An Overview of the ISA112 SCADA Systems Standard
and the ISA112 SCADA Systems Management Lifecycle

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Abstract:
In Summer 2022, the ISA112 SCADA Systems Standards committee released the second official draft of its new ISA112 SCADA Systems Management Lifecycle. The Lifecycle is comprised of 8 core activity groups, each broken down into individual work processes. The activity groups are: Continuous Processes, SCADA System Standards, Design, System Development, Hardware/Fabrication, Installation/Deployment, Commissioning/Start-up, and Operation/Maintenance. Together these eight groupings of work processes provide an organized method and framework for the long-term management of SCADA systems. Not surprisingly, the ISA112 SCADA management lifecycle places a special emphasis on having clear end-user system standards, standardized workflows, consistent management change processes, and ensuring system documentation is kept up to date.

In this session, Mr. Nasby who is co-chair of the ISA112 SCADA systems standards committee, and a past-director of the ISA Water/Wastewater Division will provide a brief introduction to the ISA112 lifecycle, the rationale behind it, and how it can be applied to various types of SCADA systems across multiple industries.

Since its draft release in 2017, the ISA112 SCADA management lifecycle is now being used by numerous pipelines and utility companies across North America, and around the world, for both project-based and long-term management of SCADA systems. Currently, the ISA112 committee has over 300 members from around the world from a wide variety of industries including the municipal water/wastewater, upstream oil/gas, pipeline, electricity, mining and environmental monitoring sectors. Active since 2016, the committee is currently on track to release the first written part of the standard: "Part 1: ISA112 SCADA systems management lifecycle, terminology and diagrams" in early 2024, soon to be followed by parts 2 and 3 which will contain detailed guidance about the ISAS112 management lifecycle and the ISA112 model architecture for SCADA systems. More information about the ISA112 committee, including a freely downloadable copy of the ISA112 SCADA management lifecycle diagram, can be found at www.isa.org/isa112 .

About the Speaker

Graham Nasby, P.Eng., FS Eng., PMP, CAP, CISSP, CISM is an industry-recognized leader in the OT (operational technology), SCADA, and industrial automation sector for his efforts in cyber security best practices, standards development, alarm management, and operational efficiency. Through his work with ISA, CSA, ANSI and the IEC, Graham has co-authored international standards on systems design, cyber security, industrial automation, alarm management, and HMI systems. Graham has over 25 years of multi-industry experience, ranging from technical to project/program management, in the pharmaceutical, water/wastewater, nanotechnology, process, and rail transport industries. Graham spent a total of 12 years in the municipal water/wastewater sector – in both a consulting and utility role – and holds both a drinking water treatment license and a wastewater treatment operator license. In 2022, he embarked on a new phase in his career by moving to the trail transport sector. Graham currently holds the role of Senior Manager of OT Security Architecture for one of North America's largest Class 1 railroads. Graham has been the co-chair of the ISA112 SCADA systems standards committee since it was formed in 2016. He lives in Guelph, Ontario, Canada.