Energy Transition with the
Intelligent Grid Platform

Modular Assistance System for the Digitization and Automation of Grid Planning and Grid Operation Processes

1. STEP
Create Transparency
- Connect formerly isolated data sources (e.g. GIS, ERP, measurement data)
- Detect and fix data errors with the power of machine learning algorithms
- Provide computable and validated grid models for all voltage levels

2. STEP
Automate Processes
- Automatically assess new grid connection requests for loads and generators
- Create and evaluate scenarios for future supply tasks
- Identify grid expansion measures to prevent and resolve grid bottlenecks

3. STEP
Optimize Smart Grids
- Integrate Smart Grid Technologies in grid planning and grid operation processes
- Create grid forecasts and observe grid state in real time
- Improve cost-efficiency and regulatory positioning
INTELLIGENT GRID PLATFORM

Application Areas

Data Quality
Combine, analyse and validate formerly isolated data systems (e.g. GIS, ERP, measurement data) and create computable grid models across all voltage levels

Grid Planning
Automate processes and workflows in grid planning (e.g. assessment of new connection requests, long-term grid studies, recommendations for grid expansion planning)

Grid Operation
Support grid operation with real-time information about current and future grid states as well as recommendations for congestion management in case of bottlenecks

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Customer Benefits at Distribution Grid Operators

› Create complete transparency of grid state
› Save time and engineering resources by up to 70%
› Integrate Smart Grid Technologies in all processes
› Reduce grid expansion costs by up to 60%
› Increase grid reliability and customer satisfaction

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References

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STATE-OF-THE-ART TECHNOLOGY

Awards

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