



COMMUNICATION FOR HIGH-SECURITY ENERGY FACILITIES

With a North American generating capacity of more than 35,000 megawatts of power, this leading energy company supplies and delivers energy to some 4 million U.S. customers from a combination of nuclear, fossil fuel and hydroelectric generating facilities. The company's use of different electricity generation methods, combined with its emphasis on operational excellence, has enabled it to consistently meet its commitment to its customers of affordable energy and reliable service.

Upgrading Communications

As part of its program for continual improvement, the company sought a best-in-class communication system to replace an aging Siemens telephone system that no longer met its needs. After considering the responses to its RFP and interviewing numerous solution providers, the company selected **Consultedge** to design and implement a telephony system employing Avaya technologies.

The client's needs were clear and unconditional for the telephony solution: high reliability, high availability, scalability and interoperability. **Consultedge's** design solution responded to those needs. Two Avaya S8710 high-availability servers are networked into a cohesive platform. The servers are separated on campus to ensure availability. The infrastructure links all users to the company's data center, enabling seamless communication amongst employees and allowing for expansion to additional facilities over time. Avaya Modular Messaging integrates voice and data communications and enables 24/7 access to messages from electronic devices including phone, PCs and PDAs.



Implementation Challenges

The extreme security requirements of nuclear power stations imposed significant implementation challenges that posed the potential for costly delays to the project implementation:

- **System Design and Delivery:** Because security checks were mandatory for each individual component of the system, **Consultedge** ensured arrival of the complete system to minimize the possibility of redundant checks by security staff. The strategy eliminated potential delays and unnecessary use of manpower, ensuring on-time and on-budget implementation. Once each component was approved by security personnel, the entire

communications system was assembled and staged at the corporate data center. It was then tested for several weeks to ensure performance before being transported to the site.

- **Security Clearance:** Thorough background checks were performed on all technicians, engineers and managers prior to receiving authorization to work on the project or enter the facility. All individuals receive additional security checks each time they enter the facility. In addition, all **Consultedge** employees received hazard and security training before participating in the project.
- **Continuity of Service:** Cutover of the new system was accomplished with no interruption of existing service. The communication system designed by **Consultedge** assured interoperability with the company's existing technologies. Interoperability is critical to ensure a smooth transition as remaining portions of the old system are upgraded in the future.
- **Partnership:** The project was managed through an effective partnership between the company's 20-member project management team and **Consultedge's** PMI-Certified Project Managers, Engineers and Technicians assigned full-time to the project. The combined team planned, scheduled, organized and managed each stage of the project's implementation, minimizing any potential for delays or unnecessary manpower costs.

Delivering Results

Consultedge's design and implementation services provided the client with an efficient hybrid system that supports existing digital and analog needs while providing the benefits of today's most advanced IP telephony capabilities. Service is assured by system components that provide 99.999% reliability. **Consultedge's** communications solution is scalable, enabling streamlined expansion to additional endpoints. The versatile system not only meets current needs, but enables the addition of future telephony technologies from any vendor.