



Texas RE Evolving Grid Workshop



July 16, 2025

AGENDA



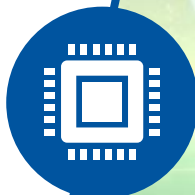
Welcome & Instructions

Executive Welcome



Keynote

Large Loads



Integrating Emerging
Technologies

Keynote



Expanding Security
Challenges



Transmission Planning



To submit questions during the workshop, please visit **slido.com** and enter today's participant code: **TXRE**

Q&A Polls

Type your question

160

Your name (optional)

Send

Welcome & Instructions

Matthew Barbour
Texas RE
Communications & Training Manager



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.

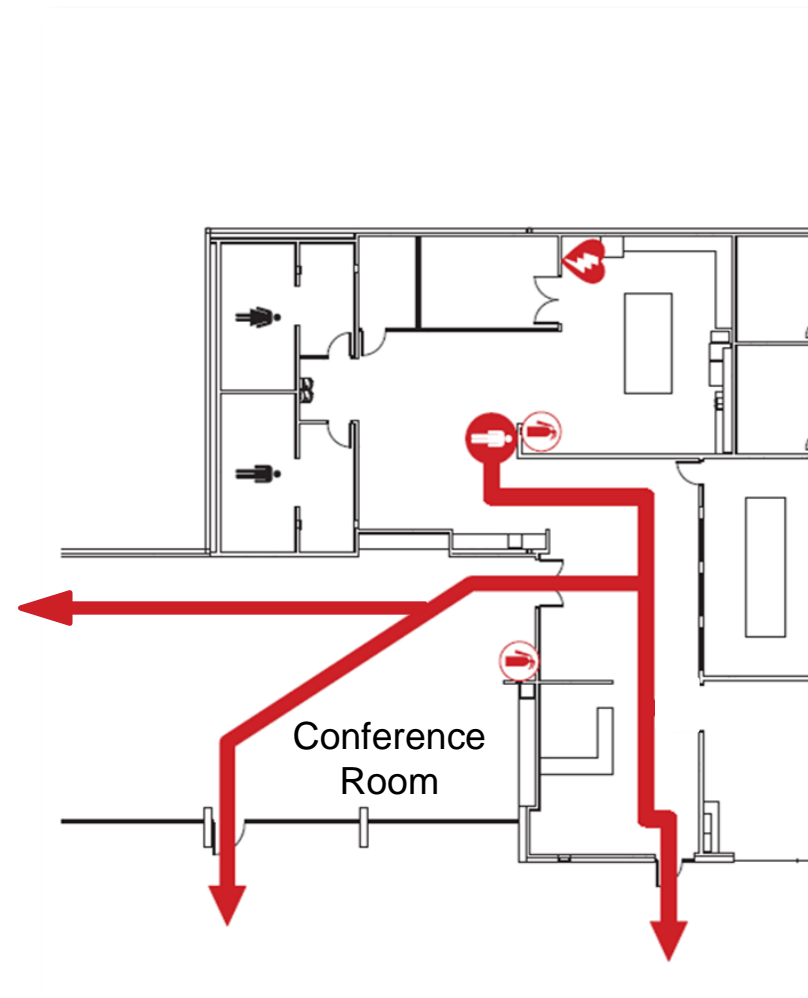
Notice of this meeting was posted on the Texas RE website and this meeting is being held in public. Participants should keep in mind that the listening audience may include members of the press, representatives from various governmental authorities, and industry stakeholders.



Safety Moment

**In case of
emergency,
evacuate through
the nearest door**

**Rally point is in
the front parking
lot**



Questions

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Q&A

|| Polls

Type your question

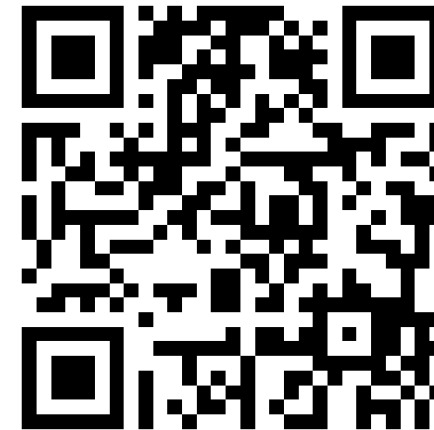


160



Your name (optional)

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Training Page

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Training

Texas RE offers training on a variety of compliance- and standards-related topics. Workshops and seminars are announced to subscribers of the Texas RE Information mailing list. To subscribe to our mailing list please visit [Texas RE Mailing Lists](#).

For questions about training, please contact [Texas RE Information](#).

[Workshops](#) ▾[Talk with Texas RE](#) ▾[Align Training](#) ▾[Lessons Learned](#) ▾[Archived Presentations](#) ▾

Archived Presentations ▾

All of Texas RE's outreach activities are free and open to the public. Past presentations delivered by Texas RE staff are available here. Please be aware that presentations will not be available indefinitely, and may be removed to comply with Texas RE's document retention policy.

ALIGN

[Align Release 1 Training](#) | [Recording](#)[Align Release 2 Periodic Data Submittal Training](#) | [Recording](#)[Align Release 2 TFE and Self-Certification Training](#) | [Recording](#)[Align Release 3 Training](#) | [Recording](#)[Align Release 4 & 4.5 Training](#) | [Recording](#)

Workshops

[Women's Leadership in Grid Reliability and Security Conference](#) | [Recording](#)[Understanding New Generator Obligations](#) | [Recording](#)

Fall Standards, Security, and Reliability Workshop

[2024 Fall Standards, Security, and Reliability Workshop](#) | [Recording](#)

Spring Standards, Security, and Reliability Workshop

[2025 Spring Standards, Security, and Reliability Workshop](#) | [Recording](#)

Cyber and Physical Security Workshop

[2024 Cyber and Physical Security Workshop](#) | [Keynote](#) | [Panels: Critical Infrastructure, Threat Assessment, Grid Technologies, Security Posture](#)

Evolving Grid Workshop

[2025 Evolving Grid Workshop](#)

Upcoming Texas RE Events



September 17, 2025

Q3 MRC, AGR&F, and
Board Meetings



October 1, 2025

Winter
Weatherization
Workshop



November 5, 2025

Fall Standards,
Security, &
Reliability
Workshop



Social Media



[/texas-reliability-entity-inc](#)



[@Texas_RE_Inc](#)



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Texas Flood Relief

County-specific updates and relief information

- [Kerr County](#)
- [Burnet County](#)
- [Travis County](#)
- [Williamson County](#)

Kerr County Flood Relief Fund

- Supports non-profit organizations, first responder agencies, and local government
- Involved in relief efforts for Hunt, Ingram, Kerrville, Center Point, and Comfort communities



Executive Welcome

Joseph Younger

Texas RE

Vice President & Chief Operating Officer



The NERC logo consists of the letters "NERC" in a bold, black, sans-serif font. A horizontal blue bar is positioned directly beneath the letters.

NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

Navigating the Evolving Grid

Evolving Grid Workshop

Jim Robb, President and Chief Executive Officer
July 16, 2025

RELIABILITY | RESILIENCE | SECURITY

Complex Risk Environment Results in Increased BPS Reliability Risk



Resource Adequacy Challenges

- Retirements of traditional generation
- IBR growth/integration
- Natural gas interdependencies
- DER performance and visibility
- Load growth



Extreme Weather Complexities

- Extreme not infrequent
- Broader deeper longer



Toxic-Soup Threat Landscape

- S/W vulnerabilities
- Supply chain
- Ransomware
- Physical attacks



Energy & Environmental Policy

- Electrification
- Emissions
- Siting and Permitting



Increasing concentration of risk

- Common mode failure
- Declining fuel diversity
- SAAS/Cloud applications
- GETS deployment

Appropriate level of investment for hardening & resilience

- Extreme weather
- Coordinated Physical attack
- Interregional transfer capacity augmentation

Loss of key essential reliability services

- Inertia/frequency response
- Reactive Power/voltage support
- Dispatchability

Expanding cyber attack surface

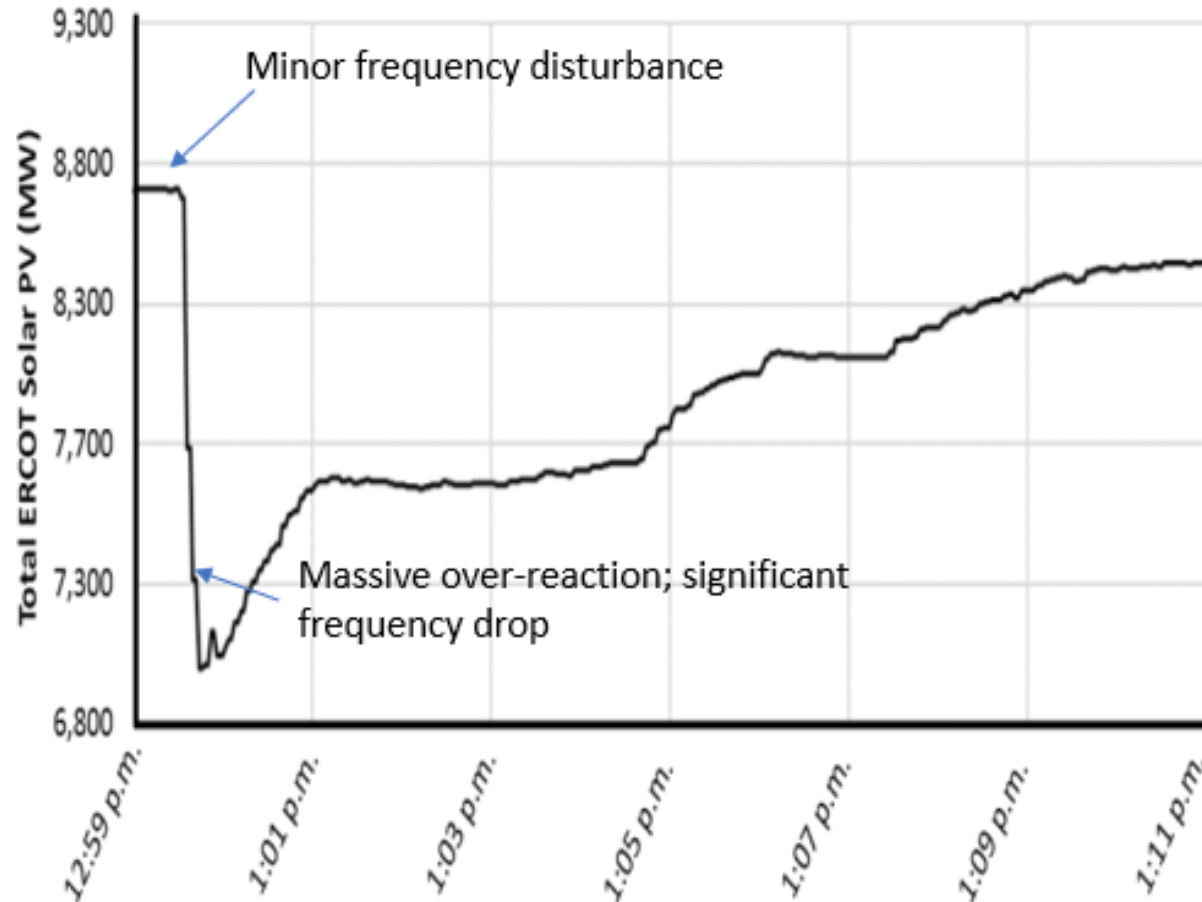
- Industry Control Systems (ICSs)
- IBRs/DERs/EV Charging/Large Loads

Rapidly evolving security needs

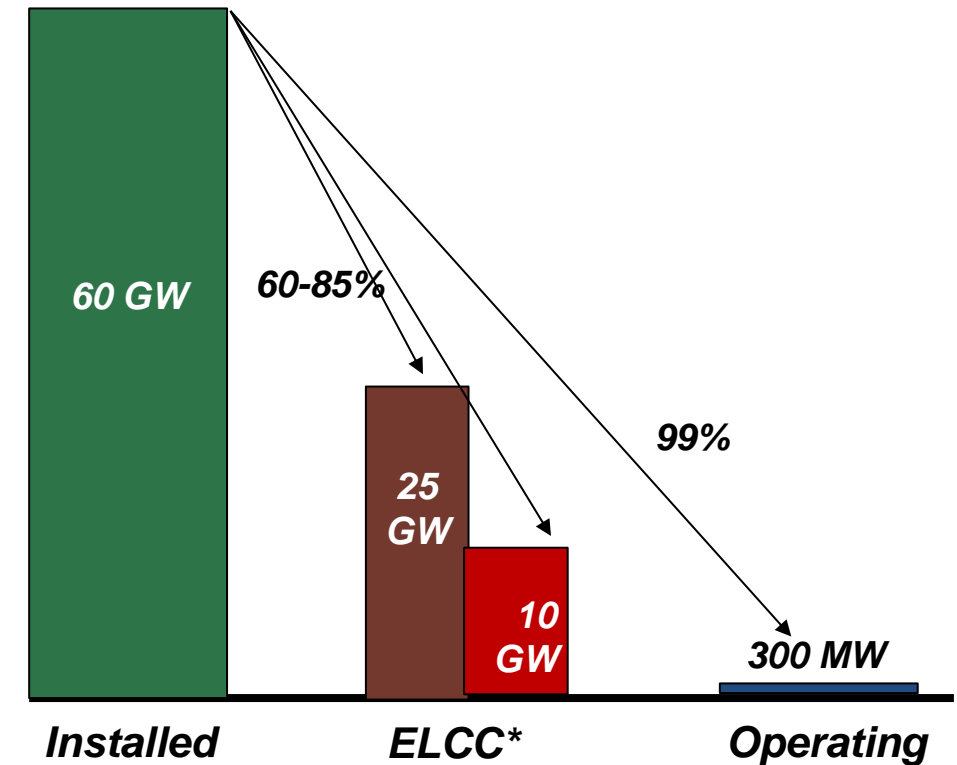
- Supply chain protections
- "One to many" attacks
- Low impact protections

Challenges with Renewable Integration: Common Mode/Common Condition Failure

ERCOT Solar Production June 4, 2022



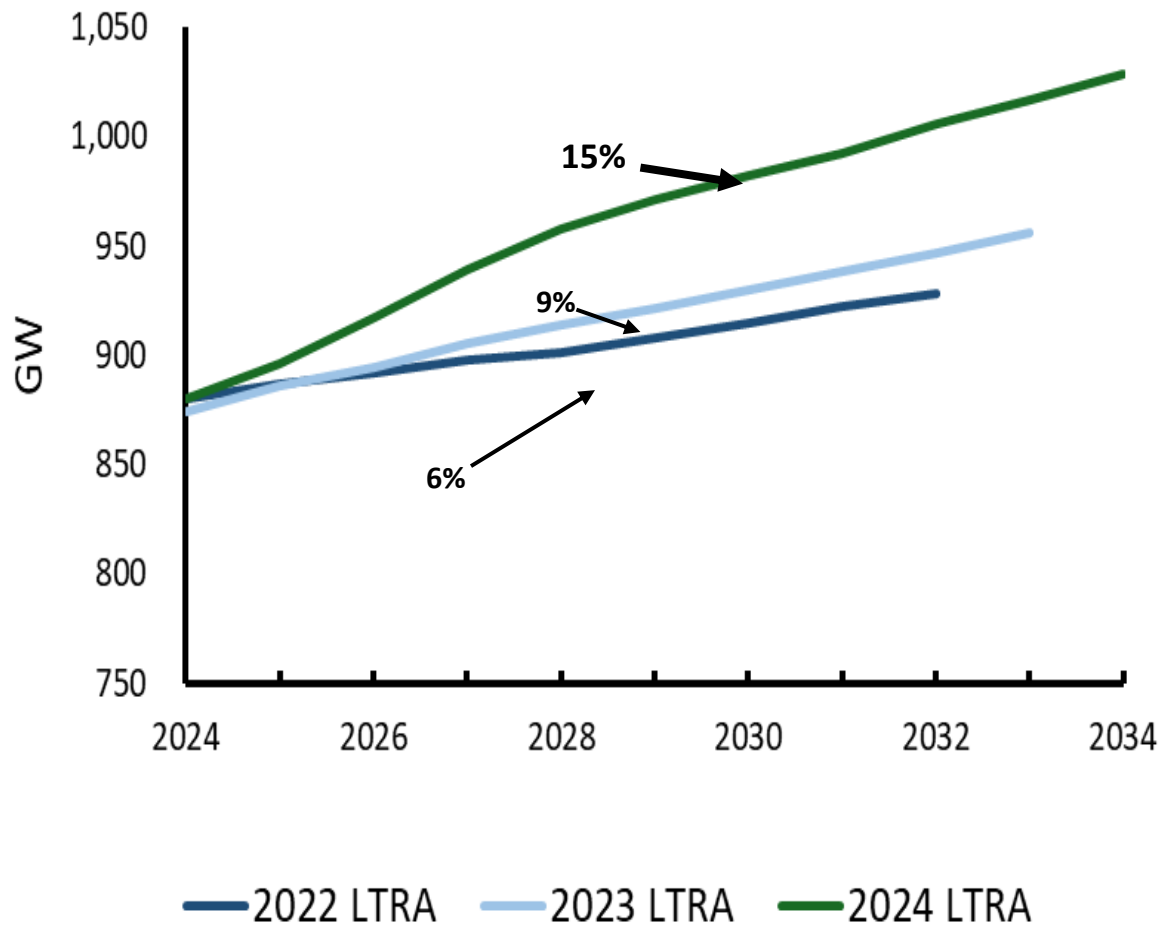
June 6, 2023, Wind Production
North American Mid-Continent



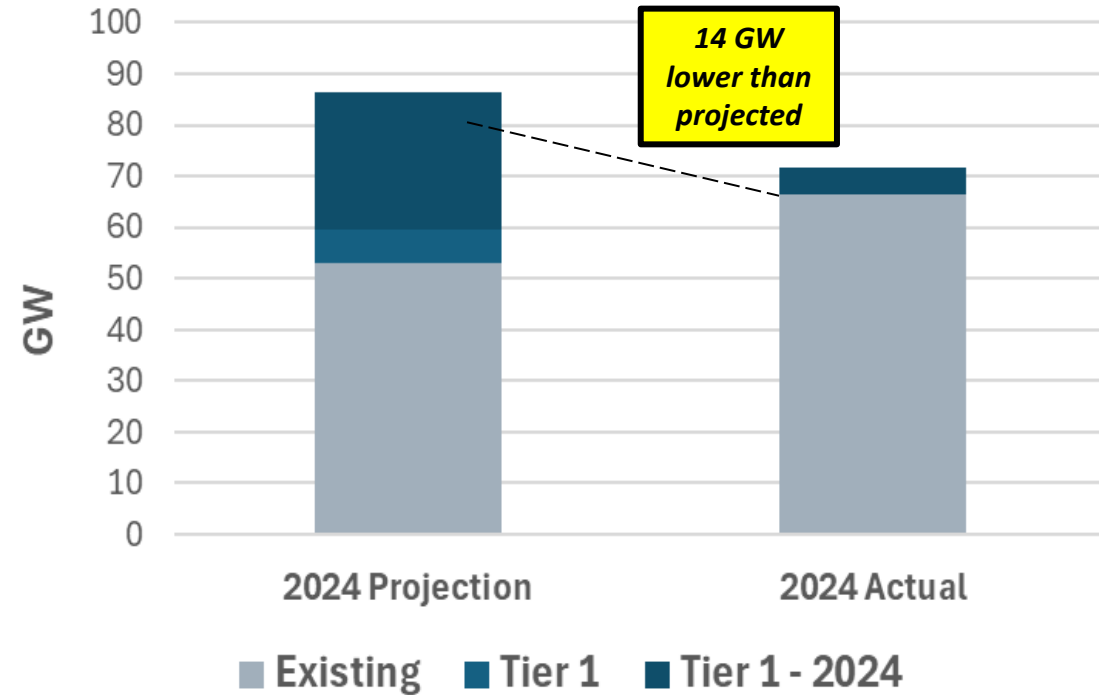
*ELCC is essentially the planning value of installed capacity
("Equivalent Load carrying Capacity")

Growing Resource Adequacy Risk

10-year BPS Summer Peak Demand Growth

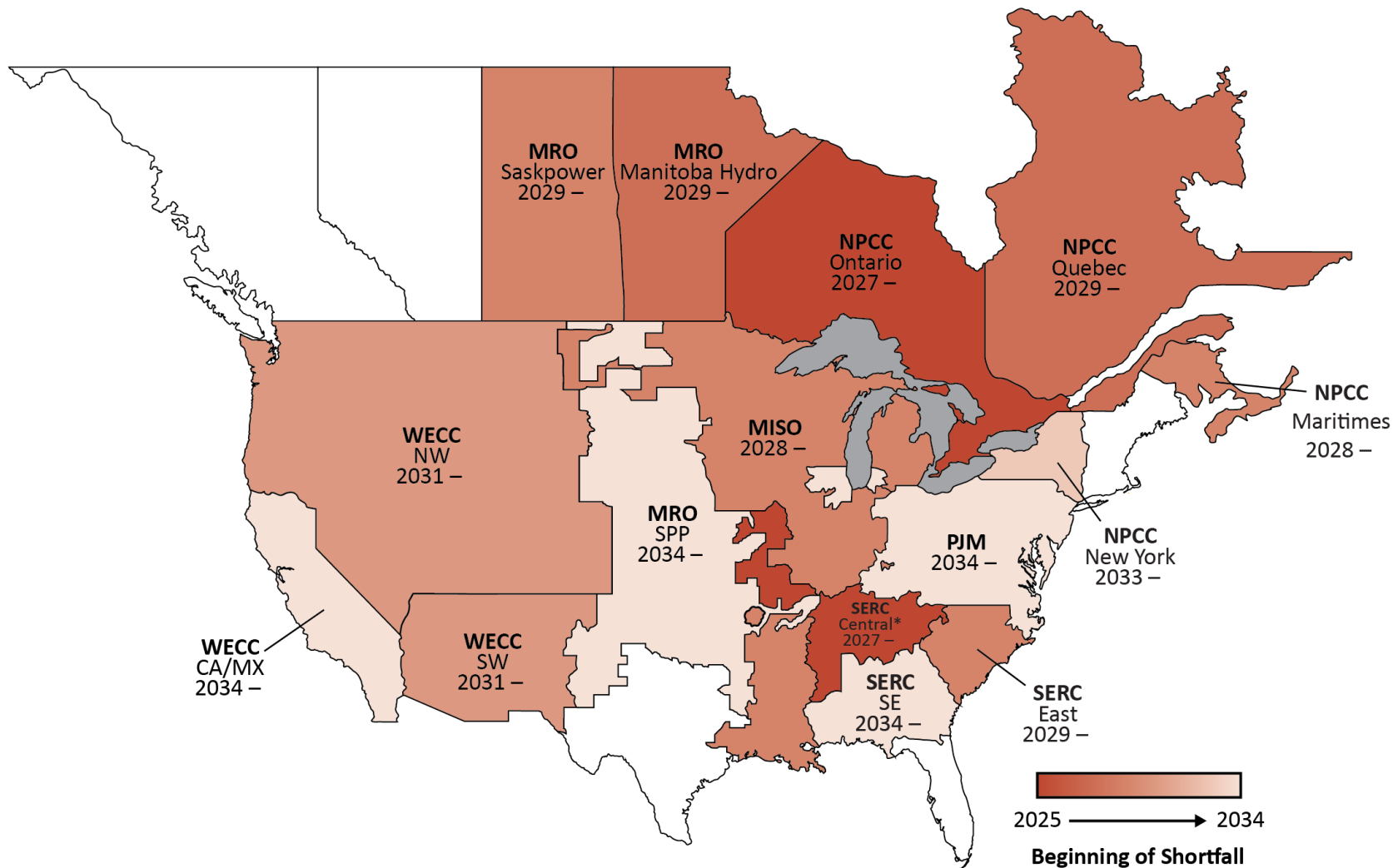


Resource Additions Slowing



Solar On-Peak Capacity | prior-year projection v. current year actual

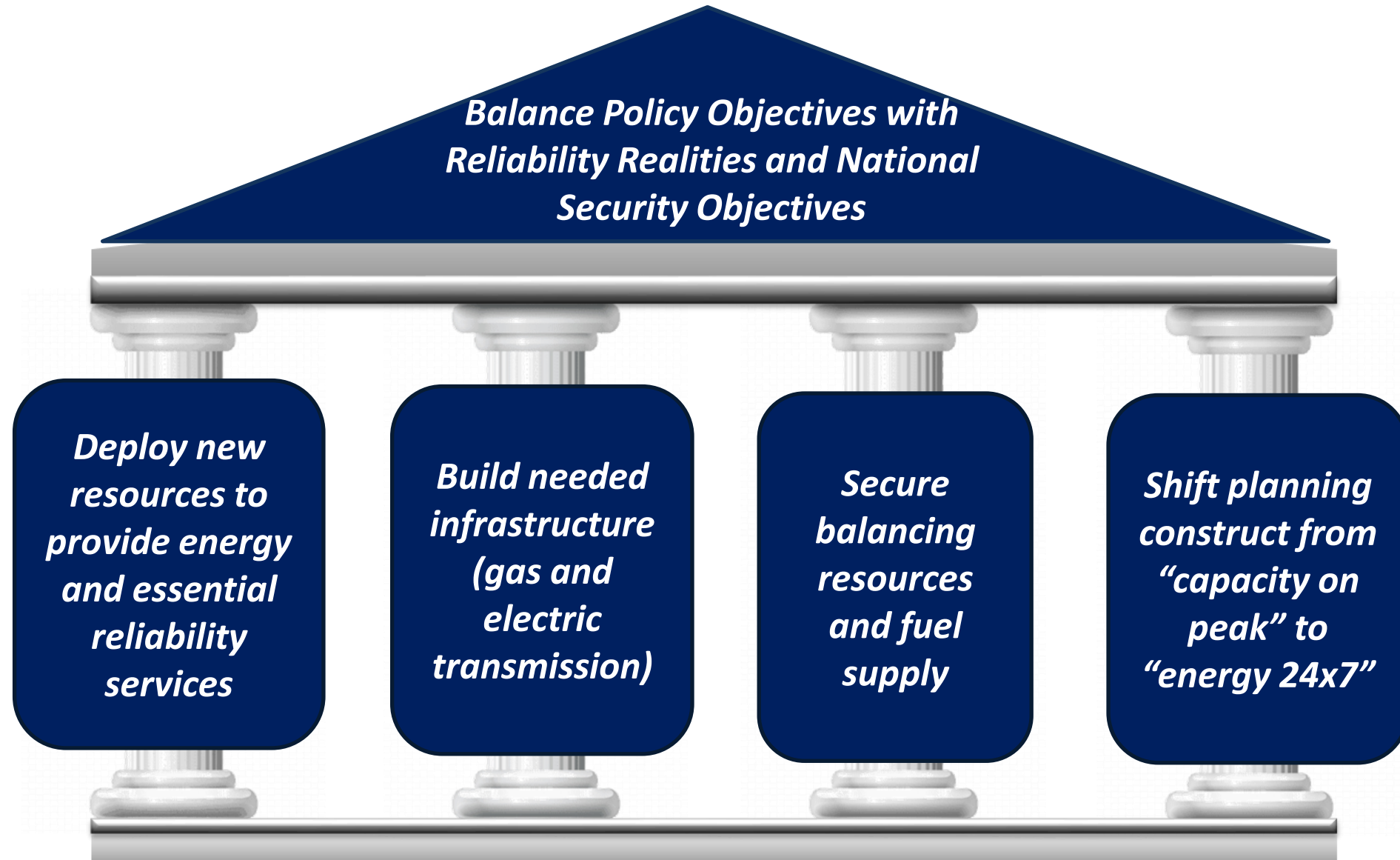
Resource Deficiencies Across North America – 5-10 Years



*14.99% bs 15% RML and then goes above until 2034

Generator retirements through 2034 (thermal): 78 GW confirmed + 37 GW announced

Reliability Priorities to Support the Energy Transition



A map of North America, including the United States, Canada, and Mexico. A horizontal band of varying shades of blue and grey crosses the center of the map, passing through the United States. The text "Questions and Answers" is overlaid on this band.

Questions and Answers



Texas RE Evolving Grid Workshop



Return: 10:00 AM

AGENDA



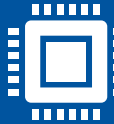
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Keynote

Large Loads



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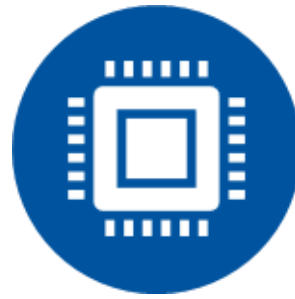
Q&A Polls

Type your question 

160

 Your name (optional) 

Large Loads



Erin Quigley
Texas RE

Agee Springer
ERCOT

Ahmed Rashwan
EPE

Katie Coleman
O'Melveny & Myers

Lee Bratcher
Texas Blockchain Council





Texas RE Evolving Grid Workshop



Return: 11:10 AM

AGENDA



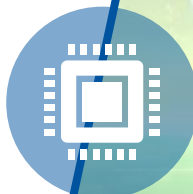
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Q&A

Polls

Type your question

😊

160

👤 Your name (optional)

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Integrating Emerging Technologies



Mark Henry
Texas RE

Alex Shattuck
ESIG

Derek Haas
UT-Austin

Daniel Tabas
Base Power

Diego Doménech
Power Electronics





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Return: 12:40 PM

AGENDA



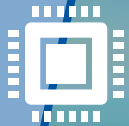
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Q&A Polls

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 Your name (optional) 

Keynote

Michael Webber
University of Texas at Austin





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Return: 1:20 PM

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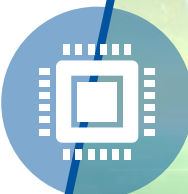
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Q&A Polls

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 Your name (optional) 

Expanding Security Challenges



Devin Ferris
Texas RE

Ernesto Ballesteros
DHS

Betsy Soehren Jones
West Monroe

Brandon Miller
TRC Companies

Kate Johnson
Dragos





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Return: 2:30 PM

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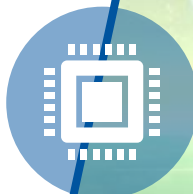
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Transmission Planning



David Penney
Texas RE

Harsh Naik
Oncor

Kevin Sherd
NERC

Prabhu Gnanam
ERCOT

David Mercado
CenterPoint



Wrap-Up



Thank you for coming!

You will receive a short survey via e-mail. Please complete it to help Texas RE develop future outreach.

