

SCADA Data Redundancy for Compliance: Guelph Water's Approach

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Abstract

In drinking water utilities, SCADA (supervisory control and data acquisition) systems play a vital role for both operations and compliance. SCADA enables operators to remotely view, monitor, and control water facilities. For regulatory compliance, SCADA systems log critical process parameters, including meeting the 5 minute data-logging interval for chlorine residuals per Ontario Regulation 170 under the Safe Drinking Water Act.

This presentation provides an overview of how Guelph Water has designed and implemented its SCADA system to have multiple redundant data-logging systems. A cost-benefit analysis will also be presented for various data logging technologies, which led Guelph to design the system that it uses. In particular, the triple-redundant SCADA data logging system at Guelph Water will be highlighted as well as the technology used to make this data immediately available to both operators and the compliance team.

About the Speaker



Graham Nasby, P.Eng, PMP, CAP holds the position of Water SCADA & Security Specialist at City of Guelph Water Services, a publicly-owned water utility located in Guelph, Ontario, Canada. Prior to joining Guelph Water, he spent 10 years in the engineering consulting community after completing his B.Sc.(Eng) at the University of Guelph. He is senior member of the International Society of Automation (ISA) and co-chair of the ISA112 SCADA System Standards Committee. He is a member of both OWWA and WEAO, and currently sits on the OWWA Automation Committee. Contact: graham.nasby@guelph.ca