

Public Sector Digest – Webinar
Thursday, August 25, 2016 at 1:00pm - 2:00pm Eastern
Guarding City Water and Wastewater SCADA Systems in Your Community
A Webinar on Municipal Cybersecurity

Panelists:

- **Niyo Little Thunder Pearson, Sr.** – Co-Founder and Chief Technology Officer, Tayo Inc
- **Ben Howard** – SCADA Coordinator, Engineering Services Division, Haldimand County, Ontario
- **Graham Nasby** – Water SCADA & Security Specialist, City of Guelph, Ontario
- **Micah Clark** – Senior Research Associate, National Security and Public Safety, The Conference Board of Canada

Cyberterrorism has become the latest vehicle for disrupting and attacking another state. Just last month, the Democratic National Convention’s funding group was reportedly hacked by Russian operatives. Although these threats have traditionally targeted national and international entities, municipalities are at risk of becoming the new ‘entry point’ for cyberterrorism.

As municipal utilities and services such as hydro and wastewater become more automated, they become more vulnerable to cybersecurity attacks. In Rye, New York, the tiny Bowman Avenue Dam was reportedly breached by the Iranian Revolutionary Guards Corp earlier this year. The dam itself is only 20 feet high, but was targeted because of its computer-guided controls.

In this open PSD webinar, our expert panel will discuss how to protect your municipality from a cybersecurity breach, the proper protocols to follow in the event of an attack, guarding SCADA systems, as well as the policy challenges and preparation municipalities must take into consideration. Sign up today to learn more

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.

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.