners had abused their authority.

The FERC commissioners, the court said, did not reasonably interpret Order 679 as justifying adders for remaining in a transmission organization. Instead, the commission created a generic adder in violation of the order, the judges ruled.

Order 679 says FERC "will approve, when justified, requests for ROE-based incentives for public utilities that join and/or continue to be a member of" RTOs.

"If all utilities that continued to be members of transmission organizations automatically qualified for incentive adders, the 'when justified' language would be surplusage," the appellate panel wrote.

Briefs from PG&E and the PUC must be submitted to FERC by Sept. 19.

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



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## South Africa scraps plans to add 9.6 GW of nuclear power by 2030

The South African government has released its first Integrated Resource Plan for power sector spending in eight years and has abandoned plans to add 9,600 MW of nuclear power capacity by 2030. Instead, it will focus on gas-fired, wind and solar power plants. The country's domestic nuclear capacity currently stands at 1,860 MW and is expected to remain idle in the upcoming years since no new projects are underway. By 2030, the government intends to commission 8,100 MW of wind power, 8,100 MW of gas-fired power plants, 5,670 MW of solar PV panels, 2,500 MW of hydropower and 1,000 MW of coal-fired capacities.

The plan will be carried out by the Department of Energy, the National Energy Regulator of South Africa (NERSA) and the state-run power utility Eskom. By 2030, the country's energy mix is scheduled to comprise coal (46% of the total capacity), gas (16%), wind (15%), solar (11%), hydropower (10%) and nuclear power (2%). Several coal-fired power plants will reach their end of life by then and Eskom will close approximately 30 GW of coal-fired capacity before 2040.

*Enerdata*

<http://www.enerdata.net>

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## China's first offshore 1.1 GW HVDC line project has been unveiled

Chinese utility Power China Huadong Engineering Corporation is mulling over the construction of a 1,100 MW high-voltage direct current (HVDC) transmission line which would connect Chinese offshore wind parks to the mainland. The company has contracted the certification body DNV GL to provide technical advisory support on feasibility studies for the power transmission project, which could connect a 1.1 GW offshore wind farm some 90 km off the coast of Jiangsu Province in eastern China.

Chinese authorities are looking forward to developing the domestic offshore wind power generation capacity and target 5 GW by 2020. In 2017 alone, roughly 1.2 GW was added to the grid, bringing the cumulative total installed capacity to nearly 2.8 GW. However, all the promising sites located within 10 km of the mainland have already been exploited, which means that the 2020 objective can only be attained if locations that are further offshore are exploited.

For this purpose, a HVDC line is required as submarine high-voltage alternating current (HVAC) is inefficient and unable to transport large amounts of power over such long distances.

*Enerdata*

<http://www.enerdata.net>