

# b.data Energy Management

Transparent operations  
at LINZ Strom GmbH



**The competition caused by the liberalization of the energy market forces power generation plant operators to increasingly use all technically possible and feasible rationalization potentials.**

In addition to the improvement of the technical processes in the generation plants, the optimal utilization planning of the power plants is also becoming increasingly important. Synergy effects can be achieved for the joint examination of all supply divisions in the planning, which lead to cost optimized operation for the entire company. Due to the complexity and ever-increasing information regulations by the officials, IT-supported preparation of data

and information from the company process and the plant inventory is becoming indispensable even for small power supply systems.

An operating information system was installed at LINZ Strom GmbH with the objective of thus achieving transparent management of power generation plants. In this project, focus was put on the energy flows in the areas of district heating and electricity as well as all primary input materials required for their generation. Process data of the generation and distribution units are administrated in a central database and processed into a suitable form. As a result, a basis is formed for all management levels: from the shift foreman, power plant

## Energy Management

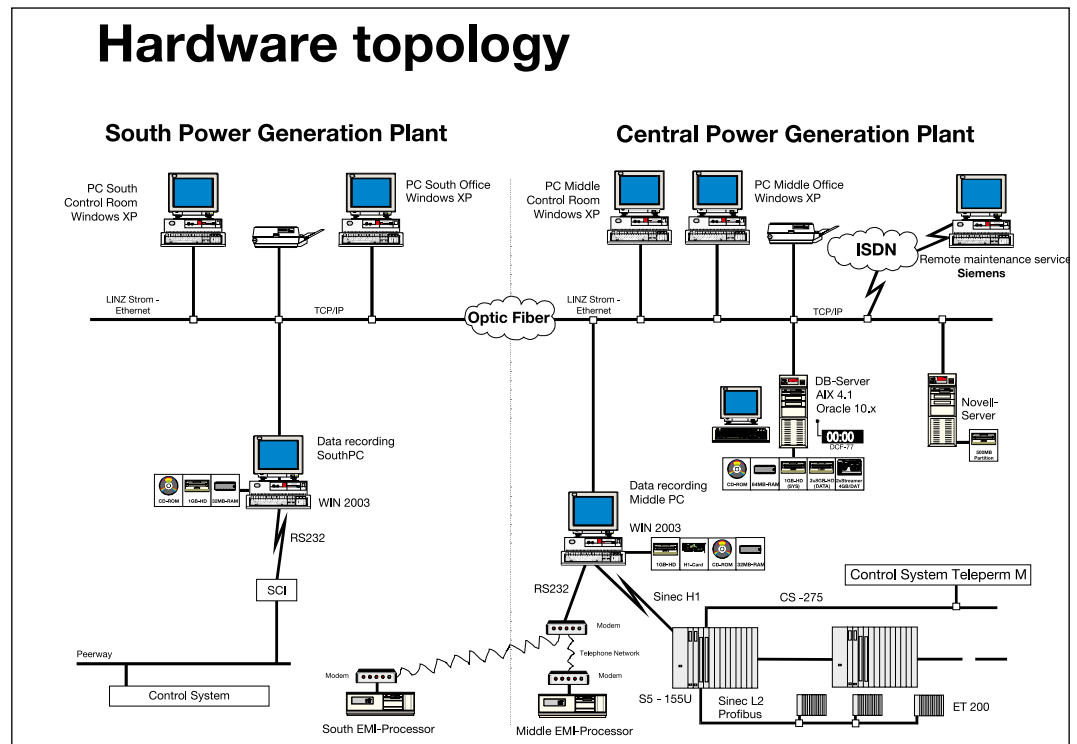
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manager, right up to the dispatcher and managing board, upon which decisions can be made.

Since the power generation plant was erected more than 28 years ago and has been extended several times since then, a whole array of control and communication system technologies is included in this project. Today the central power generation plant (Kraftwerk Mitte) has an electric output of 80 MW and a thermal output of 220 MW. The electrical energy is generated by three steam turbines and two diesel units.

The south power generation plant (Kraftwerk Süd) is a newly erected gas and steam plant, which displays an electrical output of 116 MW and a thermal output of 110 MW.



Architecture of the energy management and operating information system at LINZ Strom GmbH

#### b.data provides information for

- Energy and material balances for the energy controlling (from daily to annual balances)
- Reports (schedules, documentation)
- Daily or weekly trends (curves)

- Statistics (distributions, duration curves)
- Characteristic value charts
- Trends (online trend for the representation of current and target operation, historical records of operating and comparative data)
- Evaluation of operating materials

#### Success factors

Due to the automation of internal and external reporting, the energy management and operating information system significantly contributes to the increase of internal efficiency. In addition, the project resulted in optimized plant operation and thus the overall efficiency was increased by a few percent.

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