

Facing Utility Challenges: Managing Risk and Addressing Aging Infrastructure Needs

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Facing utility challenges – managing risk and addressing aging infrastructure needs. Risks can include asset risk (all assets including SCADA systems), operational risk (people, data and or policies) and corporate risk (customer base, finances, governance).

Infrastructure management has been identified as a national issue due to the current lack of planning and funding for future renewal and replacements to maintain system reliability. The extremely high funding needs and poor infrastructure conditions have been documented over the last 10 years in various ASCE and AWWA publications. The overall age of infrastructure continues to increase across the United States, however in most areas additional funds are not being applied towards renewal and replacement and reactive work is most common. This is generally due to the poor economy and lack of funding, as well as the lack of data available to make effective decisions and manage risk.

Implementing a risk assessment framework can assist utilities in identifying risk, mitigating risk and determining where to apply their limited funds to achieve the most risk reduction. A complete risk framework includes the element of the probability of failure, or the asset condition, the consequence of failure, or the asset criticality to the system in terms of financial, social and environmental impacts, and a risk mitigation factor that can include redundancy, automation, communications, back-up power etc. Automation and communications can be a significant strategy to reduce overall asset risk as well as provide meaningful data to maximize asset life.

ABOUT THE SPEAKER:



Celine Hyer is a Principal Consultant with Red Oak Division of Malcolm Pirnie/ARCADIS in their Tampa Florida office where she leads their asset management practice for the South. She has a B.S. in Chemical Engineering and an M.S. in Engineering Management from Florida Institute of Technology. Celine has 23 years of experience in Engineering with 13 years that are directly related to Water and Wastewater Utility Management, including asset management, master planning, capital planning and strategic planning projects. She is currently leading asset management projects throughout the United States for medium and large utilities including New York City Department of Environmental Protection, Dallas Water Utility, Lee County Utilities, and Toho Water Authority.