



Press release

Berlin/Rostock, 24/01/2020

Converting green power to heat

This year, public utility company Stadtwerke Rostock and 50Hertz Transmission will start planning a new installation that will reduce the stress on the power grids as well as provide a climate-friendly heat supply

When the wind farms in the north generate a lot of electricity, but local consumption or transport to the south are not possible, the output of the wind turbines often needs to be limited and the operators have to be compensated for their loss. This green power surplus will be put to more efficient and ecological use in the future, more specifically for the heat supply of Stadtwerke Rostock.

To convert wind power into heat, the energy service provider is collaborating with transmission system operator 50Hertz Transmission to build a Power-to-Heat unit (PtH for short) on its premises in the Rostock district of Marienehe with a planned electrical output of 20 megawatts. Construction should start this year. The installation will be combined with the heat accumulator that will also be constructed on the same site of Stadtwerke Rostock. PtH units work like oversized electric kettles and play an increasingly important role in the energy system of the future. This way, energy can be used across different sectors, which experts call “sector coupling” between electricity and heat.

The cooperation was made possible by an amendment to the Energy Industry Act (EnWG) in 2017, which enables Stadtwerke Rostock to construct the PtH unit together with 50Hertz Transmission. Stadtwerke Rostock will plan, construct and operate the PtH unit, while 50Hertz Transmission will bear the investment costs to the amount of approximately 20 million euros and take care of its proper integration into the management of bottlenecks in the extra high voltage grid.

“Together with the Hanseatic City of Rostock, Stadtwerke Rostock is the most important driver of the energy transition in the region. The construction of the PtH unit is one of the elements to reach the climate protection targets of the Hanseatic and University City of Rostock as stated in the ‘100% Climate Protection’ master plan,” is what Oliver Brünnich, CEO of Stadtwerke Rostock, had to say about the project.

For 50Hertz Transmission, the joint PtH unit is another milestone on the road to the secure and cost-conscious integration of the growing volume of electricity from onshore and offshore wind turbines into the power system. Dr Dirk Biermann, Chief Markets and System Operations Officer at 50Herz: “Both economically and

ecologically, we should strive to use electricity instead of curtailing it. The use of green power for heating or supplying hot water is a useful alternative for curtailment, so that renewable resources can also be exploited when there are bottlenecks in the electricity transmission grid.”

Background information

In 2017, the legislator granted the transmission system operators the possibility to contractually agree the construction as well as the operation of a PtH unit with a CHP unit operator. The basis for this is the Energy Industry Act (EnWG). In accordance with §13 (6a) of the EnWG, excess electricity should not be curtailed in the so-called grid expansion area, but transformed into heat using Power-to-Heat technology for further exploitation. The grid exploitation area includes the northern part of Lower Saxony as well as the states of Bremen, Schleswig-Holstein, Hamburg and Mecklenburg-Western Pomerania.

Media-contacts:

Stadtwerke Rostock
Peter Lück
Fachbereichsleiter Unternehmenskommunikation
Tel.: 0381 805-1124
Peter.lueck@swrag.de

50Hertz
Volker Gustedt
Stellv. Pressesprecher
Tel. 030 5150-2878
Volker.gustedt@50hertz.com