Press release

Munich, December 7, 2020

Siemens Energy awarded contracts to enable Uniper to provide grid stability services in Great Britain

- Rotating grid stabilization technology will provide stability services to help the grid meet the challenges of the energy transition
- Siemens Energy will install new technology at Uniper's Grain site and repurpose two steam turbine generators at Killingholme
- Both projects will become operational in 2021

Siemens Energy has been awarded contracts by global energy company Uniper to provide rotating grid stabilization technology at two sites in the UK. This new technology will enable Uniper to deliver grid stability services to energy system operator National Grid ESO, through generating inertia which helps balance grid frequency, without generating power.

Siemens Energy will supply and install two new custom designed synchronous condenser units at Uniper's Grain combined cycle power plant in Kent. At Killingholme in Lincolnshire, the two Siemens' steam turbine generators will be repurposed to enable synchronous condenser operation.

All new units will be supplied with state-of-the-art, custom designed, Siemens Energy rotating machines, flywheel, and control systems and will use the existing grid connections at each site.

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Siemens Energy supported Uniper with front end engineering design across both sites, to ensure a custom technology solution was provided, and will be responsible for installation and commissioning across both sites, with both projects due to be operational in 2021.

“As the energy transition in Great Britain continues along a path toward a zero-carbon future, innovative products and solutions such as these are taking center-stage,” said Karim Amin, Executive Vice President, Generation, Siemens Energy. “And as GB’s electricity generation system moves to more decentralized, renewable power, projects like this which provide inertia without generating any power, will be even more important for the energy system of the future. We salute Uniper for their commitment to a more sustainable energy future.”

Steve Scrimshaw, Vice President, Siemens Energy Ltd UK&I, said: “Great Britain is leading the way in integrating renewable power to replace fossil-based generation to decarbonize its electricity system. To go further, we will need to see more projects, like these, which enhance grid stability, and will ultimately enable the net zero goal to be achieved.”

Mike Lockett, Uniper UK Country Chairman and Group Chief Commercial Officer Power, commented: “I’m delighted that we’ve been able to work closely with Siemens Energy to create a bespoke solution that meets the needs of National Grid ESO, and which is the right fit for our Killingholme and Grain facilities.

“The services provided by Uniper will make an important contribution in supporting the energy transition by maintaining grid stability and security of supplies whilst enabling more renewables to be integrated into the energy system. Creating these innovative solutions based at our

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sites, puts Uniper at the forefront of this market, demonstrating our ongoing commitment to meeting the challenge of a zero-carbon future."

Julian Leslie, Head of Networks and Chief Engineer at National Grid ESO commented: "The GB electricity system is one of the most advanced in the world, both in terms of reliability and the levels of renewable power.

"We're really excited to be building on that and see Siemens Energy and Uniper deliver another development in our Stability Pathfinder programme.

"Contracts and technologies such as these are cheaper and greener, helping us as the system operator to reduce emissions and save money for electricity consumers – a huge step forward in our ambition to be able to operate the GB electricity system carbon free by 2025."

The services provided by Uniper under the Stability Pathfinder project will support National Grid ESO by helping balance the UK's electricity system and help maintain the frequency at 50Hz.



Siemens Energy Synchronous Condenser

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This press release and a press picture are available at
https://bit.ly/2JJcug0

For further information on Division Generation, please see
https://bit.ly/3ejNhE4

For further information on synchronous condensers, please see
https://bit.ly/35HNNbi

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Siemens Energy is one of the world's leading energy technology companies. The company works with its customers and partners on energy systems for the future, thus supporting the transition to a more sustainable world. With its portfolio of products, solutions and services, Siemens Energy covers almost the entire energy value chain – from power generation and transmission to storage. The portfolio includes conventional and renewable energy technology, such as gas and steam turbines, hybrid power plants operated with hydrogen, and power generators and transformers. More than 50 percent of the portfolio has already been decarbonized. A majority stake in the listed company Siemens Gamesa Renewable Energy (SGRE) makes Siemens Energy a global market leader for renewable energies. An estimated one-sixth of the electricity generated worldwide is based on technologies from Siemens Energy. Siemens Energy employs more than 90,000 people worldwide in more than 90 countries and generated revenue of around €27.5 billion in fiscal year 2020. www.siemens-energy.com.

Uniper is a leading international energy company with around 11,500 employees and activities in more than 40 countries. With about 34 GW of installed generation capacity, Uniper is among the largest global power generators. Its main activities include power generation in Europe and Russia as well as global energy trading, including a diversified gas portfolio that makes Uniper one of Europe's leading gas companies. The company is headquartered in Düsseldorf, being the third-largest listed German utility. Under its new strategy, Uniper aims to become climate neutral in its European power generation by 2035.

Uniper UK operates a flexible generation portfolio of seven power stations, and a fast-cycle gas storage facility. A broad range of commercial activities are offered through the Engineering Services division, while the Uniper Engineering Academy delivers high-quality technical training and government-accredited apprenticeship programmes for the utility, manufacturing and heavy industry sectors.

National Grid Electricity System Operator – a legally separate business within the National Grid Group – relies on a mix of power generation to balance Great Britain's electricity system and ensure that, whatever the mix, electricity is always there when its needed.

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Our mission is to enable the transformation to a sustainable energy system and ensure the delivery of reliable affordable energy for all consumers. We are working with stakeholders across the whole energy system to plan for future requirements on the electricity networks. We use the insight we gather to make sure we can balance the system today and find opportunities to transform the way we operate the system in the future.

We are proud of the role we play enabling and accelerating progress towards a low-carbon energy future. In June 2020, we facilitated 67 days of coal-free operation of Great Britain's system, showing further progress towards our ESO ambition of being able to operate a zero-carbon electricity system by 2025.

You can find out more on our Stability Pathfinder programme here.

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