ERCOT Reliability Monitor Program

Chad V. Seely
Senior Vice President, General Counsel and Corporate Secretary

Andrew Gallo
Asst. General Counsel – Regulatory

Chad Thompson
Director, Compliance Analysis

July 2023

ERCOT Reliability Monitor (ERM) Program Overview

- **Purpose**

  – Familiarize Market Participants with the ERM function

- **Key Takeaways**

  – Background and history of ERCOT Reliability Monitor (ERM)

  – Distinction between ERCOT traditional functions and ERM functions

  – ERM responsibilities according to PUC Rules

  – ERM Incident Review process

  – How to contact ERM

Table of Contents

Background

- From 2010 to November 16, 2020, the Public Utility Commission (PUC) contracted with Texas Reliability Entity (Texas RE) to be ERM

- Since termination of the Texas RE contract, ERCOT ISO Compliance has been informally performing some of the ERM obligations

  – Continues to provide quarterly compliance reporting on Market Participant performance

  – *Ad hoc* Market Participant non-compliance events (*e.g.*, TSAT models)

- PUC Enforcement Staff sought to formalize that collaboration by naming ERCOT the ERM (16 Texas Administrative Code (TAC) §25.503(c)(7))

- On November 3, 2022, PUC directed ERCOT to serve as ERM, which became effective immediately

Background (ERM Webpage)

https://www.ercot.com/about/reliability-monitor

Background (ERM Webpage)

— Key Documents

October 27, 2022, Commission Staff's Memorandum re Selection of the Reliability Monitor for the ERCOT Power Region

November 3, 2022, Order Directing ERCOT to Serve as Reliability Monitor

January 3, 2023, ERCOT's Scope of Work, Codes of Conduct and Communications Plan

April 14, 2023, ERCOT's 2023 Q1 Reliability Monitor Quarterly Report

— Market Notices

M-A041723-01 Notice of ERCOT Reliability Monitor Compliance Audit
April 17, 2023 Market Notice

M-A032723-01 Timely Updating Outage Scheduler
March 27, 2023 Market Notice

M-A031323-01 Review of Submission of Plant Verification Reports
March 13, 2023 Market Notice

M-B031323-01 Timely Updating Outage Scheduler
March 13, 2023 Market Notice

— Helpful Links

PUCT Interchange for Project No. 54248 – Selection of the Reliability Monitor for the ERCOT Power Region

https://www.ercot.com/about/reliability-monitor

Definitions

- **Reliability Requirement:** Reliability-related ERCOT ISO procedures, including Protocols, Operating Guides, and Other Binding Documents, reliability-related provisions of the Commission's rules, and reliability-related provisions of PURA (16 TAC § 25.503(k))

- **Incident Review:** Investigation performed by ERM to assess compliance with a Reliability Requirement

Market Entity Duties

Public Utility Regulatory Act § 39.151(j)

- Market Participant shall observe all ISO scheduling, operating, planning, reliability, and settlement policies, rules, guidelines, and procedures

- Failure to comply may result in revocation, suspension, or amendment of a certificate or imposition of administrative penalty

Market Entity Duties

16 Texas Administrative Code §25.503(f)

(1) Know Protocols, Operating Guides, etc. and comply w/ them

(2) & (4) If you cannot comply, notify ERCOT ISO immediately

(6) Bid energy and A/S from resources available/capable of performing

(8) Provide accurate/factual info and do not submit false/misleading info or omit material information in communications w/ ERCOT

(9) Report availability and maintenance of facilities, including outage scheduling and notify ERCOT ISO when capacity changes or resource limitations occur

(10) *Timely* comply w/ requests for information or data by ERCOT

(12) Cooperate w/ ERCOT subcommittees, staff, and PUC to develop clear and consistent Protocols

(13) Establish/document procedures instructing affected personnel how to implement ERCOT ISO procedures and establish clear lines of accountability
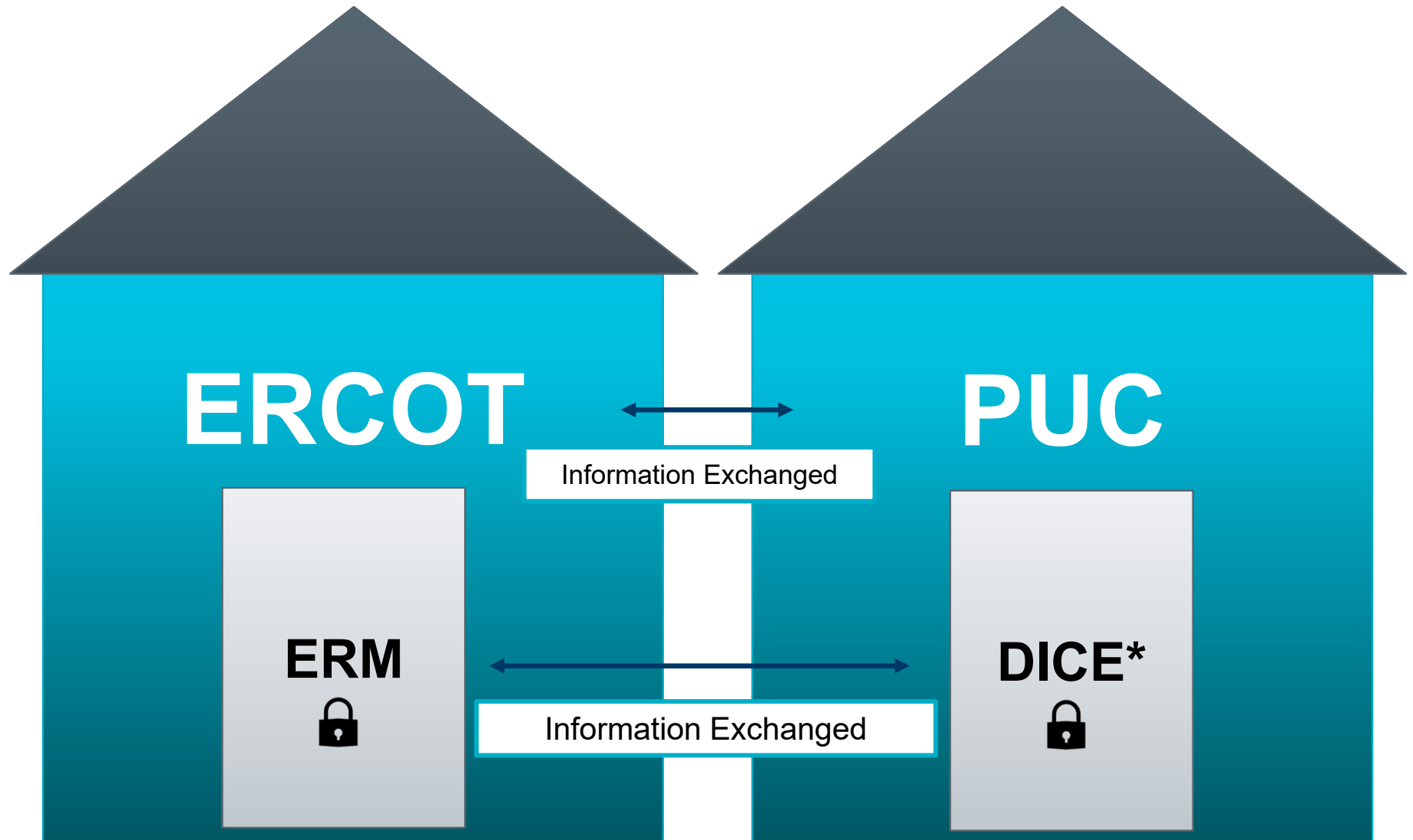
Table of Contents

Background

Distinction between ERCOT and ERM

ERM Responsibilities

ERM Process

Division of Duties

ERCOT

PUC

Information Exchanged

Information Exchanged

ERM 🔒

DICE* 🔒

*Div. of Compliance & Enforcement

Distinction between ERCOT and ERM

ERCOT Function (16 TAC § 25.503(j))

- Monitor material occurrences of non-compliance with ERCOT ISO requirements that could impede ERCOT ISO operations or create risk to system reliability
  - Failure to follow dispatch instructions within required time
  - Failure to meet Ancillary Services obligations
  - Failure to submit mandatory bids or offers
  - Other instances of non-compliance of similar magnitude
- Keep records of such events
- Support ERM and PUC in performing their duties
  - Provide info to and respond to questions from ERM and PUC

Key Takeaway: Traditional ERCOT ISO role does not change

Distinction between ERCOT and ERM

ERM Function (16 TAC § 25.503**(k)**)

- 16 TAC § 25.503(j)(6) lets ERCOT assume ERM role
- Under direction/supervision of PUC:
  - Monitor, investigate, audit, and report to PUC regarding Reliability Requirements
  - Provide subject matter advice, expertise, and assist PUC Enforcement staff in oversight and enforcement activities
  - Provide expert advice, analysis, reports, and testimony in enforcement proceedings
- ERM performs research
- PUC enforces

Key Takeaway: ERM investigates – PUC enforces

Distinction between ERCOT and ERM

For reliability purposes:

- **ERCOT ISO**
  - Monitors system performance
  - Performs event analysis
  - Works with MPs to improve performance/fix issues
  - Refers potential non-compliance to ERM

- **ERM**
  - Assesses potential non-compliance issues as investigative arm of PUC enforcement
  - Provides support to PUC enforcement
  - Performs quarterly analysis of Protocols Section 8 performance requirements

Use Case #1 – Potential MP Violation

Issue: Winter Storm Elliott – Event Analysis

ERCOT

- Operations performs event analysis (*e.g.*, weatherization issues)
- During or after event analysis, it appears MP did not follow a Reliability Requirement, ERM gets involved

ERM

- Reliability-related?
  - o Yes - not properly weatherizing affects reliability
- Conduct Incident Review
- Draft report
- If violation, refer to DICE (confidential report)

Table of Contents

PUBLIC

16

ERM Responsibilities

- Monitors ERCOT ISO and MP compliance w/ Reliability Requirements
  - Reviews ERCOT ISO event analysis reports (e.g. weather events, system disturbances, etc.)
  - Produces quarterly performance metrics reports to PUC
- Investigates ERCOT ISO and MP compliance w/ Reliability Requirements
  - Performs Incident Reviews
  - Drafts Incident Review reports and submits to PUC enforcement

NOTE: ERCOT ISO Compliance continues to monitor *ERCOT ISO* compliance with NERC Reliability Standards

Key Takeaways:
- ERM reviews issues related to state-level Reliability Requirements
- ERCOT ISO Compliance reviews issues related to NERC Requirements

Use Case # 2 - Audit

Audit Compliance with NOG §3.3.2.2 (Reactive Testing)

- ERM performs risk-based analysis to identify Reliability Requirement to audit

- Identifies NOG § 3.3.2.2(5) & (7)

- Issues Market Notice

- Gathers data

- Analyzes data

- Drafts report and sends to PUC

NOTICE DATE: April 17, 2023

NOTICE TYPE: M-A041723-01 General

SHORT DESCRIPTION: Notice of ERCOT Reliability Monitor Compliance Audit

INTENDED AUDIENCE: Qualified Scheduling Entities and Resource Entities

LONG DESCRIPTION: On November 3, 2022, the Public Utility Commission of Texas (PUC) named Electric Reliability Council of Texas, Inc. (ERCOT) the Reliability Monitor (ERM) defined in 16 Texas Administrative Code § 25.503(k) and (l). Pursuant to the ERM Scope of Work approved by the PUC, the ERM will conduct an audit of Market Participant compliance with Nodal Operating Guide Sections 3.3.2.2(5) and (7):

3.3.2.2 Reactive Testing Requirements

(5) The QSE representing a Generation Resource shall be responsible for scheduling reactive verification tests when requested by the Resource Entity in accordance with the conditions outlined above. If ERCOT does not issue a specific request for a Generation Resource reactive capability verification, the Generation Resource shall complete a reactive verification test at least every five years.

* * *

(7) The Resource Entity representing a Generation Resource shall be responsible for the timely and accurate reporting of test results to ERCOT and to the QSE representing the Generation Resource. The Resource Entity representing a Generation Resource must properly complete all required data fields in the NDCRC application for a test to be considered valid.

ADDITIONAL INFORMATION: After completing the compliance audit, the ERM will report the results to the PUC.

CONTACT: If you have any questions, please contact your ERCOT Account Manager. You may also call the general ERCOT Client Services phone number at (512) 248-3900 or contact ERCOT Client Services via email at ClientServices@ercot.com.

ERM Responsibilities

Quarterly Reports to PUC Enforcement Staff:

- **New**: Public report required by PUC (54248-2 and 54248-3)

  – When change to rule, protocol, or other binding document is recommended to promote improved reliability

  – Overall reliability of ERCOT ISO network, flagging areas of concern, and identifying possible remedial actions

  – Areas for future audit based on reliability risk

- **Legacy**: Quarterly Protocols Section 8 compliance metrics report now done by ERM (confidential report)

Assist PUC Oversight/Enforcement

- Draft, review, and revise reports to PUC per Incident Reviews
- Respond to PUC staff Qs re: investigations
- Provide PUC support during enforcement actions
  – Testimony
  – Exhibits
  – Advice/counsel

Key Takeaway: ERM provides "start to end" support to PUC staff

ERM Obligations

Independence

- Be objective and use independent judgment free of undue influence by individuals whose actions may impact outcome of ERM activity

- [Code of Conduct](#)
  - Do not share info related to ERM investigation or its results (exc. w/ PUC staff and MP)
  - Maintain records so they cannot be accessed by non-ERM employees
    - Access to ERM SharePoint site **for individual matters**
  - ERM employees cannot concurrently provide service to MP if it might create conflict of interest/appearance of impropriety
  - Cannot have interest in ERCOT ISO member, MP, or affiliate
  - No gifts
  - ERM reports to PUC any deviation from Code of Conduct

ERM Obligations

Independence

- Considering the ERM's independence and information confidentiality requirements:

    Market Participants should not copy any ERCOT employee when responding to ERM-related correspondence or data requests

ERM Employees

- ERM function resides in Compliance and Legal Departments under Chad Seely

- Other ERCOT ISO personnel may assist ERM function

    – Act independently

    – Keep info confidential to ERM

- Sign Code of Conduct

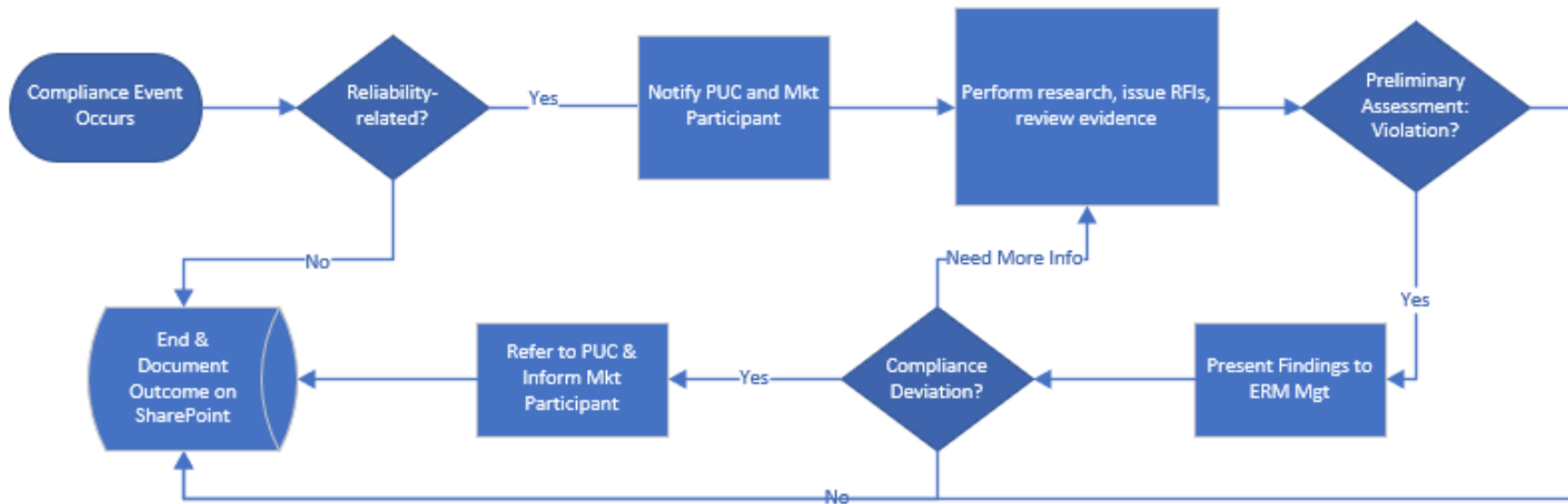**Key Takeaway:** ERM acts independently and respects confidentiality

Table of Contents

Background

Distinction between ERCOT and ERM

ERM Responsibilities

ERM Process

ERM Process

- Applies to ERCOT **and** MPs
  - ERM reviews only issues related to **state-level Reliability Requirements**
- Incident Reviews can be initiated by:
  - Direct notification by MP, PUC Enforcement Staff, or ERCOT employee
  - Internal routine compliance monitoring
- ERCOT Legal and Compliance triage incidents of potential non-compliance to determine method of Incident Review (ERM or other)
- If reliability-related, ERM proceeds w/ Incident Review

ERM Process

- Notify PUC and Market Participant (or ERCOT)
- Request assistance from ERCOT SMEs, if needed
- Send RFIs, conduct interviews, *etc.*
- Review data and make preliminary assessment
- Confirm assessment w/ ERM management
- If violation, refer to DICE for enforcement decision

Use Case # 3 – Potential ERCOT Violation

Issue: Testing Emergency Response Service (ERS) Resources

ERCOT
- ERCOT does not timely conduct ERS Resource testing
- ERCOT employee reports issue to manager
- Manager reports matter to ERM

ERM
- Reliability-related?
  - Yes - ERS supports grid stability and resilience
- ERM conducts Incident Review
- Draft report
- If violation, refer to DICE (confidential report)

Use Case #4 – Potential MP Violation

Issue: MP does not update Backup Authorized Rep. (ARB) contact info

ERCOT

- ERCOT sends email to MP ARB
- Email bounces
- ERCOT learns ARB left company
- Report to ERM@ercot.com

ERM

- Reliability-related?
    - o No - does not affect system stability or resilience

- Refer to ERCOT ISO Legal for further action

Use Case #5 – Potential MP Violation

Issue: Failure to operate Automatic Voltage Regulator (AVR)

ERCOT

- Operations identifies Resource on-line w/o AVR in service (required by Protocols § 13.5.2)
- Operations refers to ERM

ERM

- Reliability-related?
  - o Yes - operating w/ AVR not in service affects system reliability
- Conduct Incident Review
- Draft report
- If violation, refer to DICE (confidential report)

How to Contact ERM

Email ERM@ercot.com with:

- Questions related to ERM function

- Self-report potential Reliability Requirement violations

Key Takeaways

- ERCOT now performs ERM function for PUC
- ERCOT ISO traditional functions (*e.g.*, event analysis) do not change
  - If possible violation identified, ERM gets involved
- ERM
  - Performs routine compliance monitoring
  - Supports PUC in investigations and enforcement actions
- ERM employees
  - Act independently and maintain confidentiality
- ERM reviews possible violations to determine if reliability-related
  - If yes, conducts Incident Review
  - If violation, refers to DICE
- Contact ERM at ERM@ercot.com

Questions?