

USi designs, manufactures, supplies, installs, integrates, maintains and repairs hv cable pressurizing systems ranging from pressurization skids to 30,000-gallon self-contained outdoor plants, including refurbishment and upgrade of existing equipment.

USi is an approved supplier of pressurizing and cooling plants at most US utilities. Our hv High Pressure oil filled cable circulation and cooling plants have been installed on critical transmission circuits for a number of major utilities.

We have provided high-speed HPFF cooling systems, including refrigeration chillers and intermediate brine cooling systems. These Refrigeration Cooling Plants can provide a rating increase of up to 60%, incorporating advanced PLC-based control, monitoring, diagnostic and alarm systems.

USi provides complete project packages, including design, engineering, fabrication, installation, field site supervision and commissioning of the plants, along with integration of dynamic rating systems, communications and server-based remote-control systems. USi guarantees the ratings of these systems when supplied as a Turnkey system.

## OUR STATE-OF-THE-ART PLANTS INCLUDE FEATURES SUCH AS:

- ✓ Modular pressurizing skid design
- ✓ Advanced full PLC-control, monitoring and diagnostics system
- ✓ Electronic variable speed drives
- ✓ Environmentally responsible components including low-impact coolants and low-noise components
- ✓ Optional integration of real-time cathodic protection monitoring and load-monitoring in the user-interface and diagnostic system
- ✓ Remote monitoring and control using our web-based HMI, allowing multiple users to access the plant status and history via their company network



## Comprehensive Expertise

USi is more than a hardware fabricator. We offer comprehensive and unique technical support related to pipe-type cable transmission systems. The staff of USi has been intimately involved in the various aspects of underground cable system planning, design, implementation, maintenance, operations and research & development. USi has been supplying pipe-type cable accessories for over 40 years including joint casings, dielectric fluid by-pass assemblies, automated cross-over and oil bypass assemblies, pothead pressure switches diffusion chambers and fluid leak detection systems.

## Advanced Monitoring, Controls and Diagnostics

USi provides integrated monitoring and automatic control of the pressurizing plants and all connected refrigeration and high-speed circulation cooling plants. These systems allow optimum control of the cable cooling systems while ensuring safe pressurization, allowing utilities to maximize the effectiveness of their operating personnel.

## From Plants to Complete System Design & Installation

USi can design and supply plants or we can do the complete job, including substation design, modification, installation of piping, fabrication of foundations, installation of power, control and communications, fluid filling, commissioning and testing.

After installation, USi's support can include remote system monitoring and evaluation of equipment performance. We offer multi-year preventive maintenance programs, emergency repair services (on the cable system itself, as well as the plants), and continuing training programs.

