

## Siemens completes major overhaul project at power plant in Hungary

- **Gas turbine rotor exchange allows for increased output and efficiency**
- **Control system upgraded to latest version of SPPA-T3000**

The Dunamenti Power Plant in Százhalombatta, Hungary, is the largest gas-fired power plant in the country with a capacity of 794 megawatts (MW), making it a major source of reliable electricity in Hungary. Recently, in collaboration with the customer and plant owner, MET Asset Management AG, and within the scope of an overhaul project, Siemens Gas and Power replaced the entire rotor of the plant's SGT5-2000E gas turbine and installed a new, state-of-the-art SPPA-T3000 control system.

The rotor exchange for the SGT5-2000E at the Dunamenti Power Plant led to an increase in output from 148 MW to 155 MW and increased the unit's efficiency by approximately 0.8 percent. The turbine had already achieved 120,000 hours of operation and, with the new rotor, is now ready for the next 41,000 hours before the unit's next scheduled outage services.

"Thanks to the fast and direct communication and information flow within our team and the excellent cooperation with the customer, we were able to execute this major project in just 51 days, a short time for such a big project," said Vinod Philip, CEO of Siemens Service Power Generation. "We are delighted that we have delivered this state-of-the-art technology to Dunamenti, thereby contributing to an efficient and more reliable energy supply in Hungary."

"We've run several modernization and maintenance development projects in the last couple of years in order to secure sustainable operation at the Dunamenti Power Plant," said Péter Horváth, CEO of Dunamenti Power Plant. "As part of this agenda, the SGT5-2000E gas turbine manufactured by Siemens received a complete

overhaul. Thanks to the maintenance, the SGT5-2000E turbine now guarantees additional 41,000 hours of operation for the power plant so we surely remain key energy supplier of the domestic energy market.”

The new SGT5-2000E gas turbine is known for its reliable performance and was the perfect and economically sensible solution for this overhaul. The exchange of the complete rotor leads to minimal downtime for the turbine since repairs become less necessary and more infrequent, which leads to decreased outage durations. With the new rotor, the turbine at the Dunamenti Power Plant is equipped with the latest Siemens technology featuring optimal design and efficiency values. A special feature of the project is the customized financing solution that allows Dunamenti to react flexibly to the future market requirements.

In addition, the complete instrumentation and control system was upgraded to Siemens cutting-edge SPPA-T3000 R8.2 control system. The gas turbine modernization was the first of its kind worldwide using new ET200 SPHA hardware, which ensures a significantly higher signal density, redundancy possibility, better sensor monitoring and includes faster input/output design groups with the best signal/price values. This innovative control system also provides a solid foundation for increased cyber security, system integrated full redundancy, compactness, and easy handling. Patches and updates can be easily implemented online, without any interruption of plant operation and monitoring. The engineering and installation were executed by Siemens Zrt.'s team of experienced Hungarian engineers, while also onboarding dual MsC students in order to widen their knowledge as well. The engineering and installation of the new solution was carried out and cabinet tests were also conducted at Siemens Hungary's headquarters in order to help ensure fast reaction times and close collaboration with the customer.

This press release and a photo are available at: <https://sie.ag/2OblqJQ>

For further information on Siemens Gas and Power, please see

[www.siemens.com/energy](http://www.siemens.com/energy)

For further information on the SGT5-2000E gas turbine, please see

[www.siemens.com/sqt5-2000e](http://www.siemens.com/sqt5-2000e)

For further information on the SPPA-T3000 control system, please see

[www.siemens.com/sppa-t3000](http://www.siemens.com/sppa-t3000)

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