

Austin Utilities Modernizes Power Plant with DeltaV™ System, PlantWeb™ Architecture

RESULTS

- Reduced wiring cost
- Reduced engineering cost
- Reduced construction cost
- Reduced startup time
- Increased operating efficiency

APPLICATION

Electrical power generation station

CUSTOMER

Southern Minnesota Municipal Power Agency, Rochester, Minnesota

CHALLENGE

The power agency wanted to transform the 30-megawatt Austin Utilities power plant in Austin, Minnesota, from an antiquated facility into a model of efficiency for small-to-medium-sized power stations.

SOLUTION

A new process automation solution using PlantWeb™ field-based architecture from Emerson Process Management incorporating the latest intelligent field instrumentation and leading edge process management technologies made the difference.

James French, project coordinator for the Southern Minnesota Municipal Power Agency, which operates the plant, said, “The scalable technology we selected meets current needs with minimum costs, and it can be expanded economically in the future. Reduced installation and commissioning costs were an added bonus.” As part of the PlantWeb solution, all old pneumatic instrumentation and single-loop boiler controls in the plant were replaced with approximately 200 new intelligent pressure and temperature transmitters, FIELDVUE™ digital valve controllers, and other advanced field devices from Rosemount® and Fisher® Controls.



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James French

Project Coordinator, Southern Minnesota
Municipal Power Agency



For more information:
www.EmersonProcess.com/DeltaV



A DeltaV™ digital automation system with integrated Asset Management Solutions (AMS) software was installed in a totally revamped control room. The new system accommodates digital signals to and from 74 FOUNDATION fieldbus-compliant instruments, as well as communications with other instrumentation using the HART® protocol. The PlantWeb architecture and fieldbus technology contributed significant savings during construction and helped get the plant on line faster. Substantial savings accomplished, for example, in reduced labor for wiring.

“Reduced engineering time and material savings further enhanced the total financial benefit of utilizing this technology,” French stated. “Since a good deal of loop checkout and instrument configuration was done directly from the control room, startup was smoother and faster,” French said. “We’re now seeing greater operating efficiency with fewer control problems. Personnel no longer have to go out into the plant to check on operating parameters; it’s all right there in front of them. The added information generated by the smart field instrumentation produces an accurate, historic record that wasn’t possible previously.” The entire project was engineered and managed by Novaspect Inc., the local Emerson Process Management representative.

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