
Press releaseAugsburg, 2019-04-10

MAN Energy Solutions SE
Stadtbachstraße 1, 86153 Augsburg
GermanyPostal address:
86224 Augsburg, Germanywww.man-es.com

Group Communications
Michael Mustermann
P +49 821 322 12 34
michael.mustermann@man-es.com

MAN Energy Solutions constructs a combined heat and power plant in Frankfurt (Oder)

New 51 MW gas engine plant replaces a lignite-fired power station and saves up to 35,000 tons of CO2 per year

Stadtwerke Frankfurt (Oder) GmbH has tasked MAN Energy Solutions with planning and delivering a new power plant for combined heat and power (CHP) generation. The plant is powered by five MAN 20V35/44G gas engines, which produce not only 51 MW of electrical energy but also 50 MW district heating. MAN will additionally install a hot water boiler with a capacity of 20 MW that will increase the overall thermal capacity of the plant to 70 MW. Commissioning is planned for the 2021/2022 heating season.

The new gas engine plant is part of a comprehensive plan to modernize the Am Hohen Feld thermal power station; since 1997, it has been supplying electricity to around 50,000 households and businesses and district heating to approximately 23,000 residential and commercial customers in the town on the banks of the Oder. Up to now, the power plant has been fired by lignite and natural gas. The new plant will enable operation to be fueled solely by natural gas, which is better for the environment.

"By modernizing our power plant site, we are securing environmentally friendly and economically efficient heat and power supply for our region," explains Torsten Röglin, Director of Stadtwerke Frankfurt (Oder). "The new plant reduces CO2 emissions by up to 35,000 tons per year. Operating at a total efficiency of over 90 percent, the power plant makes particularly effective use of its fuel."

In total, Stadtwerke Frankfurt (Oder) is investing almost €60 million in order to modernize the plant – the company's largest investment plan in 20 years.

Gas engines are the ideal solutions for generating district heat

The new gas engine plant improves the flexibility of the overall thermal power plant. Thanks to a heat reservoir with a capacity of 10,000 cubic meters that has also been newly constructed, the waste heat from the engines can be stored when the demand for heat is low, while electricity production continues as normal. This allows Stadtwerke Frankfurt (Oder) to react quickly and flexibly to price changes on the electricity exchanges. This is also made possible by the high reaction speed of the MAN gas engines, which reach their full output in less than five minutes and can handle quick load changes effortlessly.

"Large gas engines are particularly suitable for generating district heat. When combined with a heat reservoir, this also enables the plant to operate in a market-

oriented, flexible way, as electricity and heat generation are separated," explains Hajo Hoops, Senior Sales Manager at MAN Energy Solutions. "Thanks to their high fuel utilization, combined heat and power plants with gas engines are the most efficient solution for safe, environmentally friendly, economically viable electricity and heat supply."

MAN PrimeServ is responsible for maintaining the engines

Even after the planned commissioning in the 2020/2021 heating season, MAN Energy Solutions will remain a project partner: The company's global after-sales brand, MAN PrimeServ, will work together with staff from Stadtwerke Frankfurt (Oder) to perform maintenance work.

Dr. Michael Filous, Vice President and Head of Service Agreements at MAN PrimeServ, explains: "We will supply the power plant with spare parts and carry out maintenance work on the engines. Both Stadtwerke Frankfurt (Oder) and MAN are seeking to establish a long-term partnership and we are pleased to see that they have placed their trust in us."



From left to right: Hajo Hoops, MAN Senior Sales Manager Power Plants

Alexander Stöckler, MAN Head of Sales Power Plants

Torsten Röglin, Managing Director Stadtwerke Frankfurt (Oder) GmbH



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.