

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

8000 Metropolis Drive (Building E), Suite 100, Boardroom B Austin, Texas 78744 February 3, 2025

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:

Director	Affiliation/Role (if any)	Voting Category
Aguilar, Carlos	N/A (participating by WebEx)	Voting
Capuano, Linda	N/A	Voting
England, Julie	N/A	Voting
Swainson, John (Chair)	N/A	Voting

Other Board Members:

Director	Affiliation/Role (if any)	Voting Category
Barkley, Benjamin	Office of Public Utility Counsel	Non-Voting
Cornelius, Sig	N/A	Voting
Flores, Bill	N/A (present through Item 5 only)	Voting
Gleeson, Thomas	PUCT Chair	Non-Voting
Heeg, Peggy	N/A	Voting
Hernandez, Alex	N/A	Voting
Vegas, Pablo	N/A (present for Items 1- 5 and 6.2 until adjourned)	Non-Voting

Officers and Guests:

Officer/Guest	Role	
Bonser, Drew	ERCOT Vice President, Chief Information Security Officer	
Collins, Keith	ERCOT Vice President, Commercial Operations	



PUCT Commissioner (present beginning at Item 6.2)	
ERCOT Vice President, System Planning and Weatherization	
ERCOT Corporate Counsel	
PUCT Commissioner	
ERCOT Director, Physical Security & Facilities	
ERCOT Senior Director, IT Architecture and Strategy	
ERCOT Senior Vice President and Chief Digital Officer	
ERCOT Senior Vice President and Chief Operating Officer	
(present through Item 5 only)	
ERCOT Deputy General Counsel	
ERCOT Senior Vice President, Chief Financial Officer, and Chief	
Risk Officer (present through Item 5 only)	
ERCOT Senior Corporate Counsel	
ERCOT Vice President, DevOps and Grid Transformation	
ERCOT Supervisor of Legal Operations	
Guest Presenter	
ERCOT Vice President, System Operations	

Call General Session to Order (Agenda Item 1)

John Swainson, T&S Committee Chair, determined a quorum was present and called the T&S Committee meeting to order at approximately 8:30 a.m.

PUCT Chair Thomas Gleeson called the PUCT meeting to order at approximately 8:30 a.m. In attendance with PUCT Chair Gleeson were PUCT Commissioner Kathleen Jackson and Public Utility Counsel Ben Barkley. PUCT Commissioner Courtney Hjaltman joined the meeting beginning at Item 6.2.

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 January 24, 2025, 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 Shana Horton confirmed.

December 2, 2024 General Session Meeting Minutes (Agenda Item 3)

Chair Swainson entertained a motion to approve the December 2, 2024 General Session Meeting Minutes (Minutes).

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



Annual Charter Review and Approval (Agenda Item 4)

Review of Committee Charter (Agenda Item 4.1)

Chair Swainson opened a discussion reviewing the T&S Committee charter. Committee members briefly discussed the purposes of the committee and appropriately categorizing issues between this committee and the Reliability and Markets Committee. No changes to the charter were proposed.

Emerging Technologies Guest Presentation "A! for Power Systems: Concepts and Transformative Applications" (Agenda Item 5)

Pascal Van Hentenryck made a presentation to the committee regarding the use of Artificial Intelligence (AI) in power systems, with a focus on optimization. He noted power systems are an apt application for AI because although the problems are complex, it's the same problem over and over, and plenty of data is available to fine-tune models. He described the AI model as consisting of inputs of load/generation, reserves, and engineering constraints plus a "repair layer." He described how proxies are used to reduce the time to get result from model by learning offline, then applying what was learned in real-time. Use of predictions and proxies has recently improved the speed of AI models by four orders of magnitude, which makes AI models ready for power system applications.

Committee members asked about Market Participant uses of AI; what types of hardware and data storage would be necessary to run the state's power system with an AI model; and the use of AI to improve weather prediction. Mr. Van Hentenryck noted one current limitation of the system: it occasionally results in unexplained outliers (1 of 1000). His group is working to understand and correct those.

Committee Briefs (Agenda Item 6)

Projects and Technology Update (Agenda Item 6.1)

JP Parakkuth provided the Projects and Technology update. He noted there will be a spike at the end of the year for the rollout of RTC+B. He also listed market-impacting deliverables for the first quarter of the year. Committee members discussed how ERCOT receives requests for changes to the interface with Market Participants and different ways to show IT labor trends during this update.

Real-Time Co-Optimization Implementation Update (Agenda Item 6.2)

Mr. Parakkuth presented the RTC Update. He described the four projects comprising RTC. He then highlighted the reduction in time to completion of the project by six to seven months and a reduction in cost from \$50 million to \$35 million. Mr. Parakkuth described an RTC+B training video produced by his team and encouraged the new Board members to watch it. Next, he presented a new analysis of project-related risks, including external event disruption, regulatory/policy risks, market readiness, QSE battery data quality, and loss of key resources.

Future Agenda Items (Agenda Item 7)

There were no committee member requests for future agenda items.



Other Business (Agenda Item 8)

No other business was discussed at this time.

Executive Session; Vote on Matters from Executive Session; Adjournment (Agenda Items 9-10)

Chair Swainson adjourned General Session at approximately 9:38 a.m. and convened Executive Session at approximately 9:48 a.m.

PUCT Chair Gleeson noted the PUCT had lost its quorum, effectively adjourning its meeting.

There were no voting items from Executive Session.

Chair Swainson adjourned the meeting upon the conclusion of Executive Session at approximately 10:51 a.m.

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

Brandon Gleason

Assistant Corporate Secretary