



# Water Utility Resilience Forum

December 13 – 15, 2021 | Miami, FL

Cyber Resilience: Exercising Leadership



# Cyber Resilience: Exercising Leadership

- What does it mean?
  - Recover from setbacks
  - Adapt well to change
  - Keep going in the face of adversity
- How can we work together and help each other?

# Why is Cyber Resilience Critical Now?

- Water Systems are critical infrastructure targets
- Many utilities provide both water and wastewater services: One Water
- Local governments, which often include water and wastewater systems, are common targets
- Attacks are increasing in frequency (+400% since 2020)
- Reported losses are increasing significantly
- Modified and remote operations due to COVID-19 introduce new vulnerabilities



DECEMBER 13-15 MIAMI, FL

2021 Water Utility Resilience Forum

# Cyber Resilience: Exercising Leadership

## Facilitators



**Sharon Peters**  
EMA, Inc.



**Nick Claudio**  
EMA, Inc.

## Panelists



**Andrew Hildick-Smith**  
WaterISAC



**Matthew Gabrick**  
Boston Water &  
Sewer Commission



**Ehinomen Nwani**  
Los Angeles Department  
of Water and Power



**Steve de Mik**  
Hampton Roads  
Sanitation District

The image features a white background with two decorative curved lines. One line is in the top right corner, curving from the top edge towards the right edge, with a color gradient from light blue to light green. The other line is in the bottom left corner, curving from the bottom edge towards the left edge, with a color gradient from light green to light blue. The text "Who is in the room today?" is centered in the upper half of the page.

Who is in the room today?



**Steve de Mik**  
Hampton Roads  
Sanitation District



**Matthew Gabrick**  
Boston Water &  
Sewer Commission



**Ehinomen Nwani**  
Los Angeles Department  
of Water and Power



**Andrew Hildick-Smith**  
WaterISAC

## Panel Stories



One Key  
Message

- For Utility Leaders



Your Questions?



# Adventures in AWIA – Part 1



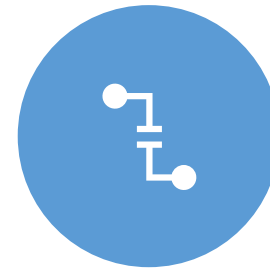
TeamViewer access directly to the SCADA system



Bypass cable around the firewall



One login for all SCADA HMI's



Outdated (7+ years) firewall that was never updated



Who has experienced an attack?

Who has been involved in try to prevent an attack?



Who has been involved in recovering from an attack?



## What Should Utility Leaders Do?

- To support preparation/prevention?
- In the moment of response?
- To meet expectations of recovery?



Your Questions?

# Adventures in AWIA – Part 2



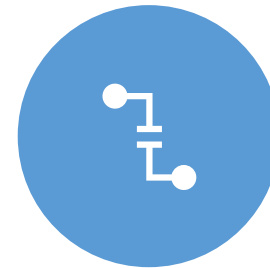
Password writing on a white board you could see from the street




Hidden WIFI router so staff could have wireless access to the internet – No firewall



“Segmented”  
Networks




Others?



## How Can We Work Together as a Sector and Community?

- Do you work with others now?
- Who has been most helpful to you?
- Are you part of a regional network or sharing with other utilities now?



What do you think is coming next?  
How can we be ready?



## Wrap Up

- What is one piece of advice you would share with everyone in this room today?
- What else?



# Table Discussions

