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Germany and Austria: Congestion management successfully launched

Today, congestion management for electricity trading at the German-Austrian border launched punctually and successfully. At the behest of the German regulatory authority the four German transmission system operators, namely 50Hertz, Amprion, TenneT and TransnetBW, have been working on this project in close cooperation with the market players and authorities in both countries as well as at the regional and European levels.

Congestion management secures electricity trading at the German-Austrian border and at the same time ensures grid stability and thus security of supply in Germany and Austria: Previously, there was unrestricted electricity trading due to the common bidding zone. This led to bottlenecks in the heavily loaded power grid that could only be stabilized with extensive measures. The transmission system operators expect a significant improvement in the capacity constraint situation between Germany and Austria and, accordingly, a reduced need for grid stabilization measures, especially at this border, as well as a relief of neighboring transmission grids, especially in Poland and the Czech Republic. In the long term, this could also have a positive effect on grid charges and thus the costs for electricity consumers.

Congestion management is in line with the objectives of the European Network Codes. According to the requirements of the German regulatory authority, market participants receive long-term transmission capacities of at least 4.9 gigawatts. As agreed with the German and Austrian regulatory authorities, the Austrian transmission system operator will ensure this capacity through power station capacity for grid stabilization measures. In case it is temporarily not available, the available transmission capacity at the German-Austrian border will be reduced accordingly. Long-term transmission capacities for the launch of congestion management were already successfully auctioned in mid-September, and the allocation in the day-ahead and intraday time frame also happened without complications. The daily calculation of capacities will be included in the regional Central West European capacity calculation. The electricity exchange takes place via the so-called flow-based market coupling.

Background

Germany and Austria have so far formed a common bidding zone in the European energy market. The trade volume between the two countries has been rising steadily in recent years. However, since the physical transport capacity of the transmission grid is limited, this resulted in power supply overload over many hours throughout the year. As a result, the secure operation of the transmission grid in Germany, Austria and other neighboring countries has become increasingly complex resulting in the need for grid stabilizing measures. At the end of 2016, the European Agency for the Cooperation of Energy Regulators (ACER) decided to divide the joint bidding zone between Germany and Austria. As a result, the German regulatory authority commissioned German transmission system operators to prepare congestion management systems at the German-Austrian border by 2018. In the spring of 2017, the German and Austrian regulatory authorities agreed to the required level of long-term transmission capacity and the guarantee of sufficiently secured power station capacity for grid stabilizing measures by the Austrian transmission system operator.

TenneT
<http://www.tennet.eu>



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PJM: FirstEnergy can shut 4 GW of fossil plants without harming reliability

PJM Interconnection has completed a 30-day reliability study of FirstEnergy Solutions' (FES) proposed coal and diesel plant retirements, concluding the shutdowns can proceed without impacting the grid's reliability.

FES wants to mothball four fossil fuel plants in Pennsylvania and Ohio in 2021 and 2022, amounting to 4 GW of coal capacity. Earlier this year, the grid operator concluded FES could shut down three nuclear plants without threatening reliability.

Because the deactivations are planned several years into the future, PJM said it would have time to make system upgrades to account for any impact. The operator also said it is working on a study of extended outages associated with potential fuel disruptions, and would incorporate into that analysis FES' new closures.

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

2 October 2018

Winter outlook 2018-2019: Favourable developments for November, but additional efforts required for January and February

The need for additional capacity to maintain security of supply throughout the winter is down from 1,600-1,700 MW to 700-900 MW

While the 750 MW of announced additional measures and the bringing forward of the maintenance of Tihange 1 have not quite allowed the legal criteria to be met, the risk of load shedding has been reduced substantially.

BRUSSELS – Today Elia was invited to a meeting of the Federal Parliamentary Committee on Business to give an update on the outlook for winter 2018-2019. With just a few weeks to go before winter started, Belgium was faced with the unexpected unavailability of several nuclear power plants (Doel 1, Doel 2, Tihange 2 and Tihange 3), in response to which Elia announced on 24 September that the legal criteria for security of supply had not been met. One week on, the outlook for Belgium has improved: instead of an extremely difficult winter, the country can now expect shorter periods of supply difficulties and a lower risk of load shedding.

Appeal to the government and the market parties for more megawatts

According to Elia's latest analysis, another 700-900 MW of capacity is needed to ensure that security of supply can be maintained throughout the winter. Last week, at the initiative of Federal Energy Minister Marghem, a number of options were presented that could make a positive contribution to the situation. But even with the 750 MW of announced additional measures and the bringing forward of the maintenance of Tihange 1, the legal criteria for security of supply have not quite been met. The risk of load shedding is nonetheless considerably lower than it was.

Elia urges the government and the market parties to continue seeking ways of providing additional capacity. In January and February in particular, the market situation is more difficult because the import options are more limited.

Looking ahead to early 2019, certainty is needed about the expected return to service of several nuclear power plants (Doel 1, Doel 2 and Doel 4) in December. The task



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force led by Minister Marghem, which is working on the government's behalf, is also examining the feasibility of adjusting the unavailability programme to allow one of the nuclear power plants that was supposed to be offline until after the winter to return to service safely from January. This would have a positive impact on security of supply.

Every megawatt is welcome for November too. There has been one positive development for that month though: an additional analysis conducted by French system operator RTE has confirmed that the French grid may well have over 1,000 MW of energy available for the Belgian market, even if the weather is very cold (i.e. the kind of conditions seen once every ten years).

Starting in mid-October, Elia will run a weekly operational process that will include reviewing the outlook for the week. Any additional measures required can then be examined in consultation with the relevant government departments.

Elia

<http://www.elia.be>

2 October 2018

Engie advances date of Tihange-1 nuclear reactor's overhaul

French energy group Engie has brought forward the date of the overhaul operations for its Tihange-1 nuclear reactor in Belgium by one week to save time and avoid a possible blackout in November in case of challenging meteorological conditions. Tihange-1 maintenance operations will take place between 13 October and 17 November 2018 instead of the initial planned dates of 20 October-29 November. November 2018 will be very tense month in terms of electricity supply for Belgium and this slight calendar change is meant to help in case of cold wave.

Indeed, the country is expected to face an unprecedented power supply crunch this winter after Engie decided to delay the restart of its 443 MWe Doel-1 and Doel-2 nuclear reactors (Belgium) by two months in September 2018. They were slated to restart in October 2018, following long maintenance stops, which began in April-May 2018 but the company decided to extend the maintenance outage. Besides, Engie also decided to postpone the restart of its Tihange-2 and 3 nuclear reactors in September 2018 by several months following the discovery of problems with their concrete structures.

Engie operates seven nuclear reactors in Belgium, of which four in Doel (2,905 MW) and three in Tihange (3,008 MW).

Enerdata

<http://www.enerdata.net>

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Rosatom's Rostov-4 nuclear reactor starts commercial operations

According to the state-held nuclear company Rosatom, the Rostov-4 VVER nuclear reactor located near Volgodonsk in Russia has entered the commercial operation phase three months ahead of schedule. The Russian regulator Rostekhnadzor issued the required permit in January 2018 and the unit was connected to the domestic grid in February 2018, progressively ramping up to reach 100% capacity in April 2018.

Rostov-4 is a Pressurised Water Reactor (PWR) with a design net capacity of 1,011 MW (1,070 MW gross). It is the fourth unit of the Rostov nuclear plant, which already



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comprises three other PWRs. With the commissioning of Rostov-4, Russia's total installed nuclear capacity reaches 27.9 GWe.

Enerdata

<http://www.enerdata.net>

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Denmark embraces electric car revolution with petrol and diesel ban plan

Denmark has proposed a ban on the sale of new petrol and diesel cars from 2030 and hybrid from 2035, joining international efforts to promote electric-only vehicles to reduce air pollution and combat climate change.

The government has previously come under fire for increasing tax on electric cars in 2016, sending sales down from more than 3 percent of all new cars to almost zero, but now aims to follow the example being set in an increasing number of countries.

“It is a big ambition that will be hard to achieve. But that’s exactly why we need to try,” Danish Prime Minister Lars Lokke Rasmussen told parliament on Tuesday.

The plan requires parliamentary approval to become law and will be presented to parliament next week.

Britain and France have both pledged to ban new petrol and diesel cars from 2040 in move that could hit the wealth of oil producers and transform a car industry in which global carmakers are scrambling to adapt to the brave new world of electric vehicles.

In Sweden, sales of electric cars make up more than 7 percent of all new car sales while more than half of all new cars in Norway are electric or hybrid vehicles.

The mayors of Paris, Madrid, Mexico City and Athens have all said they plan to ban diesel vehicles from city centers by 2025, while the French government also aims to end the sale of new gasoline and diesel vehicles by 2040.

Denmark, the cradle of wind power, aims to become fossil fuel-free by 2050.

In 2017 Volvo became the first major traditional automaker to phase out vehicles powered solely by the internal combustion engine, announcing that all Volvo car models launched after 2019 would be electric or hybrids.

Reuters

<http://www.reuters.com>

3 October 2018

Nordic TSOs confirm 15 minutes resolution by end of 2020

The common Nordic power market has provided huge benefits for more than 20 years. Among the next steps in this cooperation is the move from 60 to 15 minutes markets and settlement.

By the end of 2020 all European countries shall implement 15 minutes imbalance settlement period (ISP). The Nordic TSOs will combine this with a 15 minutes balancing market and ensuring availability of 15 minutes products in the XBID intraday market paving the way for a transition to a more sustainable energy system.

The Nordic TSOs are currently conducting detailed assessments of the move from 60 minutes ISP to 15 minutes ISP, 15 minutes balancing market and 15 minutes trading



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possibilities in the intraday market. The original Nordic TSO ambition of a Q2 2020 implementation of 15 minutes ISP has been assessed to be too challenging for both the TSOs and the market actors. The ongoing work with a Nordic implementation plan indicates a stepwise approach with the preliminary target date towards the end of Q4 2020. This plan will be based on input from all the stakeholders.

Statnett

<http://www.statnett.no>

3 October 2018

PJM recasts capacity repricing in market reform filing at FERC

The PJM Interconnection on Tuesday filed a pair of options to reform its capacity market with the Federal Energy Regulatory Commission (FERC), recasting a capacity repricing plan that the agency threw out when it invalidated the grid operator's market rules in June.

Under both proposals, PJM would remove state-subsidized resources from the capacity market and institute a strict price floor for resources that remain. The second "extended" proposal would boost capacity prices for the remaining resources, combating what PJM says would be price-suppressive effects of removing subsidized resources from the market.

Comments from renewable energy and nuclear advocates urged FERC to protect states' ability to meet clean energy goals, while fossil generators largely advocated for a strong price floor, though one floated a price on carbon. Reply comments are due Nov. 2 and a FERC decision is expected early next year.

Utility Dive

<http://www.utilitydive.com>

4 October 2018

Electricity plant in port of Rotterdam ready to act as the 'starter motor of the south'

A recovery facility for the high-voltage grid has been put into operation at the gas-fuelled Enecogen electricity plant in the port of Rotterdam. This facility – equivalent to an enormous emergency power generator - quickly re-energises the high-voltage grid in case of a total power failure in the Netherlands

The recovery facility was built for TenneT by Enecogen - a joint venture between Eneco and Castleton Commodities International LLC. After a construction period of 18 months, the facility is now ready for use. By putting it into operation, Enecogen becomes an important link in assisting TenneT to restore the electricity grid in the event of a total power failure. In accordance with European agreements TenneT wants to be prepared for such a situation, despite the fact that it is very unlikely that a blackout on such a scale will occur in the Netherlands.

In a blackout situation, the electricity plants in the Netherlands must be reactivated. Like a starter motor, the installation consisting of an emergency power generator and a gas turbine turns on the the Enecogen plant. As a result, the rest of the power supply - power stations, solar farms and windmills - can then be brought back on the grid step by step. Upon notification from TenneT, the recovery facility must be up and running as quickly as possible and subsequently continue to be available for at least 24 hours.



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The Enecogen recovery facility is the third emergency facility contracted by TenneT in the Netherlands for this purpose. Similar facilities contracted by TenneT at an earlier stage are Nuon's Magnum power plant in the north and Eneco's Lage Weide power plant in the middle of the country. The completion of the 'starter motor of the south', completes TenneT's emergency facilities for blackout situations.

TenneT

<http://www.tennet.eu>

4 October 2018

India's GEC projects to involve INR500 billion investments by 2022

India's grid operator Power Grid Corporation of India Limited (POWERGRID) expects a market opportunity of around INR500 billion for establishing Green Energy Corridors (GEC) in India by 2022.

GECs involve the development of transmission infrastructure for the evacuation of renewable energy pockets located in the country's western and southern regions. The creation of the GECs in India is one of the most ambitious network infrastructure projects in the world and will support the increase of renewable energy generation capacities; thus contributing towards lowering the rising emissions of greenhouse gases in India.

The Indian government has set a target to add around 100 GW of solar power generation capacity in the grid through the GECs.

Global Transmission

<http://www.globaltransmission.info>

10 October 2018

Ghana starts to export power to Burkina Faso through a new 225 kV line

The governments of Ghana and Burkina Faso have inaugurated the 225 kV interconnection line, a 188-km long line spreading from Bolgatanga (Ghana) to Ouagadougou (Burkina Faso). The 100 MW line paves the way for exporting of power from Ghana to Burkina Faso.

It was built by the French company Eiffage for a total amount estimated at CFA55bn (roughly US\$96m), of which CFA21bn (US\$37m) was financed by the government of Burkina Faso. With the commissioning of the facility, Burkina Faso expects to reduce the average price of electricity per kWh on the domestic power market. Meanwhile, Ghana's government announced that the country has become a net exporter of electricity.

The project's completion was vital for the West African Power Pool (WAPP) and will strengthen regional integration and the realisation of a regional power market.

Enerdata

<http://www.enerdata.net>