

Stadtwerke Erfurt (SWE), Germany

Up-to-the-minute power generation
with Omnivise T3000 9.2



The plant

SWE Energie GmbH supplies the city of Erfurt with electricity and heat via two plants: the combined heat and power plant on Iderhoffstraße, which has a peak-load boiler for district heating; and secondly, the Erfurt East combined cycle power plant. Through coupled production, the modernized Erfurt East plant saves 180,000 tons of CO₂ per year compared to separate production. With an average fuel utilization rate of 83% and a maximum efficiency of 90%, it is an outstanding example of a sustainable model.

SWE Energie GmbH's plants have been operated using T3000 for a long time. For legacy reasons, three T3000 systems with different versions of the T3000 control system were used in the plants, and extensive services will soon no longer be available for one of these versions. Therefore, SWE decided to comprehensively upgrade the entire control system to Omnivise T3000 R9.2.



The task

In order to keep the plants efficient and sustainable, an end-to-end I&C system for all turbines and plant components was needed, ensuring long-term support and easy maintainability.

For SWE Erfurt, it is crucial that its control system is always up to date and fulfills future requirements for critical infrastructure. An IEC 62443-certified system that offers advanced cybersecurity enables optimal protection of power generation facilities and is the basis for meeting KRITIS requirements with which SWE's generation units must comply.

48,000 households
supplied with district heating

The solution

The upgrade to Omnivise T3000 Release 9.2 offered an integrated and consistent solution providing long-term support.

The integration of renewable energies is facilitated by control system's SCADA functionality, which makes SWE well equipped to embed renewable generation into the overall system. The I&C system with advanced cybersecurity functionalities fulfills the requirements of the KRITIS regulation according to IEC 62443 and supports secure plant operation.

By integrating the new Omnivise T3000 Release 9.2 control system, SWE's plants benefit from a stable and sustainable platform. The close cooperation between Siemens Energy and Erfurter Stadtwerke enabled a seamless project flow and mutual exchange.



The result

The upgrade to Omnivise T3000 9.2 enables:

- Ability to integrate renewable energy into the plant system, using advanced SCADA capabilities
- Enhanced cybersecurity for valuable assets and sensitive data to support KRITIS requirements
- Long-term stability through a sustainable system with long-term maintenance and service

Due to two modernizations and the latest control system, SWE Erfurt's combined cycle power plant Erfurt East is ideally prepared to meet future requirements.

“With Omnivise T3000 R 9.2, we successfully modernized the Erfurt plants and made them future-proof. The upgrade was absolutely smooth and frictionless.”

Daniel Fischer, Project Manager, SWE Energie GmbH & Norman Vogt, I&C Manager, SWE Energie GmbH

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Siemens Energy Global GmbH & Co. KG

Gas Services
Siemenspromenade 9
91058 Erlangen, Germany

For the U.S. published by
Siemens Energy, Inc.

Gas Services
4400 N Alafaya Trail
Orlando, FL 32826, USA

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