

AREVA Engineering

Engineering Solutions to Improve Plant Performance



Each and every day, AREVA is working to energize today's nuclear fleet while designing and building tomorrow's. Our team of nuclear engineering professionals is focused on delivering solutions that enhance performance and plant reliability. At AREVA, this is our way of life. Our business relationships are built on trust earned through consistently delivering expert solutions, cost-effectively, with maximum emphasis on safety, quality, predictability and reliability.

With U.S. market leadership and global resources, we are committed to delivering performance improving innovations such as Power Uprates and Variable Frequency Drives (VFDs). For example, the company recently successfully completed Installation and Commissioning of two Siemens Robicon Perfect Harmony VFD systems for reactor recirculation pump speed control at a U.S. nuclear unit.

"By bringing the Siemens Robicon Perfect Harmony Variable Frequency Drive technology to the nuclear industry, AREVA is providing our customers with a solution to improve plant performance while reducing house load," said

Carl Fisher, Vice President of I&C and Electrical Systems, AREVA NP Inc. "This is just one example of how we are working with our customers to improve plant reliability and profitability."

Major Projects Include:

- Integrated Electrical Systems Upgrades
- Major Systems Installations or Modifications
- Balance of Plant Engineering
- Total Motor Solutions
- Power Uprates
- Life Cycle Management
- Regulatory Interface
- Fire Protection
- NSSS Engineering
- Reliability Improvement
- License Renewal

AREVA NP's I&C and Electrical Systems team was responsible for the equipment, engineering and overall project management for the installation. A VFD is a system for controlling the rotational speed of an AC electric motor by controlling the frequency of the electrical power supplied to the motor. These drives addressed issues with the

obsolescence of the motor-generator sets previously used for speed control. Although relatively new to the nuclear industry, Siemens Robicon Perfect Harmony VFDs are field-proven in more than 4,000 installations around the world.

The upgraded drives are designed to allow more precise reactor recirculation flow control, a reduction in house load due to increased electrical efficiencies, and a reduction in required maintenance. This is also anticipated to result in significant savings for the plant in reduced house load, increasing its profitability.

AREVA is committed to providing a comprehensive solution to meet your specific overall plant needs with proven engineering, solid project management and precise execution. To learn more about our engineering solutions to improve performance, visit the Plants section of the AREVA NP website at www.us.aveva-np.com.

