

---

**Press release**Augsburg, 30<sup>th</sup> October 2019

---

**MAN Energy Solutions SE**  
Stadtbachstraße 1, 86153 Augsburg  
GermanyPostal address:  
86224 Augsburg, Germany[www.man-es.com](http://www.man-es.com)

---

**Group Communications**  
Jan Hoppe  
P +49 821 322 3126  
[jan.hoppe@man-es.com](mailto:jan.hoppe@man-es.com)

# MAN Energy Solutions to Deliver Back-Up Power to Support UK Transition to Sustainable Energy

MAN Energy Solutions has won orders from Statera Energy, the UK-based flexible-energy company, for the supply of 8 x MAN 20V35/44G TS engines for two 50MW power plants.

The orders represent the first part of a recent framework agreement between the two companies for the supply of 20V35/44G TS natural-gas reciprocating engines to Statera's UK power plants. 24 such engines, the first of their kind to be deployed in Britain, will deliver a total of 300 MW of highly efficient back-up power to the national grid, and will be installed in six new power plants over the course of the next 18 months.

Wayne Jones, OBE, Chief Sales Officer of MAN Energy Solutions, said: "As a global pioneer, the UK is the first among the world's leading industrial nations to commit itself to a zero-emission target; MAN Energy Solutions is proud and honoured to be part of such an important initiative. Our gas engines provide market-leading fuel efficiency and saving fuel ultimately means cutting emissions. As soon as it is available, the engines can also be operated on synthetic natural gas, a fuel that can be generated from renewable energy and is 100% climate neutral. Studies expect the production of such green gas to ramp up within the next 10-15 years. In this way, Statera's new plants are future-proofed and have the potential to contribute to a fully decarbonised economy."

The United Kingdom's commitment to reach net zero carbon emissions by 2050 means that weather-dependent, intermittent, renewable sources of energy – such as wind and solar – will need to be deployed at scale over the coming years. As a result, balancing the supply and demand of electricity will become increasingly challenging as back-up forms of generation will need to respond rapidly to fluctuations in the output of renewable sources of power. Aurora Energy Research predicts that by 2050, 50TWh of back-up power will be needed to support renewables which will represent around 9% of the energy mix. In all its Future Energy Scenario analysis, National Grid predicts that gas will play a key part in meeting this requirement.

Statera's new plants mark an innovative step change in the way natural gas can be used to meet the urgent nature of an energy deficit or peak demand on the UK electricity network when compared to Combined Cycle Gas Turbine (CCGT) power plants. The Statera plants can reach full capacity from standby within around five minutes (versus 60 minutes minimum for a CCGT) and their design has been optimised to be the most efficient way of turning natural gas to electricity for short runs of 4 hours or less. Analysis conducted by Aurora Energy Research predicts that the most common duration requirement for back-up power to support the renewable energy mix by 2050 will be for under 4 hours, which is why these new power plants are essential to meet this changing need. In addition, each of

Statera's power plants will be fitted with a selective catalytic reduction unit, which will ensure that exhaust emissions are not only within Environment Agency limits but are consistent with levels already measured in the atmosphere.

Tom Vernon, Managing Director of Statera Energy, said: "The UK has set some of the most ambitious carbon and sustainability targets in the world, which will require a fundamental rethink of the way energy is produced, stored, and used. Renewables are going to be the dominant source of power in the future, and while batteries will balance the grid for daily fluctuations in supply and demand, flexible gas generation will play a crucial role in efficiently guaranteeing security of supply for those prolonged periods where there is low renewable generation. Statera's mission is to improve the efficiency of the current level of gas deployment using technology where the best flexibility and response times can be delivered. This will replace less efficient and less responsive gas and allow further development of renewables. We are very pleased to be working with MAN Energy Solutions who has developed an engine that we believe is truly best in class and leads the way in using Natural Gas and Synthetic Natural Gas to create electricity with maximum flexibility and efficiency."

## **About the gas engines**

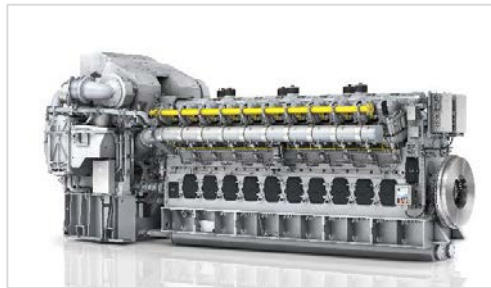
Gas engine power plants offer important advantages to plant operators facing today's energy-market requirements. Each of the new plants consists of four MAN 20V35/44G TS-type gas engines that can be introduced to – or removed from – service as required, offering customers optimal operational and market-oriented flexibility.

The MAN 20V35/44G TS is a spark-ignited, two-stage turbocharged gas-engine. Engines with two-stage turbocharging come with both a low-pressure and high-pressure compressor, which work connected in series to deliver improved power density and efficiency. Such a set-up significantly reduces fuel consumption and emissions, and offers a more compact plant design. MAN Energy Solutions is the only large engine manufacturer that designs and builds its own turbochargers, ensuring a perfect match with the engine.

MAN Energy Solutions is the leading provider of gas-engine power plants in Europe, including the key market of Germany, where in 2018 the company commissioned power plants in Stuttgart-Gaisburg and the town of Schwäbisch Hall. The company is currently establishing additional plants with gas engines from its 35/44 series in the cities of Frankfurt (Oder), Jena and Chemnitz.

## About Statera Energy

Statera is a next-generation, flexible-energy company powering the transition to a secure, stable and sustainable future. Statera Energy is pioneering highly flexible, highly efficient, reciprocating engines powered by natural gas. These fast-action power plants enable the UK to continue to grow its renewable energy portfolio, protecting the National Grid against the intermittent and unpredictable nature of weather-dependent energy sources. Statera has already deployed a fast-acting electricity-generation power station with a capacity of 50 MW at Creyke Beck in Humberside. Statera is also the UK's leading developer, owner and operator of battery-storage projects. It currently operates two of the UK's largest batteries totalling 100 MW, the first of which has been operational since 2017. The company is actively developing a large pipeline of transmission and distribution connected projects at strategic locations in the UK and has 700 MW of projects consented and ready for construction.



*The MAN V35/44G TS is a spark-ignited, two-stage turbocharged gas-engine*



*Layout of the Statera gas engine power plants*

---

MAN Energy Solutions enables its customers to achieve sustainable value creation in the transition towards a carbon neutral future. Addressing tomorrow's challenges within the marine, energy and industrial sectors, we improve efficiency and performance at a systemic level. Leading the way in advanced engineering for more than 250 years, we provide a unique portfolio of technologies. Headquartered in Germany, MAN Energy Solutions employs some 14,000 people at over 120 sites globally. Our after-sales brand, MAN PrimeServ, offers a vast network of service centres to our customers all over the world.