Emerson’s Smart Wireless Solutions Protect Remote Pumping Facilities at Milford Power

**BENEFITS**

- Smart Wireless solution communicates easily in dense environment with many obstructions
  - All 12 devices were communicating within 2 hours
  - Wireless communication was not interrupted when new building was erected in the middle of the network
- Smart Wireless helps prevent freeze damage to water pumping and circulation equipment
- Wireless saved $75,000 in installation and capital costs

**CHALLENGE**

Milford Power, a 500 MW gas-fired turbine facility in Milford, Connecticut, utilizes two gas-fired turbines to produce electricity for the grid. The site includes eleven remote buildings that house water pumping and circulation equipment serving a variety of needs of the power generation infrastructure. Since winter brings freezing conditions, small heaters are located in each remote building to ensure the pumps operate properly. Freeze damage of a pump system would cost $10,000 to $20,000 to repair or replace and take that pump out of commission for up to three days. They wanted to find a technology to bring temperature measurement into the control room as part of an early warning system. Wiring of these points was not feasible, since running trays over the roads or conduit under existing structures was cost prohibitive.

**SOLUTION**

Milford Power installed Rosemount 648 Wireless Temperature Transmitters in all eleven remote buildings around the plant. The devices then communicated through a Smart Wireless Gateway back to the control room.

**RESULTS**

Damage to the water pumping and circulation equipment was prevented by monitoring the temperature with Smart Wireless solutions from Emerson. An early warning detection system for rapid temperature change was achieved, at a fraction of the cost of a wired solution.

“We looked at various technologies and selected the Emerson... Especially important was the easy, flexible self-organising network that could be installed and operational in a very short time...this is an excellent solution that works well, is easy to install and very easy to expand...”

Cliff Esmiol
Maintenance Supervisor, Milford Power