



**GENERAL SESSION MINUTES OF THE  
TECHNOLOGY AND SECURITY COMMITTEE MEETING  
OF ELECTRIC RELIABILITY COUNCIL OF TEXAS, INC.**

8000 Metropolis Drive (Building E), Suite 100, Boardroom B  
Austin, Texas 78744  
December 18, 2023

Pursuant to notice duly given and after determination that a quorum was present, the meeting of the Technology and Security (T&S) Committee of the Board of Directors (Board) of Electric Reliability Council of Texas, Inc. (ERCOT) convened on the above-referenced date.

**Meeting Attendance:**

Committee Members:

<b>Director</b>	<b>Affiliation/Role (if any)</b>	<b>Voting Category</b>
Aguilar, Carlos	N/A	Voting
Capuano, Linda	N/A	Voting
England, Julie	N/A	Voting
Swainson, John (Chair)	N/A	Voting

Other Board Members:

<b>Director</b>	<b>Affiliation/Role (if any)</b>	<b>Voting Category</b>
Vegas, Pablo	ERCOT President and Chief Executive Officer (CEO)	Non-Voting

Officers and Guests:

<b>Officer/Guest</b>	<b>Role</b>
Bauld, Mandy	ERCOT Senior Director of Project Management Office
Berlin, Anna	ERCOT Associate Corporate Counsel
Day, Betty	ERCOT Vice President of Security and Compliance and Chief Compliance Officer
Hobbs, Kristi	ERCOT Vice President of System Planning and Weatherization
Levine, Jonathan	ERCOT Assistant General Counsel and Assistant Corporate Secretary
Ögelman, Kenan	ERCOT Vice President of Commercial Operations
Parakkuth, Jayapal	ERCOT Vice President and Chief Information Officer
Rickerson, Woody	ERCOT Senior Vice President and Chief Operating Officer
Seely, Chad V.	ERCOT Senior Vice President, General Counsel and Corporate Secretary
Spak, Mara	ERCOT Vice President of Human Resources



Tamby, Jeyant	ERCOT Senior Vice President, Chief Administrative Officer and Chief of Staff
Woodfin, Dan	ERCOT Vice President of System Operations

**Call General Session to Order and Announce Proxies (Agenda Item 1)**

John Swainson, T&S Committee Chair, determined that a quorum was present and called the T&S Committee meeting to order at approximately 9:00 a.m.

Chair Swainson highlighted the Antitrust Admonition and addressed the following Agenda Items in the order below.

**Notice of Public Comment, if Any (Agenda Item 2)**

Chair Swainson announced that on the agenda for the meeting, which was posted publicly on December 11, 2023, ERCOT had provided instructions for members of the public who were interested in commenting in person and that to date no individuals had expressed interest in commenting, which Jonathan Levine confirmed.

**October 16, 2023 General Session Meeting Minutes (Agenda Item 3)**

Chair Swainson entertained a motion to approve the October 16, 2023 General Session Meeting Minutes (Minutes).

**Julie England moved to approve the Minutes as presented. Carlos Aguilar seconded the motion. The motion passed by unanimous voice vote with no abstentions.**

**Recommendation regarding Committee Charter (Agenda Item 4)**

Chair Swainson indicated the Committee reviewed and discussed a revised draft Charter at its last meeting in October, and based on that feedback, ERCOT staff prepared a new draft with a small number of additional revisions. Chair Swainson entertained a motion to recommend Board approval of the Committee Charter.

**Mr. Aguilar moved to recommend Board approval of the T&S Committee Charter as presented. Ms. England seconded the motion. The motion passed by unanimous voice vote with no abstentions.**

**Committee Briefs (Agenda Item 5)**

Chair Swainson invited ERCOT staff to present the Committee Briefs.

**Technology Objectives and Key Results (OKR) Projects Update (Agenda Item 5.1)**

Jeyant Tamby presented the Projects Update. He reviewed the budget and schedule performance for the top ten projects delivered in 2023. Committee members and Mr. Tamby discussed the challenges calculating actual costs associated with a project and potential improvements to improve the accuracy of the company's project labor calculations. Committee members proposed reporting on time allocated to specific projects among different areas of the company. Mr. Tamby reviewed project delivery history from 2021 through 2023, and Committee members discussed including contingent labor in future reports.



### **Information Technology Update (Agenda Item 5.2)**

Jayapal Parakkuth presented the Information Technology (IT) Update. He reported on application releases since the October 2023 Committee meeting, highlighting newly released dashboards on Energy Storage Resources (ESRs) and Generation Resource Outages. Committee members and Mr. Parakkuth discussed incorporating the number of ESRs into the ESR dashboard. Mr. Parakkuth reviewed the Energy Management System (EMS) Upgrade project, which was recently completed on time and under budget. He reported on an integer overflow issue that resulted in the need for a price correction, which will be discussed at the Reliability and Markets (R&M) Committee meeting later in the day, including the root cause, solution, and lessons learned.

### **Real-Time Co-Optimization Implementation Update (Agenda Item 5.3)**

Mr. Parakkuth presented the Real-Time Co-Optimization Implementation Update. He provided an overview of the project, which is designed to co-optimize Ancillary Services in real-time, allow for a more accurate representation for batteries, and better account for ESR State of Charge (SOC). Mr. Parakkuth highlighted major dependencies in the critical path for completion of the project. Committee members, Kenan Ögelman, and Dan Woodfin discussed ERCOT's approach to the SOC issue and how it compares to other Independent System Operators (ISOs). Mr. Parakkuth reviewed upcoming major milestones, and he and Committee members discussed possible areas of focus for future reports.

### **Security Update (Agenda Item 5.4)**

Betty Day presented the Security Update. She reviewed ERCOT's participation in the GridEx VII exercise in November 2023, as well as the recent CyberStrike LIGHTS OUT training.

### **Future Agenda Items (Agenda Item 6)**

Mr. Parakkuth presented the Future Agenda Items. He highlighted items anticipated for the February 26, 2024 Committee meeting. Chair Swainson invited comments on possible future additions to Committee reports from ERCOT staff.

### **Other Business (Agenda Item 7)**

No other business was discussed at this time.

### **Executive Session; Vote on Matters from Executive Session and Adjournment (Agenda Items 8 and 9)**

Chair Swainson announced that no voting items from Executive Session were expected; accordingly, he would adjourn the meeting immediately upon conclusion of Executive Session. Chair Swainson adjourned General Session at approximately 10:05 a.m. and convened Executive Session at approximately 10:16 a.m.

There were no voting items from Executive Session.

Chair Swainson adjourned the meeting upon conclusion of Executive Session at approximately 11:32 a.m.



Committee materials and presentations from the meeting are available on ERCOT's website at <https://www.ercot.com/committees/board/tech-security>.

A handwritten signature in blue ink, appearing to read "Jonathan M. Levine".

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Jonathan M. Levine  
Assistant Corporate Secretary