# SCADA Upgrades to the Globe Hollow Water Treatment Plant

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#### SUBMISSION TYPE

35-minute presentation (no paper)

### **KEYWORDS**

Plant Upgrade, SCADA, Lessons Learned, IEC 61131-3, Project Management

#### **ABSTRACT**

This presentation will provide information on the hardware and software used to upgrade the existing SCADA system at the water treatment plant located in Manchester, CT. This work was completed in the Fall of 2010. This is the third upgrade to the original system that was installed in 1983.

The original SCADA system was installed in 1983 as part of initiative to concentrate treatment for surface water in Manchester to one facility from 3 separate plants. The 1983 treatment plant has a capacity of 10 MGD with a hourly peak of 16 MGD. The SCADA system provides information from 24 Remotes in the field, 3 Remote I/O Racks and 17 Remotes in the plant. The system uses Redundant ControlWave PLCs and ControlWave Micro PLCs programmed using a variety of the languages in the IEC 61131-3 standard. The project was implemented as part of an upgrade and equipment replacement plan for the treatment plant.

## **ABOUT THE SPEAKER**

Robert J. Dusza is the Project & Technical Support Manager for the Water & Sewer Department for the City of Manchester, Connecticut, USA. He has over 27 years of experience in the water/wastewater sector that includes both operations and project related work. In his current role with the city he is responsible project management, programming, and system upgrade services for the city's water/wastewater treatment plant SCADA systems. From 1985 to 1999 he was involved the operations of both water and wastewater treatment plants in the City of Manchester in roles of increasing responsibility. Robert has a B.S. in Marine Biology from University of New England and a M.S. in Environmental Science & Technology from Rensselaer Polytechnic Institute (RPI), Hartford, Connecticut. Robert also has Class IV Water and Class IV Wastewater operator licenses for the State of Connecticut.