# WELCOME TO TECHNICAL TALK WITH RF July 21, 2025

## WELCOME TO TECHNICAL TALK WITH RF





# TECHNICAL TALK WITH RF

Join the conversation at

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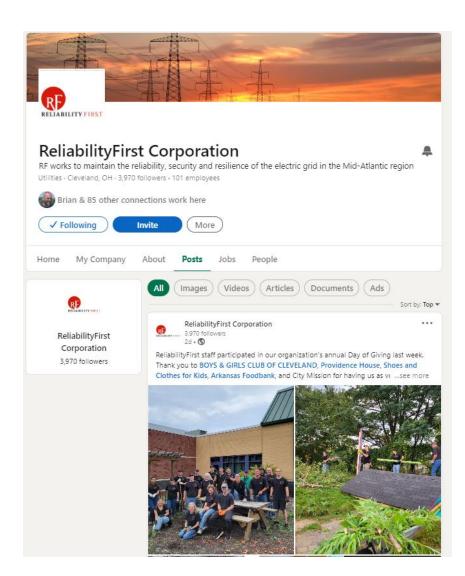
#TechTalkRF

### TECHNICAL TALK WITH RF

Follow us on



Linkedin.com/company/reliabilityfirst-corporation



## TECH TALK REMINDERS

Please keep your information up-to-date

CORES and Generation Verification Forms

Following an event, send EOP-004 or OE-417 forms to disturbance@rfirst.org

CIP-008-6 incident reports are sent to the <u>E-ISAC</u> and the <u>DHS CISA</u>

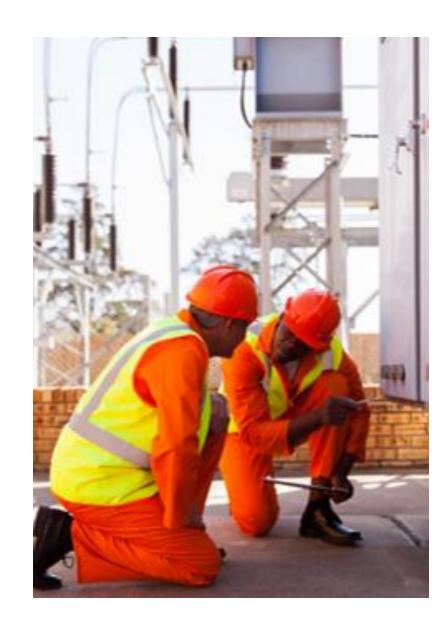
Check our <u>monthly CMEP update</u> and <u>newsletter</u>:

- 2025 ERO Periodic Data Submittal schedule
- Timing of Standard effectiveness

BES Cyber System Categorization (CIP-002-5.1a)

 Assess categorization (low, medium, or high) regularly and notify us of changes

CIP Evidence Request Tool V9 was released and is on NERC's <u>website</u>



### TECH TALK REMINDER

Are you getting our newsletter *First Things RFirst?* 

- Sign up today <u>here</u>

Also, make sure to check out our **2024 Impact Report** and **video** 



### First Things RFirst

Expert analysis for a more reliable, secure and resilient electric grid, plus news and updates for RF stakeholders.

June 2024

### **Insights & Analysis**

### ReliabilityFirst 2024 Summer Reliability Assessment



RF's Summer Reliability Assessment projects the PJM and MISO areas to have adequate resources under normal demand, but if demand or resource outages are experienced beyond those projections, there is an increased likelihood that corrective actions would be needed. This risk is low in the PJM area, but it is elevated in the MISO area.

Click here to read more

### The Lighthouse: The challenges of Operational Technology cyber security



Our modern civilization relies on Operational Technology (OT) to keep essential services working. The electric grid, pipelines, water treatment plants, transportation systems, and many more all depend on OT to deliver reliable services. Operating these systems securely comes with a host of cyber security challenges.

Click here to read more



## WELCOME TO TECHNICAL TALK WITH RF





### TECH TALK ANNOUNCEMENT



# ReliabilityFirst Hosting a CIP Low Impact Workshop

(In-Person Only) August 19<sup>th</sup> - 21<sup>st</sup>

**Register Now: Eventbrite** 

**Event Details: rfirst.org** 

The RF Low Impact Workshop will give attendees the opportunity to improve their understanding of security and compliance for CIP assets containing low impact BES Cyber Systems.

Attendees will be able to choose from three training tracks on Day 1.

Day 2 will be a workshop with presentations and panels on various topics of interest to the CIP low impact community.

Registration is limited, so be sure to sign up early!



RF Offices, Cleveland, Ohio
August 19-21, 2025
Free to attend, Registration is Limited!
Details and Registration:

https://www.rfirst.org/event/cip-low-impact-workshop/

## TECH TALK ANNOUNCEMENT



Fall Reliability & Security
Summit
(In-Person Only)
September 8-10th 2025

Register Now: <u>Eventbrite</u> Event Details: <u>rfirst.org</u>

Join ReliabilityFirst at our annual Fall Reliability & Security Summit, hosted this year at the MGM National Harbor just outside of Washington, D.C.

We'll kick things off with an evening reception and our Reliability Recognition Awards Ceremony on Monday, Sept. 8, followed by an exciting agenda on Tuesday, Sept. 9. We'll be joined by key players from across the electric industry, including executives from FERC, NERC, PJM, AEP, LS Power, and more for a panel discussion as well as presentations on FERC Orders, RF Compliance and Enforcement, and more. Registration is limited, so be sure to sign up early!



MGM National Harbor, Oxon Hill, MD September 8-10, 2025 Free to attend, Registration is Limited! Details and Registration:

https://www.eventbrite.com/e/2025-fall-reliabilitysecurity-summit-tickets-1438521599829?aff=oddtdtcreator

### TECH TALK ANNOUNCEMENT



# Department of Energy Releases Report on Evaluating U.S. Grid Reliability & Security

Read here: Report

The U.S. Department of Energy (DOE) today released its <u>Report on Evaluating U.S. Grid Reliability and Security</u>. The report fulfills Section 3(b) of President Trump's Executive Order, <u>Strengthening The Reliability And Security Of The United States Electric Grid</u>, by delivering a uniform methodology to identify at-risk regions and guide Federal reliability interventions.

The analysis reveals that existing generation retirements and delays in adding new firm capacity, driven by the radical green agenda of past administrations, will lead to a surge in power outages and a growing mismatch between electricity demand and supply, particularly from artificial intelligence (AI)-driven data center growth, threatening America's energy security.



### Resource Adequacy Report

Evaluating the Reliability and Security of the United States Electric Grid

July 2025

### TECH TALK ANNOUNCEMENT



# Cold Weather Preparedness Small Group Advisory Sessions (SGAS) Tentatively Planned for the week of August 18, 2025

The event will consist of two parts:

- General Session Live Webinar: A general session will be held to discuss EOP-012-3 on Monday, August
  18, 2025 (TBD). Registration for a one-on-one session is not necessary to participate in this general
  session.
- SGAS One-on-One Sessions: Closed, one-on-one discussions between a registered entity's Subject
  Matter Experts (SMEs) and ERO Enterprise staff about issues pertinent to that entity's implementation
  of EOP-012-3 and any other cold weather-related concerns. These sessions will occur Tuesday, August
  19, 2025 Friday, August 22, 2025. NERC will schedule the one-on-one sessions after registration is
  received and is coordinated with Regional Entity staff.

For more information, please contact <u>Derek Kassimer</u> (via email) or at **470-936-3260** 



### TECH TALK ANNOUNCEMENT



### **NERC Releases New Infographics** to Support Entities in IBR **Registration Initiative**

Read here: Full Announcement | Overview

NERC developed two easy-to-follow infographics that help entities involved in the Inverter-Based Resource (IBR) Registration Initiative by making the registration process clear and accessible. NERC recognizes the critical importance of ensuring that identified entities are integrated smoothly and educated on the scope and role of NERC and its Regional Entities, collectively known as the Electric Reliability Organization (ERO) Enterprise.

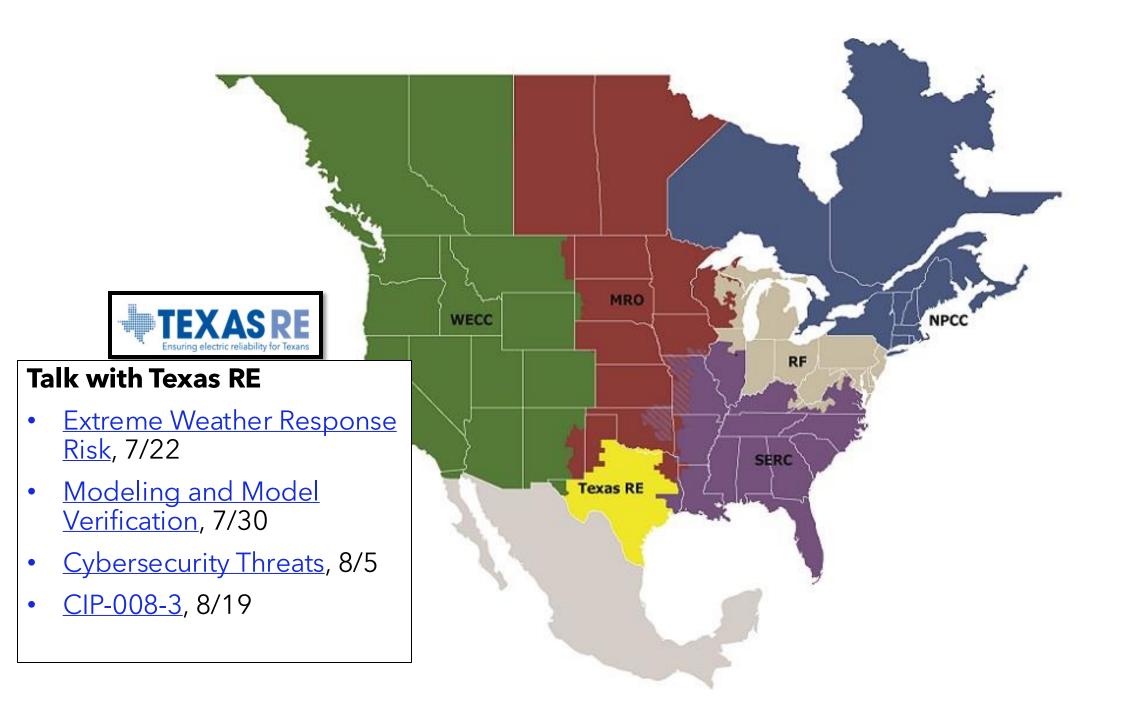
These resources are part of a broader effort to welcome new participants into the ERO Enterprise and provide the tools and guidance needed to support reliability and compliance from the start.











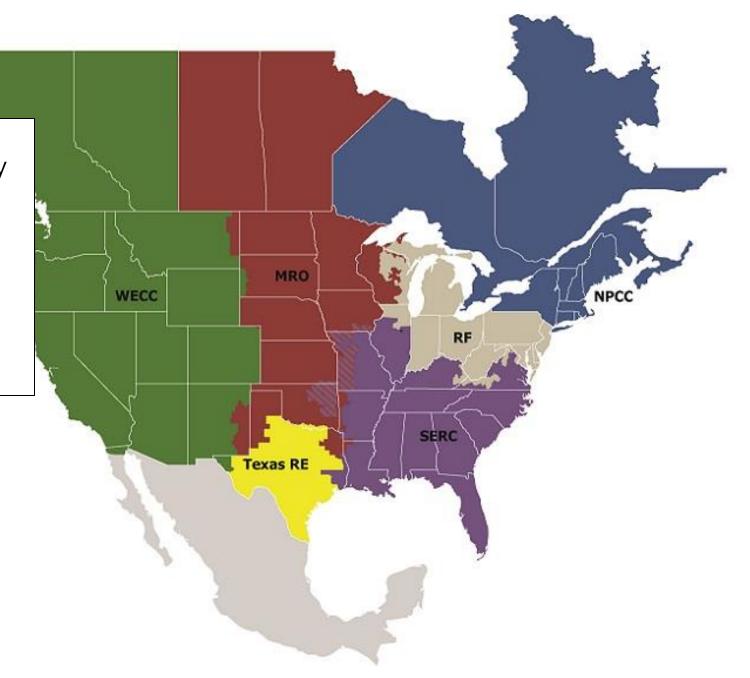


WECC Reliability & Security Workshop

October 14-15

Reliability & Security Oversight Update

August 21

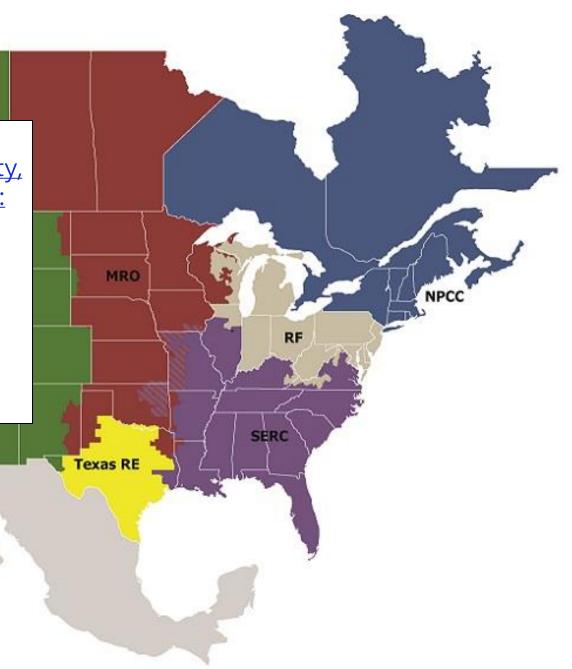




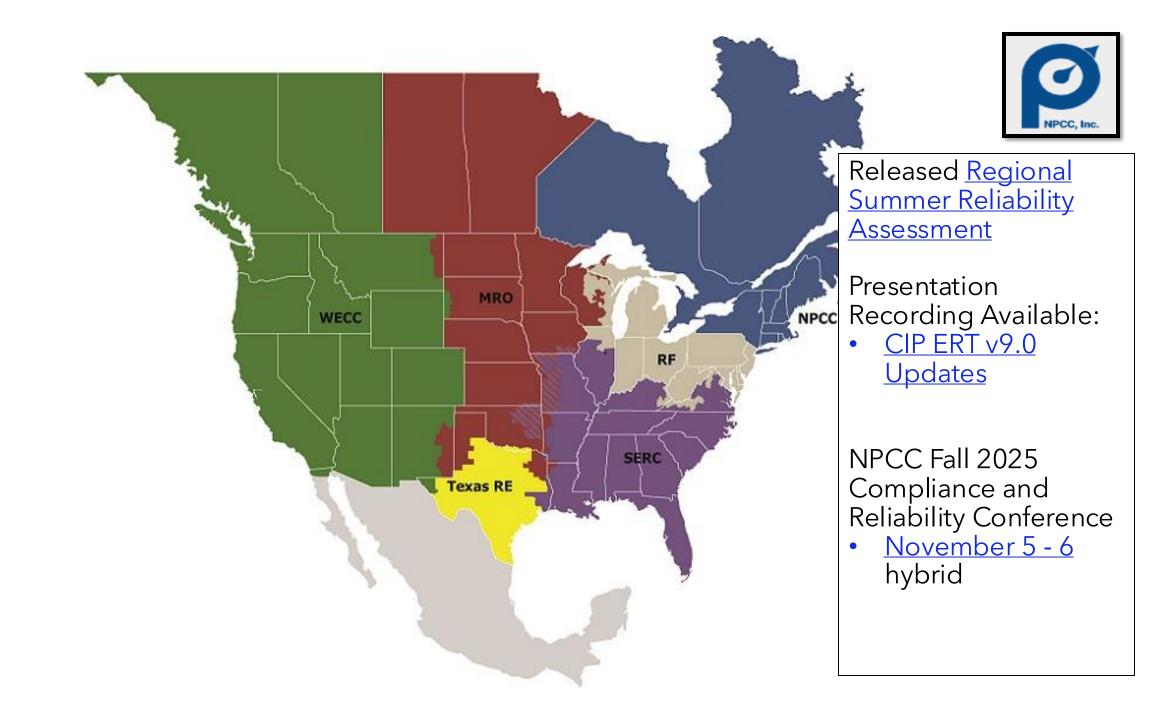
ICYMI: Recording & Slides
Available Reliability,
Security, and CMEP Summit:
Navigating the Evolving
Power Grid

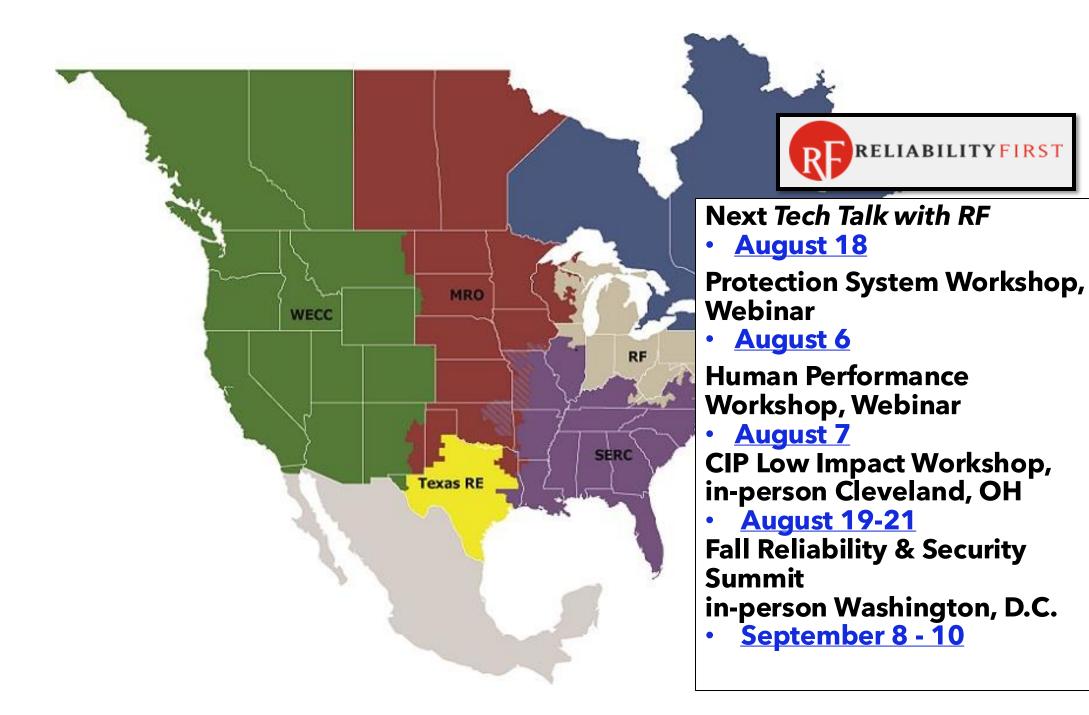
Inverter-Based Resources (IBR) Webinar

• August 13

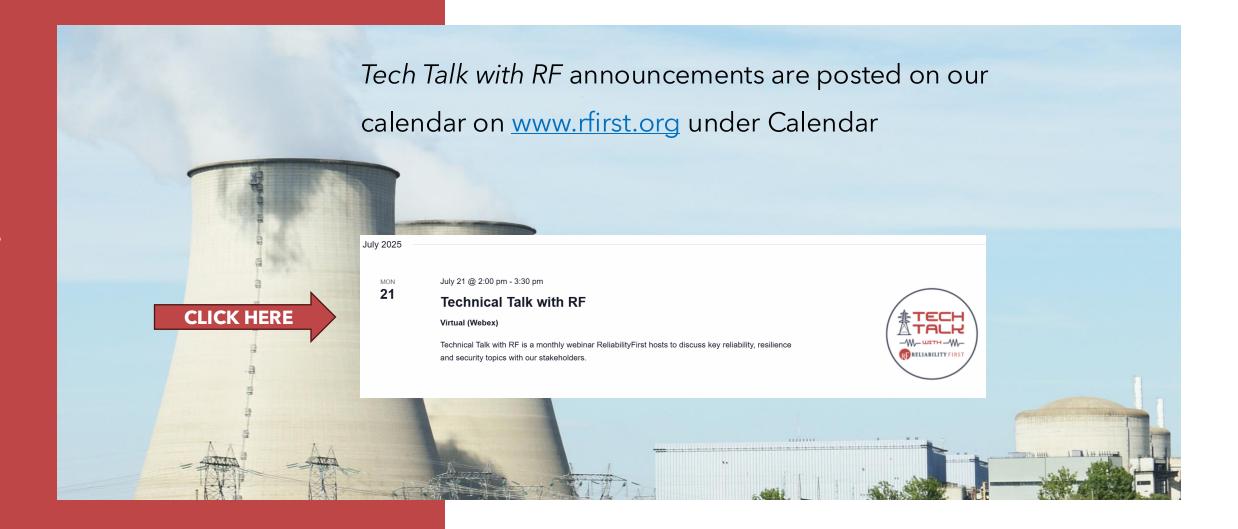








### TECH TALK REMINDER



### TECHNICAL TALK WITH RF

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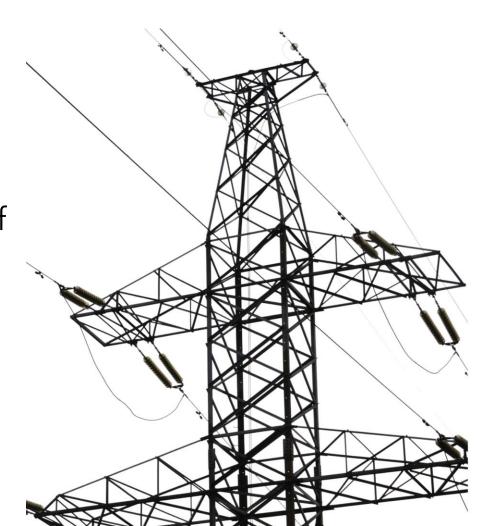
SLIDO.com

#TechTalkRF

### Anti-Trust Statement

It is ReliabilityFirst's policy and practice to obey the antitrust laws and to avoid all conduct that unreasonably restrains competition. This policy requires the avoidance of any conduct which violates, or which might appear to violate, the antitrust laws. Among other things, the antitrust laws forbid any agreement between or among competitors regarding prices, availability of service, product design, terms of sale, division of markets, allocation of customers or any other activity that unreasonably restrains competition.

It is the responsibility of every ReliabilityFirst participant and employee who may in any way affect ReliabilityFirst's compliance with the antitrust laws to carry out this policy.





### AGENDA

### **NERC MODERNIZATION OF STANDARDS** PROCESSES AND PROCEDURES (MSPP) **TASK FORCE**

- MATT HOLTZ, MSPP TASK FORCE MEMBER, INVENERGY
- **TODD BENNETT, MSPP TASK FORCE MEMBER, ASSOCIATED ELECTRIC (AECI)**

### **HAMILTON LIBERTY WINTERIZATION SITE VISIT: BEST PRACTICES & LESSONS LEARNED**

- BRIAN ZECHMAN, GENERAL MANAGER, HAMILTON LIBERTY **PLANT**
- JOHN WOLFF, SR. LEAD ENGINEER, GENERATION, PJM





# Modernization of Standards Processes and Procedures (MSPP) Task Force

Matt Holtz and Todd Bennett, MSPP Task Force Members Tech Talk with RF July 21, 2025



### **Need for Transformational Change**

Transformational changes to the standard development process would enhance NERC's ability to address risks associated with grid transformation.

Incremental enhancements to the standard development process have marginally improved efficiency, but recent events underscore the need for transformational change.

Transformational change will help ensure that stakeholder participation in the standard development process continues to be robust and meaningful.

Survey results indicate broad agreement with scope of task force.





### Transform and Modernize the Process

Re-envision a modernized standard development process to address evolving risks

### Create Efficiencies

Identify areas of opportunity and recommendations to save time and remove redundant steps in the current process

### **Develop a Trusted Process**

Provide clear opportunities for stakeholder input, due process, openness, and balance of interests





### **Inputs and Considerations**

Previous standards improvement efforts

Section 321 lessons learned Comparison of standards processes

Implementation impact

Stakeholder input









Task force established



Developed and published scope document



Aligned on goals and objectives



Developed comprehensive communications and outreach plan



Identified initial areas of opportunity to address pain points in the process



Released a public survey; engaged with external stakeholders



Drafted a white paper of potential improvement opportunities



### **Potential Improvement Opportunities**







### Standard Initiation

- Implement a biannual review and prioritization process
- Centralize the process through the Reliability and Security Technical Committee

### Standard Development

- Form a new group or panel to coordinate standards drafting with Al assistance
- Outsource standards drafting
- Implement incremental process changes

### **Balloting**

- Create a standing ballot body
- Implement a notice and comment process for proposed standards
- Implement incremental changes to Registered Ballot Body framework



### **White Paper Rollout**

**July 22** 

Public Comment Period Open August 27

Public Comment Period Closes



"Drop-in" Q&A Sessions

July - August

Industry Outreach (Regional Entity events, NERC Standing Committees, MRC, Board, Task Force outreach etc.)





### **MSPPTF Process Timeline**

### Q2 2025

### Q3 2025

### Q4 2025

### Q1 2026

- Developed scope document
- Identified areas for improvement
- Solicit stakeholder input
- Develop white paper of potential improvement opportunities
- Solicit stakeholder input
- Develop draft recommendations

- Solicit stakeholder input
- Finalize recommendations
- Present recommendations to NERC Board

### **Communications and Engagement**

 Individual task force engagement  General communications to and broad engagement with industry and stakeholders  Updates to NERC's Board, MRC, Standing Committees, and Industry Groups



### **Commitment to Robust External Engagement**

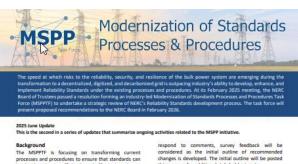
- Almost 200 responses to the industry survey
  - Summary of themes from the survey responses will be shared with the white paper
- More than 500 stakeholders engaged by individual task force members
  - Through various committee meetings, conferences, workshops and other means
- Upcoming webinars and Q&A sessions associated with the open comment period
- Ongoing schedule for meeting with stakeholders and soliciting input prior to the task force's Q1 2026 presentation to the NERC Board of Trustees





- Several resources are available to keep industry and stakeholders informed throughout this critical project:
  - MSPPTF Scope
  - MSPPTF Roster
  - MSPP FAQs
  - MSPPTF External Engagements
- Resources and forthcoming engagements are posted on the MSPPTF webpage (under the Initiatives tab **NERC** homepage).
- The MSPPTF publishes a monthly update at the beginning of each month to provide an overview of recent activity and upcoming work.

### **Monthly Update**



be developed more efficiently and effectively to better address the complex and rapidly evolving risk landscape It is considering the spectrum of the current standards program, including processes, balloting, drafting, and the roles of team and committee members. The MSPPTF is also reviewing prior standard improvement efforts and recent Section 321 actions for lessons learned.

Since the last update, the MSPPTF has identified and prioritized three areas of opportunity for improvement in the standards process and is conducting a deep dive into: 1) standards initiation/standard authorization requests, 2) standards development/drafting, and 3) balloting. The task force is meeting this month to develop an initial outline of recommended changes.

The MSPPTF also released a survey that provide stakeholders with the opportunity to offer ideas for consideration to transform current standards processes and procedures. The survey (which is due on June 5) is anonymous, and while the task force will not directly this summer for additional stakeholder input

The task force continues its comprehensive program to engage and provide updates to stakeholders through public announcements and various open meetings MSPPTF Chair Greg Ford and Vice Chair Todd Lucas updated the NERC Board of Trustees on MSPPTF activities on May 8, and Todd Bennett updated the Standard Committee (SC) on May 21. Todd Lucas will provide an update at the Joint Reliability and Security Technica meeting on June 11. In addition, task force members are conducting outreach to various industry groups to gather informal input as indicated in the timeline below

Several resources are available to keep industry and stakeholders informed throughout this critical project, including the MSPP webpage (located under the Initiatives tab on the NERC homepage), the MSPPTF









**Questions?** 

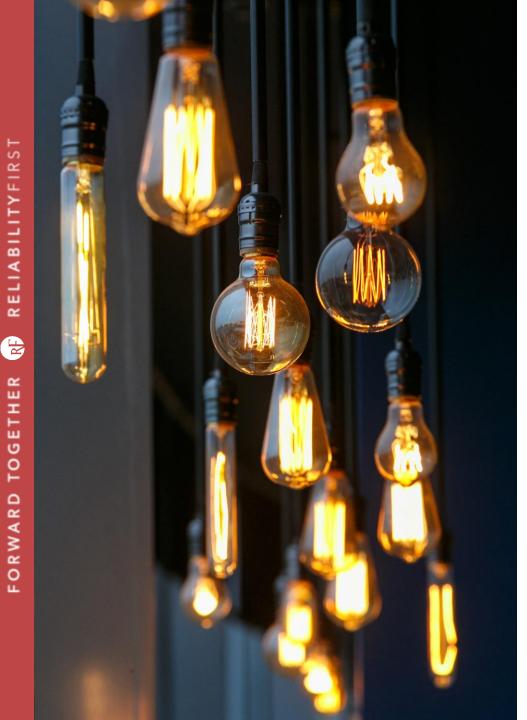
Email mspp@nerc.net

# RF WINTERIZATION PROGRAM AND HAMILTON LIBERTY SITE VISIT

Brian Zechman, General Manager, Hamilton Liberty Plant

John Wolff, Sr. Lead Engineer, Generation, PJM

July 21, 2025, Technical Talk with RF



## AGENDA

HISTORY OF RF WINTERIZATION **PROGRAM** 

PJM COLLABORATION

**EXAMPLE PRACTICES** 

HAMILTON LIBERTY SITE VISIT

### HISTORY OF RF PROGRAM

- Started in 2014
- Voluntary
- RF Assist Visit
- Outside of Compliance
- Sharing Best Practices
- 20 Site Visits in 2024 2025
- Survey

1.0	PLANT WINTERIZATION - OVERALL CONCERNS & ISSUES
1.1	How many boiler-turbine-generator enclosures are of the outdoor type, i.e., boiler room and turbine- generator room are not enclosed and directly exposed to weather conditions?
1.2	How many boiler-turbine-generator enclosures are of the semi-outdoor type, i.e., boiler room partially enclosed with portions directly exposed to weather conditions but turbine generator room fully enclosed?
1.3	How many boiler-turbine-generator enclosures are of the indoor type, i.e., boiler room and turbine-generator room are fully enclosed and not directly exposed to weather conditions?
1.4	Due to the applicable type of configuation, describe any past problems (trips, derates, fail-to-start, etc.) caused by extreme weather and list the amount of megawatts impacted.
1.5	Does your entity presently have a plant winterization plan for all generating facilities?
1.6	Briefly describe the training program or exercise which prepares plant personnel for extreme cold weather conditions.
1.7	What plant personnel are specifically assigned or responsible for the plant winterization plan related to directing key activities before, during and after severe winter weather events?
1.8	To what level of corporate management is the plant winterization plan communicated?
1.9	What is the status of the your plant winterization plan?
1.11	What is your facility(ies) minimum starting temperature(s)?
1.12	What is your facility(ies) minimum design/operating temperature(s) and how long can the facility operate at that temperature?

#### PJM COLLABORATION

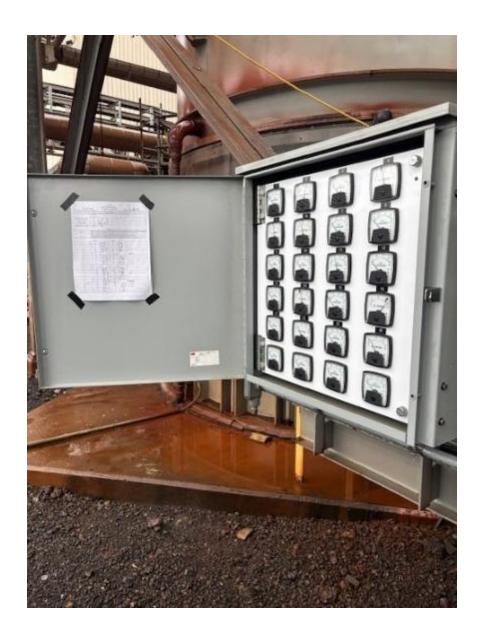
- PJM began collaborating with RF during the 2023/2024 winter season for winter readiness site visits. Only a few sites were visited during that winter.
- During the 2024/2025 winter season, PJM supported 14 of the 20 different site visits.
  - Visits were supported by PJM personnel from multiple groups within the organization.
  - Visits were opened with an "Operational Basics" presentation to provide a high-level overview of how PJM functions and the roles of GO/GOP in the overall grid or Bulk Power System (BPS). This proved very beneficial to bridge the gap between GO/GOP and PJM as many have third party marketing companies that interface directly with PJM.
- Site visits included coal-fired power plants, simple and combined cycle power plants, and renewables, including wind and solar.

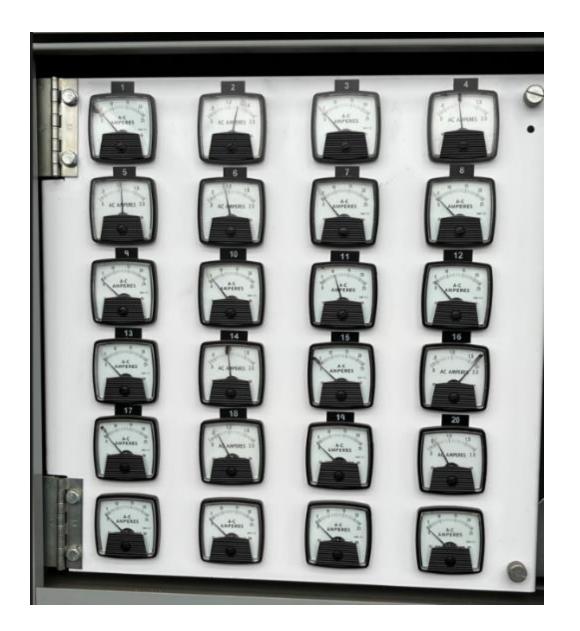
#### HIGHLIGHTS OF PJM'S PRESENTATIONS

- PJM overview, main focus and key statistics
- Overview of the grid and interaction between PJM and members
- Generation dispatch operations and scheduling
- Transmission system operations
- Control actions for contingencies

Overall, the presentations generated good discussion, and in some cases, spurred follow up training sessions.

#### HEAT TRACE LOADING





#### TEMPORARY WINDBREAKS





### HAMILTON LIBERTY POWER PLANT



#### HAMILTON LIBERTY POWER PLANT

- 800 MW nominal natural gas fired combined cycle
- Commercial operation began: 2016
- Located in: Towanda, Pennsylvania
- Owned/Operated by: Cogentrix

#### AIR FILTER INLET HEATING





#### PERMANENT ENCLOSURE AROUND PUMPS





#### WINTER SUPPLIES





#### LOCAL VISUAL INDICATION





#### HEAT TRACE MONITORING PANEL





#### END OF LINE HEAT TRACE INDICATION





## **HEAT TRACE TESTING**

PANE									
DATE:	10/1/2022								
	10/1/2022								
CRKT#	DWG CUR OPER	ACT CUR OPER	MEGGER (M OHM)	Leakage Current	TYPE	work order#			
1	10.3	6.4	550	ge	MIQ	12941 (closed)			
2	**	5.3	550		2 BOXES	/- (/			
3	13	13.7	550		HTSX				
4	5.9*	12.7	550		HTSX&BOX				
5	17.2	15.1	550		HTSX				
6	*	4.1	550		BOX				
7	6	15.4	550		HTSX				
8	13.85	14.9	550		HTSX				
9	10.4	13.8	6.4		HTSX				
10	15.1	10.2	550		BSX				
11	15.1	9.3	550		BSX				
12	5.25	4.8	550		HTSX				
13	10.8	13.4	550		BSX				
14	11.1	6.3	550		BSX				
15	1.3	1.3	550		HTSX				
16	8.9	14.3	550		HTSX				
17	13	11.7	550		HTSX				
18	4.6	4.6	273		MIQ	12942 (closed)			
19	*	8	550		BOX				
20	0.6*	0.4	550		BOX&HTSX				
21	*	4.6	550		BOX				
22	1.9*	4.3	550		BOX&HTSX				
23	14.8	18	550		HTSX				
24	12.9	16.3	550		HTSX				
25	*	0.8	550		BOX				
26	5.1	8.4	550		HTSX				
27	3.7	4.5	550		HTSX				
28	*	15.1	0.7		BSX	new work order 15183			
29	SPARE								
30	SPARE								
31	SPARE								
32	SPARE								
33	*	3.3	550		BSX				
34	SPARE				?				
35	SPARE								
36	SPARE								
	51%-70% of Dwg Cur Oper value								
	>50% of Dwg	Cur Oper value							

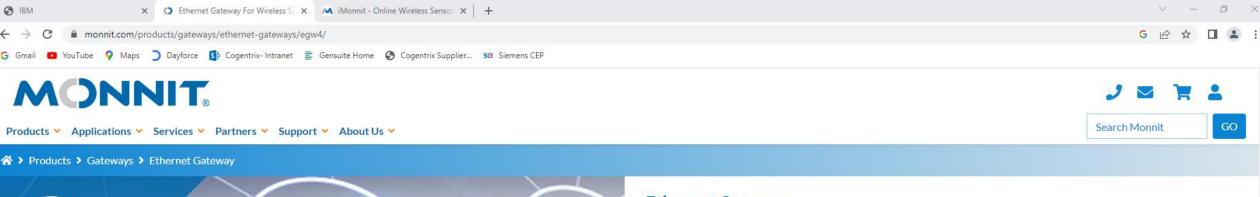
#### WIRELESS REMOTE TEMPERATURE SENSORS











**Gateways** 



#### **Ethernet Gateway**

Connect Your IoT Sensor Network to the Internet

Monnit ALTA® Ethernet Gateway and ALTA XL® Ethernet Gateway allow ALTA Wireless Sensors to communicate with the iMonnit™ Wireless Sensor Monitoring and Notification System without the need for a PC. Simply provide power and plug the ALTA Ethernet Gateway or ALTA XL Ethernet Gateway into an open Ethernet port with an Internet connection. Then it will automatically connect with our online servers, providing the perfect solution for commercial locations with an Internet connection.

The ALTA XL Ethernet Gateway features a powerful wireless transceiver with up to 1 Watt transmission strength and an amplified receiver. The ALTA XL Ethernet Gateway can send and receive data communications with ALTA Sensors 2,000+ feet through 18+ walls in commercial building environments.

#### **Gateway Features**

- Updated Modbus TCP-IP and SNMP to support new sensor profiles
- · Internet MIB (management information base) is implemented on the gateway for industry tools to autodiscover the gateway and understand its features
- Enhanced SNMP walk to only show data for valid OIDs (sensor data that exists in the system)
- · SNMP Interface: in addition to integers, the gateway has additional OIDs to present the same data in HEX and string (human-readable) format

\*If you plan to use an alternative interface to the sensors other than iMonnit.com (such as Modbus TCP, SNMP, the direct push of data from gateway to on-premises, or third-party server), the purchase of an unlock code will allow free roaming of the data from the hardware.





Save 10%. Click here.















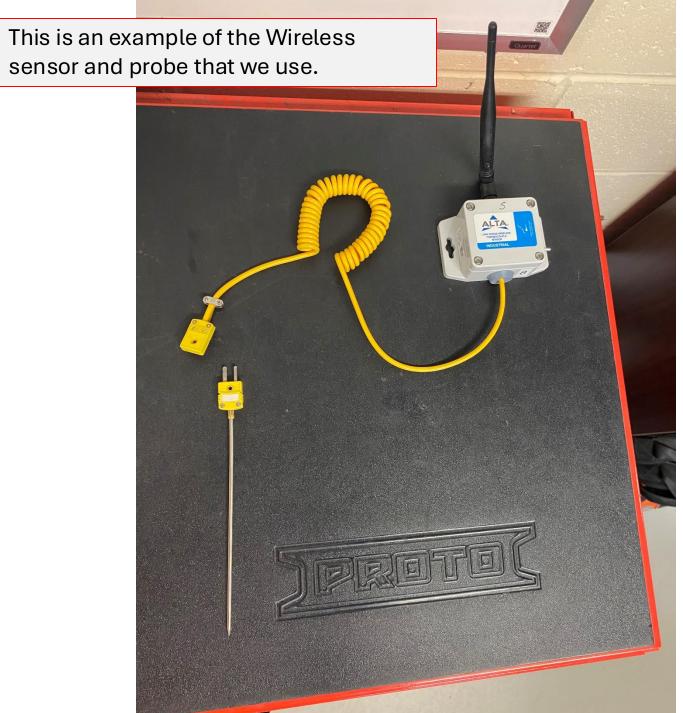


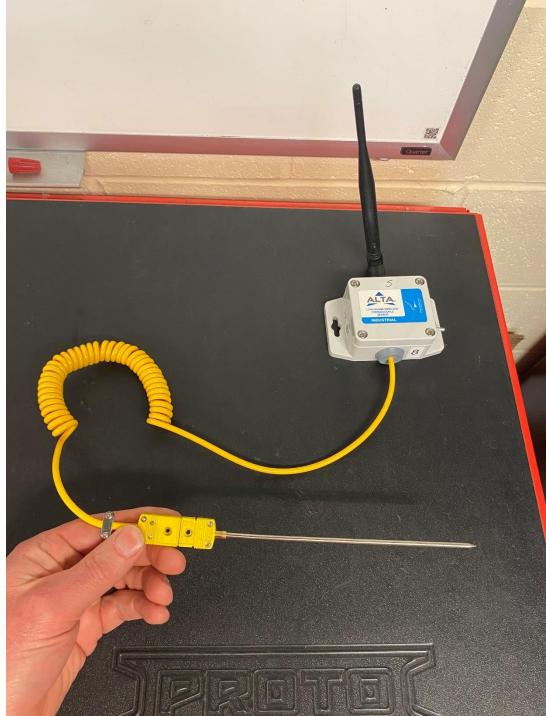




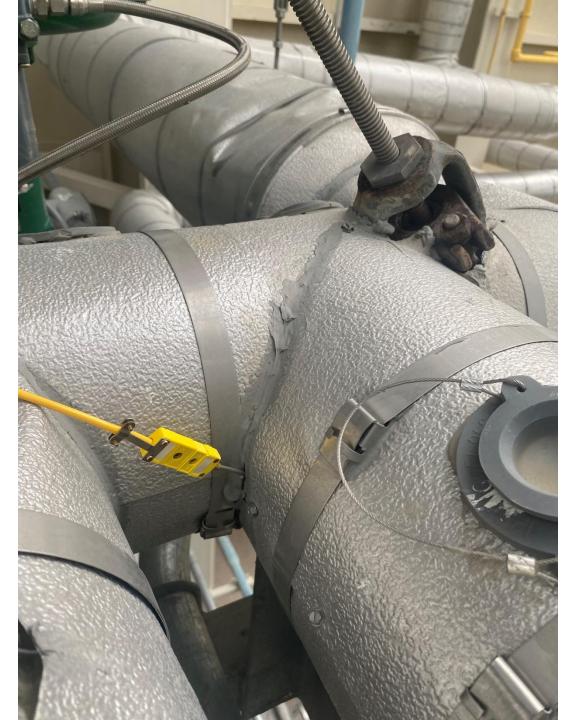




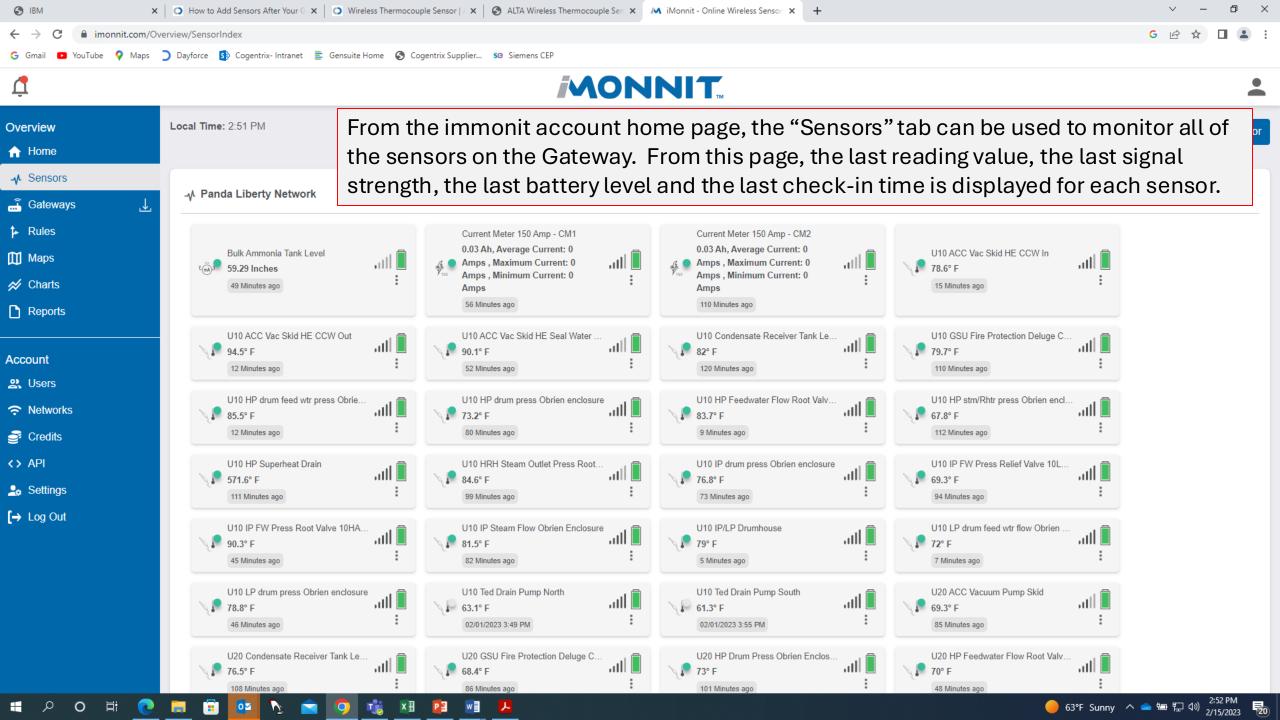


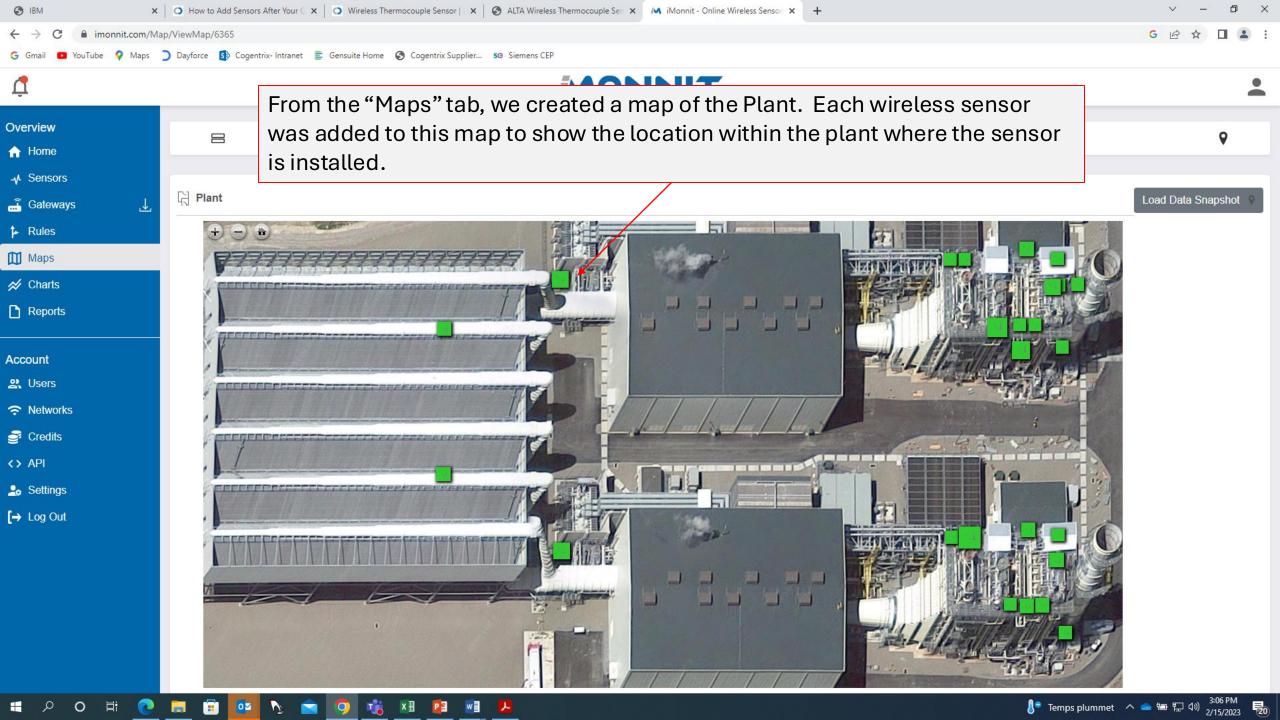


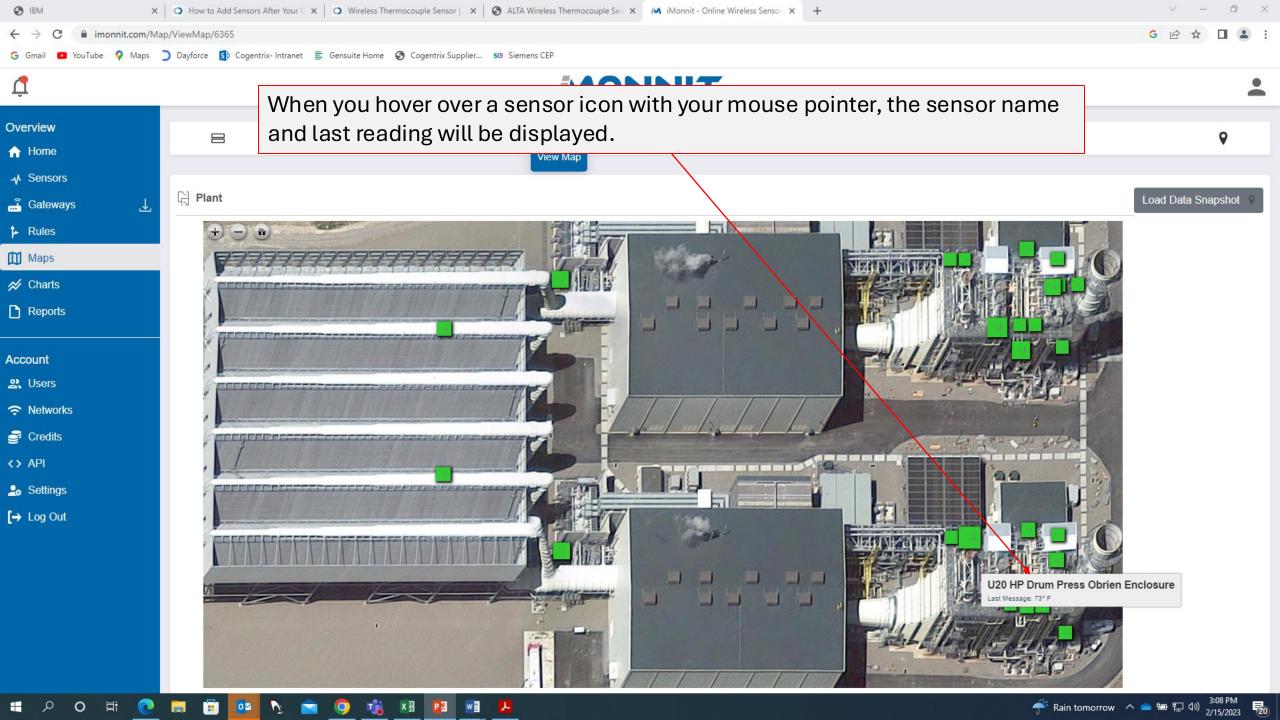
This is an example of a probe installation on a pipe with aluminum clad insulation.











#### P&ID CROSS-REFERENCE

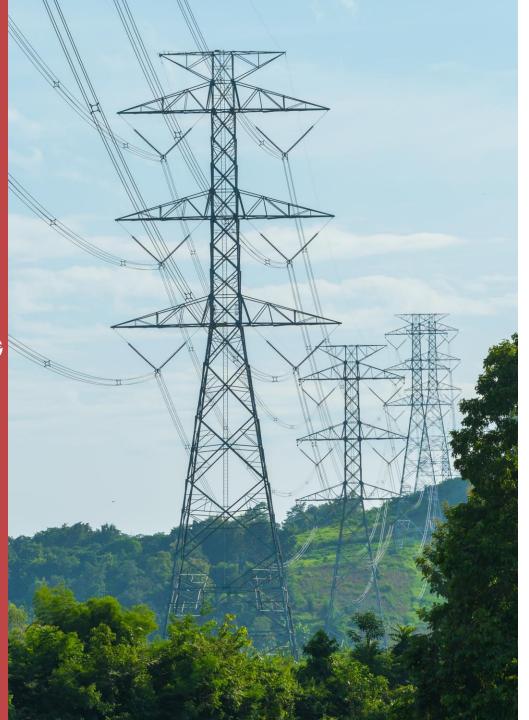
- 4	Α	В	С	D	E	F	G	Н	1	J	K
1	Thermon Heater Number	P&ID	Instrument Enclosure if Applicable	Description	Panel Number	Circuit Breaker #	Panel Location	Power Connection Location	Replaced/ Repaired info	DWG Current	Actual Current
2	1	00MD0140-SH2 00MD0155-SH1		Raw water supply line 005GX01BR001 from raw water tank connection N6, on 00MD0140-5H2, to electric pump suction line 005GX01BR011 and diesel pump suction line 005GX01BR003, on 00MD0155-5H1	00BLA06	1	Water Treatment Building MCC	South of Water Treatment Building 4' Elevation WT-3		16.5	10.4
16	16	00MD0142-SH1		Demineralized water tank outlet line OOGHC10BR001 from tank connection N10 to demin forwarding pump inlet line OOGHC10BR002, in water treatment building	008LA06	8	Water Treatment Building MCC	On demin water tank box WT-20 3' elevation.	water in cable. Baked out and siliconed end of cable. 2024 wo14333 closed	3.7	2.1
17	17	00MD0140-SH2		Raw water / firewater tank line OOLCA25BR004 from tank connection N11 to underground connection on line OOLCA25BR003 from unit 10 and 20 condensate reject lines.	008LA06	6	Water Treatment Building MCC	South of H2O treatment building box WT-1 3' elevation - Fuel gas filter seperator yard box WT-7A 3' elevation		1.8	2.4
18	18	10MD0151-SH2		HRSG blowdown sump pumps discharge line 10GMA75BR001 from enclosure outlet lines 10GMA15BR001 and 10GMA16BR001, on 10MD0151-SH2, to underground connection line 00GMA80BR001, on 10MD0151-SH2, in North East corner of HRSG	10BJC06	19	North West Corner of HRSG Ground Level	No Access or no tag			
19	19	10MD0151-SH2		GT inlet evaporative cooler blowdown/drain line 10GMA60BR401 from connection on evap cooler to underground connection on line 10GMA60BR402 to HRSG blowdown sump	10BJD04	29	West Side of HRSG by Stairs Ground Level	CCW skid under intake box 108-171 10' elevation		2	3.4



#### **COMPRESSED AIR DRYERS**



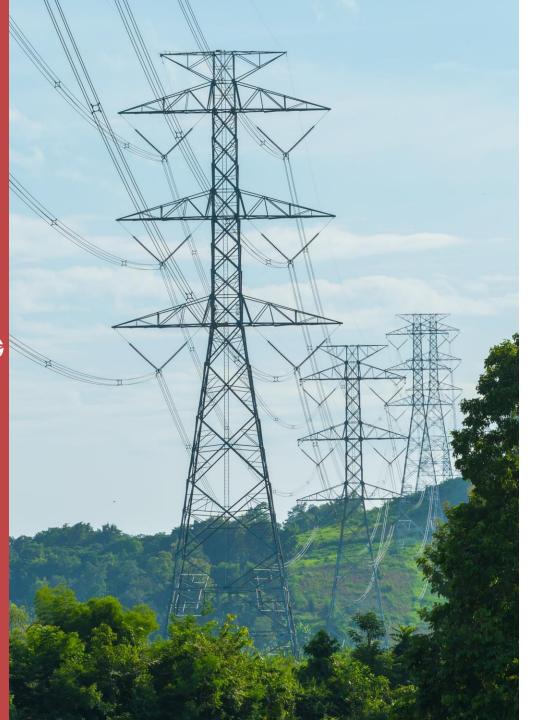




# QUESTIONS & ANSWERS

Contact: Mike Hughes

mike.hughes@rfirst.org



## **THANK YOU**

Join us for our next Tech Talk - August 18th 2-3:30 pm EST

**Webinar Link**