

AWWA Webinar: May 4, 2016 at 11:00am-12:30pm EST
Practical Examples of Delivery Cyber Security at a Water Utility
Speaker #3 – Graham Nasby, City of Guelph Water Services

SCADA Security at City of Guelph Water Services

Graham Nasby, P.Eng, PMP, CAP^{1*}

¹City of Guelph Water Services, 29 Waterworks Place, Guelph, Ontario, N1E 6P7, Canada
(*correspondence: graham.nasby@guelph.ca)

Keywords:

Utility Management, SCADA, Cybersecurity, Security, ISA-99, ISA-62443, AWWA-G430, AWWA-J100-10

Presentation Outline

In water utilities, the SCADA (supervisory control and data acquisition) system plays a vital role by giving operations the ability to monitor and control the water system in a consistent and reliable manner. The SCADA system is also an important tool for maintaining regulatory compliance by providing key monitoring, logging, control and alarming capabilities. For this reason, ensuring that the SCADA system is adequately protected from service interruptions and cybersecurity threats is of vital importance.

In this presentation, the speaker will outline how the City of Guelph Water Services has used the framework of the ISA/IEC-62443 cyber security standards (formerly known as ISA-99) to safeguard its SCADA system. The presentation will begin with an outline of the philosophy behind the ISA/IEC standards, and then give an overview of how it has been applied. The talk will also cover how ISA/IEC cyber security preparedness concepts have also been applied to other computer systems at Guelph Water. The presentation will conclude with a discussion of how the ISA/IEC-62443 cyber security standards fit into the NIST cybersecurity framework and the current AWWA cyber security guidance documents.

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. He is senior member of the International Society of Automation (ISA) and past director of the ISA's water/wastewater technical division. As an AWWA and WEF member, he continues to promote the importance of automation and cyber security in the municipal water sector. Graham sits on several international standards committees, including the ISA-99 cybersecurity committee, the IEC TC65 industrial automation committee, and the ISA-18 alarm management committee. In 2013, Graham received the ISA's Technical Division Leader of the Year his contributions to the municipal water/wastewater sector. In 2014, he was recognized with a 'Mid-Career Achievement' award from his alma mater, the University of Guelph's School of Engineering.