

## Getting the Most from Your SCADA Data

Emile Richard<sup>1\*</sup>

<sup>1</sup>Portland Water District, 225 Douglass St, Portland, Maine 04103

(\*Email: [erichard@pwd.org](mailto:erichard@pwd.org) and Phone: 207-523-5243)

### SUBMISSION TYPE

30 minute presentation

### KEYWORDS

SCADA, Historian, Operations, Plant Staff, Troubleshooting

### ABSTRACT

This presentation will focus on using SCADA data beyond the typical monitoring and control functions. The key toward expanding the use of the data is getting it into the hands of the operations staff and plant engineers. In their hands, it will become a valuable troubleshooting tool and a “sandbox” for optimization. With the right tools, the use and manipulation of the data does not require the expertise of the “SCADA Guy or Gal”. By empowering the operations staff, they can create adhoc trends to pursue “what if” scenarios. They can find ways of using the data visibility to deploy staff strategically. Use telemetry data to identify the sources of water hammer problems in the transmission mains. Create a spreadsheet for preempting wastewater pump plugging. By merging the lab data with the SCADA data, more use for the data can be found that includes automated state reports.

This presentation will discuss the tools and SCADA structure deployed at the Portland Water District. A few examples will be given to illustrate how we use the SCADA data and the benefits of using it. The examples are taken from actual uses of the data developed by the operations staff and engineers. The importance of intuitive tools and display design will be discussed. The value of exporting the data to a spreadsheet will also be presented.

### ABOUT THE AUTHOR



**Emile L. Richard, P.E.** is a Senior Project Engineer with the Portland Water District where he has been for the last 16 years. He provides project and technical support for the District wide SCADA System, and also manages Instrumentation Group. He received a bachelor's degree in chemical engineering from the University of Maine, a master's degree in chemical engineering from the University of Notre Dame and an Advance Graduate Certificate in environmental engineering from WPI. He is a senior member, and local section president, of ISA (International Society of Automation), and a member of AWWA. He is licensed professional engineer in both New York and Maine; a licensed class 4 water (treatment & distribution) and grade B-3 wastewater treatment plant operator in Maine. Contact: [erichard@pwd.org](mailto:erichard@pwd.org).