



System Description

Product Type: Ovation

Unit size (MW): 2 x 600 MW units

Location: Inner Mongolia, China

Boiler/Plant Type: Coal-fired drum type boiler by Harbin Work with Hitachi turbines

Application: Boiler Control (BLR), Burner Management (BMS), Balance of Plant (BOP), Turbine Control (DEH)

Initiation: September 2000

Ship: November 2001

Operation: November 2003 & May 2004

Major System Components:

- 1 Redundant FDDI Network
- 15 Redundant Controllers
- 5 Operator Workstations
- 1 Engineer Workstation
- 1 Historian/Report Server
- 2 Shift Supervisor Workstations
- 2 X-Terminals connecting to Barco Screens

DCS I/O Point Count: 7,360 I/O points



Ovation's open architecture will help Beijing Datang assure reliable power supply to its customers.

BEIJING DATANG POWER GENERATION CO., LTD.

Tuoketuo Power Plant

Located in Inner Mongolia, China

Beijing Datang Power Generation Company is one of the largest independent power producers in China, supplying power to Beijing, the nearby port city of Tianjin, and part of the surrounding Hebei Province. It operates four power plants and has started construction of another two facilities. Tuoketuo is a new power plant located in New Hohhot City, Inner Mongolia. This facility includes two coal-fired generating units of 600 megawatts each, with plans for four additional 600 megawatt units. As the largest generating complex in Asia, Tuoketuo will help meet the increasing demands for power in the Beijing region.

The Ovation[®] expert control system by Emerson Process Management was selected from a group of competing distributed control systems by an expert technology consulting group established by the Beijing Datang Power Generation Co. As the preferred control system for Tuoketuo, Ovation was the only product that met the power company's requirements for the 21st century with its advanced technology and open information management system. Ovation provides both boiler and turbine control for the Tuoketuo plant.

Benefits of Ovation technology—a unified, responsive, state-of-the-art system with the flexibility to grow as generating capacity grows—will help Beijing Datang achieve its goals of assuring reliable power supply and quality service to its customers. Evaluated technically superior features of the Ovation system over competitors systems include:

- An **open architecture** that eliminates technological obsolescence and dependence on proprietary systems
- **Easy integration** of existing IT products
- Maintains **process security**
- **User friendly** man-machine interface design