

# SCADA Risk Management and Emergency Preparedness

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## FORMAT

30 minute presentation

## KEYWORDS

SCADA, Emergency Preparedness, Security, Risk Management

## ABSTRACT

Modern day utilities depend on SCADA and related systems for the operation, maintenance, and management of critical utility process and business related systems. What happens when your plant is flooded, a fire breaks out, a tornado strikes, you face a cyber attack, a backhoe cuts communications cables, critical equipment fails, etc? How will your utility be impacted? How do you prepare or mitigate these incidents? What support structure needs to be in place? This presentation will review many of the known and little known risks your SCADA system may be exposed to and how, with some preparation, these risks can be minimized in a cost effective manner. Some of the topics that will be covered are as follows: maintenance risks, equipment location risks (such as the do's and don'ts of server location), strengths and weaknesses of various system architectures, software updates and licenses, data storage and archival, redundancy, cyber and physical security measures, critical equipment identification, critical task alternatives, minimum system support requirements, availability of mitigation resources, emergency preparations, and how to implement a program to be prepared for when disaster strikes.

## ABOUT THE AUTHORS

**Mark Leinmiller** *has been an active participant in numerous AWWA and WEA events, presenting papers at national AWWA & IEEE conferences and at statewide water conferences, seminars, and workshops. He has presented papers at AWWA-WEA events in Georgia, California, North Carolina, South Carolina and Tennessee. Mark joined Schneider Electric's Water Wastewater Competency Center in 2006, and has worked with municipalities, contractors, engineers, systems integrators and equipment suppliers to insure well-coordinated project designs. Most recently Mark has been involved in the Smart Cities initiative. He has worked in the electrical, automation systems, energy efficiency and production arena for over 20 years, and holds a Bachelor of Science in Industrial & Systems Engineering from Georgia Tech.*

**Jeff Miller** *is a Water Solutions Architect for Schneider Electric's Water Wastewater Competency Center. Jeff has a B.S. in Electrical Engineering and has worked as an engineering consultant and systems integrator for 24 years where he has delivered on over 30 wastewater treatment, 25 water treatment and*

*45 pump station projects ranging in size from small lift stations to 370 MGD treatment plants. Jeff is the co-founder and past chair of the NC AWWA-WEA Automation Committee and is also an active member of several national and regional Automation and Plant O&M related committees.*

**Mike Drescher** *is an expert in instrumentation and control systems, and utilizes his 25+ years of experience in industrial manufacturing to help optimize water and wastewater systems in the areas of energy efficiency, consistent high quality production, leak management and operational improvement. Mike joined Schneider Electric's Water Wastewater Competency Center seven years ago, and received his BS in Industrial Engineering from Iowa State.*