Advanced Distribution Management System

Schneider Electric Smart Grid Solutions Suite
Managing the Distribution Network of the Smart Grid Era

Make the most of your energy™
Advanced Distribution Management System

Electric utilities are preparing for the multitude of challenges facing the industry — limited generation to supply increasing energy demand, growing regulatory and customer pressure for increased reliability and reduced carbon emissions, adoption of distributed renewable generation and energy storage, and the inevitability of both an aging workforce and infrastructure.

In a rather short period of time, these challenges have converged, and in doing so, have exposed the need for a comprehensive distribution network monitoring, analysis, and control system.

Utilities that are proactive — building business cases and deploying scalable solutions now — will be best prepared to meet the challenges of today and the future. To assist the industry in achieving their strategic Smart Grid goals, Schneider Electric proudly offers its Advanced Distribution Management System (ADMS).

Introducing Schneider Electric ADMS

Schneider Electric ADMS provides the most comprehensive network management solution with monitoring, analysis, control, optimization, planning and training tools that all function on a common representation of the entire electric distribution network. By merging distribution management (DMS), outage management (OMS), and supervisory control and data acquisition (SCADA) systems into one secure, unified solution with over 50 advanced functions, it can maximize benefits from a growing abundance of intelligent grid devices, distributed renewable energy, advanced metering, and all things smart grid.

Schneider Electric ADMS presents a consistent, real-time view of the distribution network. It allows system operators, dispatchers, reliability analysts and managers to work as a team — accessing the same as-operated representation of network information. This common visibility allows for efficient and reliable management of grid operations in the face of a diverse, rapidly-changing environment.

Schneider Electric ADMS offers many key benefits such as:

- Greater network reliability
- Improved operational efficiency
- Reduced operations costs
- Increased safety
- Enhanced security

Maximize benefits from a growing abundance of intelligent grid devices, distributed renewable energy, advanced metering, and all things smart grid.
• Support for regulatory compliance
• Better asset utilization
• Standards-based integration

What's new: recent developments

Self-healing automation — closed-loop control for advanced functions such as Volt/VAR Optimization (VVO) and Fault Location, Isolation, and Service Restoration (FLISR). Utilities can deploy these advanced functions in several modes, such as fully manual, partially automated, and fully automated, as well as integrated with field managed, distribution automation schemes. Utilities can now improve reliability, safety and efficiency through automation, serving such goals as energy loss minimization, demand management, and emergency response.

Distributed energy — renewable energy represents highly variable generation that is being distributed potentially anywhere along distribution feeders. While this offers utilities a promising opportunity for future generation, it also introduces significant reliability issues that need to be addressed. Schneider Electric ADMS now offers complete modeling, monitoring, analysis, and planning of distributed renewable energy. Combined with the latest in near-term load forecasting, utilities can plan and operate their distribution networks with tools to take advantage of the benefits of renewable generation.

Distribution SCADA — combines the industry’s most feature-rich distribution management system with the optional benefits of an incorporated, field-proven distribution SCADA system. The Smart Grid era is ushering in a dramatic increase in deployment of intelligent field devices, yet legacy SCADA systems were not designed to scale to a high number of connected points. But utilities now have the luxury of deploying Schneider Electric ADMS to integrate with their existing SCADA systems or replacing them, now or in the future, with the latest and greatest in distribution SCADA technology. Nothing beats the flexibility and strategic approach to bringing control room applications together into one secure, single user interface solution.

Beyond the control room — mission critical applications contain advanced analysis tools that have traditionally been restricted to the control room. Schneider Electric ADMS offers an easy to deploy and maintain ADMS Web client, both inside and outside of the control room. Advanced applications are accessible with a rich user experience, in a secure manner, in both real-time and simulation modes.

Real-time weather — Web services-based integration of real-time weather data. The weather metrics of greatest importance for the purpose of forecasting and managing network load include temperature, cloud cover, wind speed, and humidity. This data provides the relevant information to determine “feels like” values, such as wind chill and heat index, for enhanced load forecasting, load management and post-event analysis. The real-time integration of weather data becomes most valuable with the incorporation of erratic renewable energy, such as solar and wind.

Managing the Distribution Network of the Smart Grid Era
Schneider Electric ADMS represents the evolution of control room technology by merging DMS, OMS, and SCADA technologies into one comprehensive network management solution. As part of the Schneider Electric Smart Grid solutions suite, it can help your utility transition into a next-generation energy provider. Contact us for more information about how this unified Schneider Electric solution can help you meet your utility’s Smart Grid goals.