Success Story

Maximum tension

Reliable power supply for more than 18 million people

50Hertz is responsible for operation, maintenance, planning, and expansion of the 380/220 kilovolt transmission grid in northern and eastern Germany. This grid covers an area of 109,000 km^2 and has a length of around 9,750 km, which is roughly equivalent to the distance between Berlin and Rio de Janeiro. It ensures the grid integration of around half of all wind turbines installed in Germany.

50Hertz thus ensures a secure power supply for more than 18 million people – 24 hours a day, 7 days a week, 365 days a year.

Brief introduction to 50Hertz

Without a high-performance transmission grid, the internal electricity market would be inconceivable. Germany ranks at the top in Europe in terms of security of supply.

50Hertz plays an important role here. Acting as an interface between generation and consumption, the company represents a center of excellence for the extra-high voltage grid. This is because it continuously regulates the balance between generation and consumption, while maintaining sufficient reserves to compensate for deviations at any time.

The Challenge

At the heart of 50Hertz is the *Transmission Control Center* (TCC) in Neuhagen near Berlin. A wealth of information converges at this control center, from where engineers and technicians control and regulate the 9,750-kilometer transmission grid. Employees monitor system security and grid frequency and ensure the optimal integration of wind energy. This minimizes the risk of grid congestion.

The Solution

DAKS informs and alerts

Alerts are now processed much more quickly and reliably via the central internal alert server. The project

The 50Hertz TCC team

was launched in 2010 under the leadership of Mr. Ey (FI department) and Mr. Göbel (TSC department).

After thorough testing, the decision was ultimately made in favor of the DAKS alarm server. The focus was not only on pure technical feasibility; the market stability of the provider and the high availability of the server were also decisive criteria in the decision to choose DAKS.

Planning and implementation

After six months of planning and preparation, the DAKS server was initially run in test mode. The existing emergency plans served as a template and were updated during implementation. The updated workflows were then implemented in the server's telephone alerting processes.

Growing requirements

Gradually, more and more tasks were incorporated into the alerting and communication process. Since then, the DAKS servers have also been performing routine tasks such as receiving faults from the control system and automatically notifying service technicians by telephone, email, or text message.

However, everything was checked down to the smallest detail beforehand. Because, as Mr. Göbel concludes, our slogan is also our corporate philosophy: "We take care of you – safely and reliably."

> „We invest a great deal of time and money in security. But this is the only way we can meet the requirements placed on us.
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> The requirements for the new alarm server were extremely diverse. They included, among other things, the ability to integrate it as easily as possible into the existing telecommunications infrastructure and the ability to map the highly complex emergency plans onto it. After all, these should not have to be changed specifically with the introduction of the new system."
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> – Johannes Göbel, 50Hertz, TSC Department

The Benefit

With DAKS, faults and emergencies are handled in a structured, automated manner without any loss of time. Fast, reliable alerting of the right specialists across multiple communication channels significantly increases response speed and contributes directly to a permanently secure and stable power supply.

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