

# Foundations of Operations and Planning (O&P) Programs

Mario de la Garza Manager, O&P Compliance Monitoring

#### **Antitrust Admonition**



Texas Reliability Entity, Inc. (Texas RE) strictly prohibits persons participating in Texas RE activities from using their participation as a forum for engaging in practices or communications that violate antitrust laws. Texas RE has approved antitrust guidelines available on its website. If you believe that antitrust laws have been violated at a Texas RE meeting, or if you have any questions about the antitrust guidelines, please contact the Texas RE General Counsel.

Notice of this meeting was posted on the Texas RE website and this meeting is being held in public. Participants should keep in mind that the listening audience may include members of the press, representatives from various governmental authorities, and industry stakeholders.





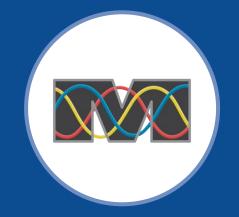
# **Upcoming ERO Events**





June - July 13, 2023

Inverter-Based
Resource Webinar
Series



June 29, 2023

Regional Summer
Assessment Webinar



July 17, 2023

Technical Talk with RF



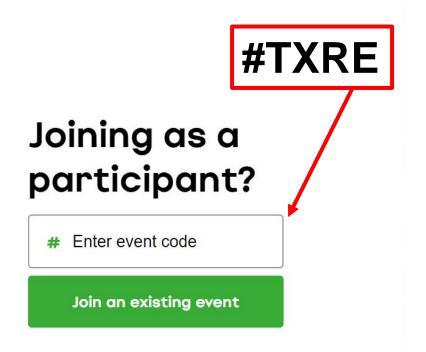


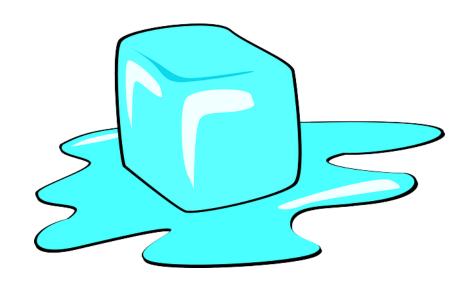
### Sli.do



slido Product Solutic

Slido Question #1
How many years of NERC compliance
experience do you have?









# **Establishing a Foundation**



- Rules of Procedure
- Applicable Requirements

**Obligations** 

# **Strategy**

- Resources (internal or external)
- Evidence
- Internal controls

- Processes
- Capabilities
- Training
- Initial performance
- Ongoing compliance

Implementation





# **Obligations**



# Rules of Procedure (ROP) Identify a Registered Entity's Obligations within the Regulator Framework of the ERO Enterprise

- Monitoring methods—types and general process
- Provision of evidence
- Disposition of findings

# Numerous Resources to Identify Applicable Reliability Standards and Requirements

- NERC "US Effective Date Status/Functional Applicability" spreadsheet
  - https://www.nerc.com/pa/Stand/Pages/default.aspx
- Texas RE provides information as part of Registration process





# **Strategy**



# Registered Entities Should Develop a Strategy to Meet Identified Obligations

- Assign subject matter experts to perform prescribed tasks and assume responsibility for specific Reliability Standards and Requirements
- Identify prescribed tasks where internal resources are insufficient and third-party contractors may be required
- Determine the evidence that will be retained to demonstrate compliance
- Assess areas of need for internal controls
- Review resources (e.g., <u>New Generator Welcome Package</u>, NSRF, Implementation Guidance, Practice Guides, etc.)





# **Implementation**



# Registered Entities Will Need to Implement a Strategy to Develop and Maintain a Robust Compliance Program

Document processes to detail how an entity plans to meet obligations

Verify capabilities are in place to meet obligations

Train personnel on processes and responsibilities

Complete initial performance of prescribed tasks

Implement internal controls to address ongoing compliance

Periodic review





# **Novice Power Company**





# New Power Company has an expected Commercial Operations Date in 8 months



Novice Power Company will be registering as a GO and GOP





# **Obligations**



# Novice Power Company has evaluated the functional <u>applicability spreadsheet</u> from the NERC website to identify its compliance obligations.

1	Status 	Standard Family	Standard	Standard Version	Req. Number	Effective Date of Standard	Phased-in Implementation Dates (if applicable)	Inactive Date	GO
4757	Subject to Enforcement	MOD	MOD-026	MOD-026-1	2.1.5.		07/01/2018		GO
4758	Subject to Enforcement	MOD	MOD-026	MOD-026-1	2.1.6.		07/01/2018		GO
4759	Subject to Enforcement	MOD	MOD-026	MOD-026-1	R3.	7/1/2014			GO
4760	Subject to Enforcement	MOD	MOD-026	MOD-026-1	R4.	7/1/2014			GO
4761	Subject to Enforcement	MOD	MOD-026	MOD-026-1	R5.	7/1/2014			GO
4767	Subject to Enforcement	MOD	MOD-027	MOD-027-1	R2.		07/01/2018		GO
4768	Subject to Enforcement	MOD	MOD-027	MOD-027-1	2.1.		07/01/2018		GO
4769	Subject to Enforcement	MOD	MOD-027	MOD-027-1	2.1.1.		07/01/2018		GO
4770	Subject to Enforcement	MOD	MOD-027	MOD-027-1	2.1.2.		07/01/2018		GO
4771	Subject to Enforcement	MOD	MOD-027	MOD-027-1	2.1.3.		07/01/2018		GO
4772	Subject to Enforcement	MOD	MOD-027	MOD-027-1	2.1.4.		07/01/2018		GO
4773	Subject to Enforcement	MOD	MOD-027	MOD-027-1	2.1.5.		07/01/2018		GO
4774	Subject to Enforcement	MOD	MOD-027	MOD-027-1	R3.	7/1/2014			GO
4775	Subject to Enforcement	MOD	MOD-027	MOD-027-1	R4.	7/1/2014			GO
5217	Subject to Enforcement	MOD	MOD-032	MOD-032-1	R2.		07/01/2016		GO
5218	Subject to Enforcement	MOD	MOD-032	MOD-032-1	R3.		07/01/2016		GO
5219	Subject to Enforcement	MOD	MOD-032	MOD-032-1	3.1.		07/01/2016		GO
5220	Subject to Enforcement	MOD	MOD-032	MOD-032-1	3.2.		07/01/2016		GO
5686	Subject to Enforcement	PRC	PRC-002	PRC-002-2	R12.		10/01/2016		GO
	l				J	- /- /			1





# **Novice Power Company Strategy**



Identified internal subject matter experts for a number of applicable Standards.

Identified numerous Standards for which external resources will be necessary.

Identified evidence it will retain to demonstrate compliance with applicable Standards.

Identified various Standards/Requirements for which internal controls are needed to help meet obligations and demonstrate compliance.

Reviewed various resources designed to help understand obligations and demonstrate compliance.





# Sli.do (#TXRE)



# **Slido Question**

What Standards has your organization identified that internal controls are necessary to maintain and demonstrate compliance?







# **Implementation - Required Process Examples**



EOP-004-4 R1

Event Reporting Operating Plan

FAC-008-5 R1-R3

Documentation or a Methodology

FAC-003-4 R4

 Documented Vegetation Maintenance Strategies, Procedures, Processes, or Specifications

PRC-005-6 R1

Protection System Maintenance Program

PRC-027-1 R1

 Process for Developing New and Revised Protection System Settings





# **Implementation - Additional Process Examples**



## **BAL-001-TRE-2**

Notify BA of Change in Governor Status

COM-001-3

 Consult with Parties Affected by Interpersonal Communication Capability Failures

PRC-004-6

- Analyze BES Interrupting Device Operations
- Notify Owners of Shared Composite Protection Systems
- Develop CAPs for Misoperations

**TOP-001-5** 

- Comply with Operating Instructions
- Notify of Inability to Comply with Operating Instructions

VAR-002-4.1

- Maintain Voltage Schedule
- Notify TOP of Change in AVR/PSS Status





# Implementation - Required Capability Examples



## COM-001-3 R8

Interpersonal Communication capability with BA and TOP

# COM-001-3 R12

 Interpersonal Communication capability between Control Centers and/or between Control Centers and field personnel





# Implementation - Additional Capability Examples



# **Data Provision**

 Satisfy data specification provided by TOP or RC (IRO-010-3, TOP-003-4)

# **Monitoring and Control**

- Identify status changes (BAL-001-TRE-2, VAR-002-4.1)
- Comply with Operating Instructions (TOP-001-5)
- Maintain voltage schedule (VAR-002-4.1)





# **Implementation – Required Training Examples**





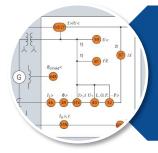
#### COM-002-4 R3

 Conduct initial training for operating personnel on use of three-part communication when receiving an Operating Instruction



#### **EOP-005-3 R9**

 Provide a minimum of two hours of System restoration training every two calendar years



#### PER-006-1 R1

 Train operating personnel on the operational functionality of Protection Systems and RAS that affect the output of the generating Facilities





# **Implementation – Additional Training Examples**



# **Operating Personnel**

- Event reporting (EOP-004-4)
- Notification requirements (BAL-001-TRE-2, COM-001-3, TOP-001-5, VAR-002-4.1)
- Facility operations (TOP-001-5, VAR-002-4.1)

# **Facility Personnel**

- Data and model verification (MOD-025-2, MOD-026-1, MOD-027-1)
- Data provision (IRO-010-3, MOD-032-1, TOP-003-4)
- Protection Systems (PRC-019-2, PRC-024-2, PRC-025-2, PRC-027-1)
- Periodic maintenance and testing (FAC-003-4, PRC-005-6)





# Sli.do (#TXRE)



# **Slido Question**

What Standards are emphasized in your organization's internal training program?







# **Implementation – Initial Performance Examples**



## **BAL-001-TRE-2 R6**

Ensure Governor settings are set in accordance with R6

## FAC-008-5 R6

 Establish Facility Ratings that are consistent with the associated Facility Ratings methodology or documentation for determining its Facility Ratings

# MOD-025-2 R1, R2

- Verify Real and Reactive Power capabilities
- Complete and provide to Transmission Planner within twelve calendar months of commercial operations date

# MOD-026-1 R2, MOD-027-1 R2

- Verify generating unit model response matches recorded response
- Transmit model documentation and data to Transmission Planner within 365 calendar days after commissioning date





# **Implementation – Initial Performance Examples**



## PRC-005-6 R3

Commission Protection Systems to establish initial performance dates

## PRC-019-2 R1

 Coordinate voltage regulating controls, limit functions, equipment capabilities and Protection System settings

# PRC-024-2 R1, R2

 Set generator protective relays are set such that generating units remain connected during defined frequency and voltage excursions

## PRC-027-1 R2

- Perform Protection System Coordination Study (2027); or
- Establish Fault current baseline (2021)





# **Ongoing Compliance Examples**





After the foundation of an O&P Compliance Program has been established, internal controls are essential to ensure ongoing compliance with Reliability Standards.

- Alarms and notifications
- Change management
- Internal review
- Inventory tracking
- Onboarding
- Processes and procedures
- Periodic verification
- Training





# Sli.do (#TXRE)



# **Slido Question**

# What is an example of an internal control?

- A. Automatic notifications
- B. Inventory tracking
- C. Periodic verification
- D. All of the above •







## **Contact**





Mario de la Garza Manager, O&P Compliance Monitoring Mario.delaGarza@texasre.org 512-583-4906





# **Upcoming Sessions**



June 5 – Intro to Align

June 6 - Standards Development

June 8 - Compliance Monitoring

June 13 - CIP 201

June 14 - Foundations of O&P

June 15 - O&P 201

June 20 - Risk-Based Approach to Reliability

June 21 – Improving Self-Reporting 201

June 22 – NERC Data Submission, Events Analysis, and Guidelines

June 27 - Initial Engagement Submissions

June 29 – Reliability Services

# **JUNE 2023**

1	Sun			Wed	Thu	Fri	Sat	
	28	29	30	31	1	2	3	
	4	\$ 100 miles	6	7	8	9	10	
	11	12	distributive to the second sec	14	15	16	17	
1	18	19	20	21	22	23	24	
	25	26	27	28	29	30	1	





