



TEXAS RE
Ensuring electric reliability for Texans

NERC and Texas RE Update

Mark Henry

Reliability Services, Texas Reliability Entity, Inc.

ERCOT/Texas RE Generator Winter Weatherization Workshop

September 3, 2020

NERC Industry Metric on Events Caused by Gas-Fired Unit Forced Outages Due to Cold Weather or Gas Unavailability

Why is it important?

- Reduce risk to BPS reliability due to gas-fired unit outages during cold weather or gas unavailability

How is it measured?

- Firm load loss due to cold weather or gas unavailability
- MWh of potential production lost initiated by cold weather and gas unavailability

Data (Annual Measurement) ▪ No firm load loss due to gas-fired unit outages during cold weather: <i>Zero is green, else is red</i> (Cold weather months: January – March and December of the same calendar year) <i>As of 6/30/2020, Metric status is Green.</i>	2020 Status 
Data (Annual Measurement) (Match with 4.4, year defined as Q3-Q2) ▪ No firm load loss due to gas unavailability: <i>Zero is green, else is red</i> <i>As of 6/30/2020, Metric status is Green.</i>	
Data (Compared to a 5-year rolling average) ▪ Percentage of winter period net MWh of potential production lost due to gas-fired unit outages during cold weather (Cold weather months: January – March and December of the same calendar year) <i>Five-year average: 0.0058%</i>	
Data (Compared to a 5-year rolling average) ▪ Percentage of annual net MWh of potential production lost due gas unavailability compared to a 5-year rolling average (Due to data availability, year defined as Q3-Q2) <i>Five-year average: 0.1513%</i>	

NERC Cold Weather Guideline Revision in Progress

Added: Schedule ... “winterization” work to occur prior to the local NOAA First Frost Date. Un-doing winterization should wait until after NOAA Last Frost Day...

Updates to list of typical problem areas:

- Item 4.a.: *Calibration of dew point monitoring* .
- Item 10: Lube oil and greases for mechanical equipment in exposed locations
- Item 11: Exposed batteries and UPS systems
- Item 12: Heat tracing, insulation & temperature responsive ventilation (heaters, fans, dampers and louvers)

New Lesson Learned LL20200601 – “Unanticipated Wind Generation Cutoffs during a Cold Weather Event” and emphasis on communication of this risk of low temperature cutoffs

NERC Cold Weather Reliability Standard

NERC Project 2019-06: Cold Weather

- Third version posted and comments received May 21, 2020
- Fourth version up for NERC Standards Committee approval in late September with reposting this fall for additional comments



Standard Authorization Request (SAR)

Complete and submit this form, with attachment(s) to the [NERC Help Desk](#). Upon entering the Captcha, please type in your contact information, and attach the SAR to your ticket. Once submitted, you will receive a confirmation number which you can use to track your request.

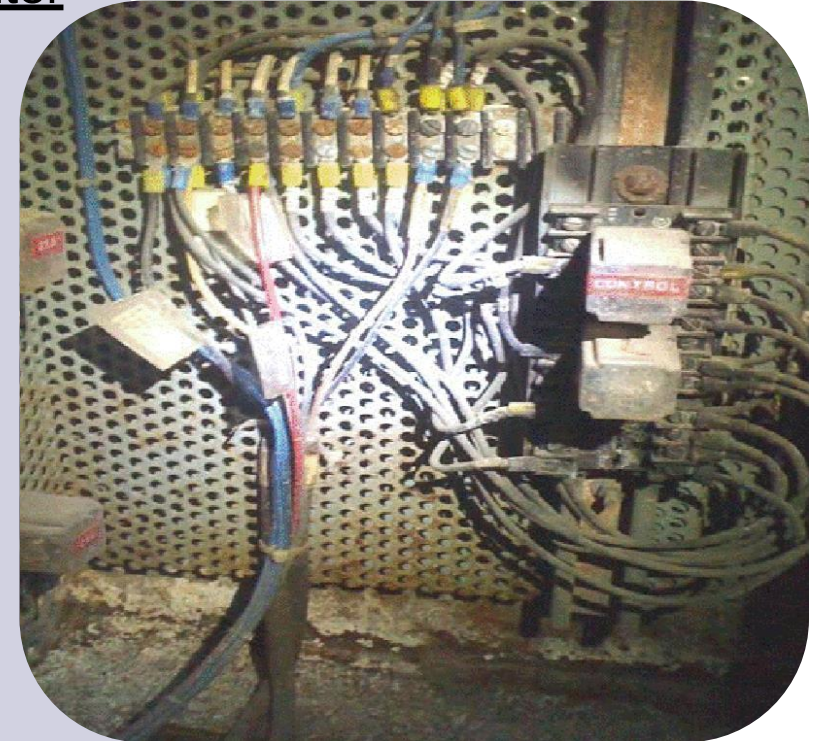
The North American Electric Reliability Corporation (NERC) welcomes suggestions to improve the reliability of the bulk power system through improved Reliability Standards.

Requested information	
SAR Title:	Extreme Cold Weather Preparedness <u>and Communication Requirements between Functional Entities</u>
Date Submitted:	September 20, 2019
SAR Requester	
Name:	Michael Desselle, VP Process Integrity/Chief Compliance and Administrative Officer
Organization:	Southwest Power Pool, Inc.

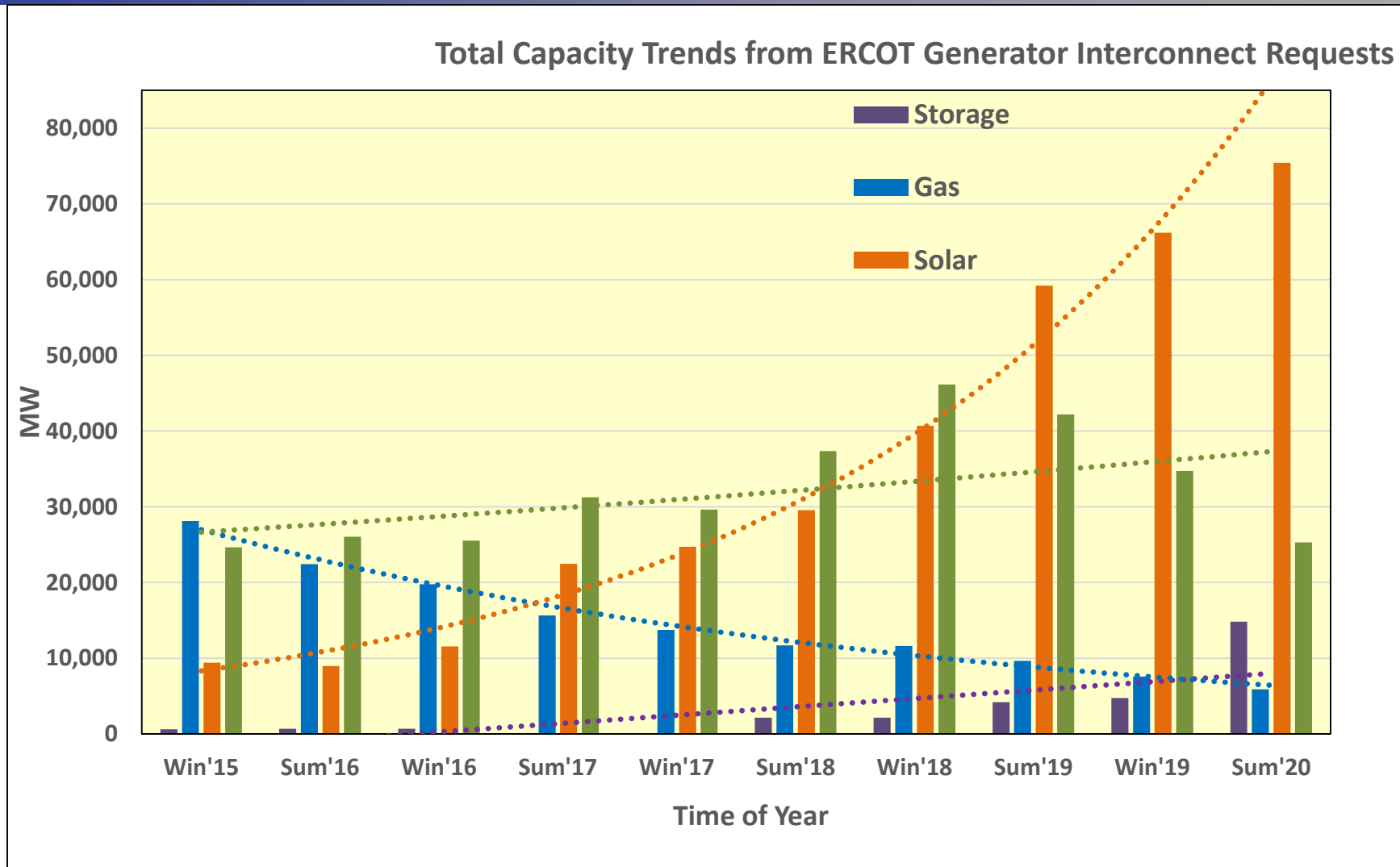
Human Performance Observations

Inadequate Generator Winter Preparedness

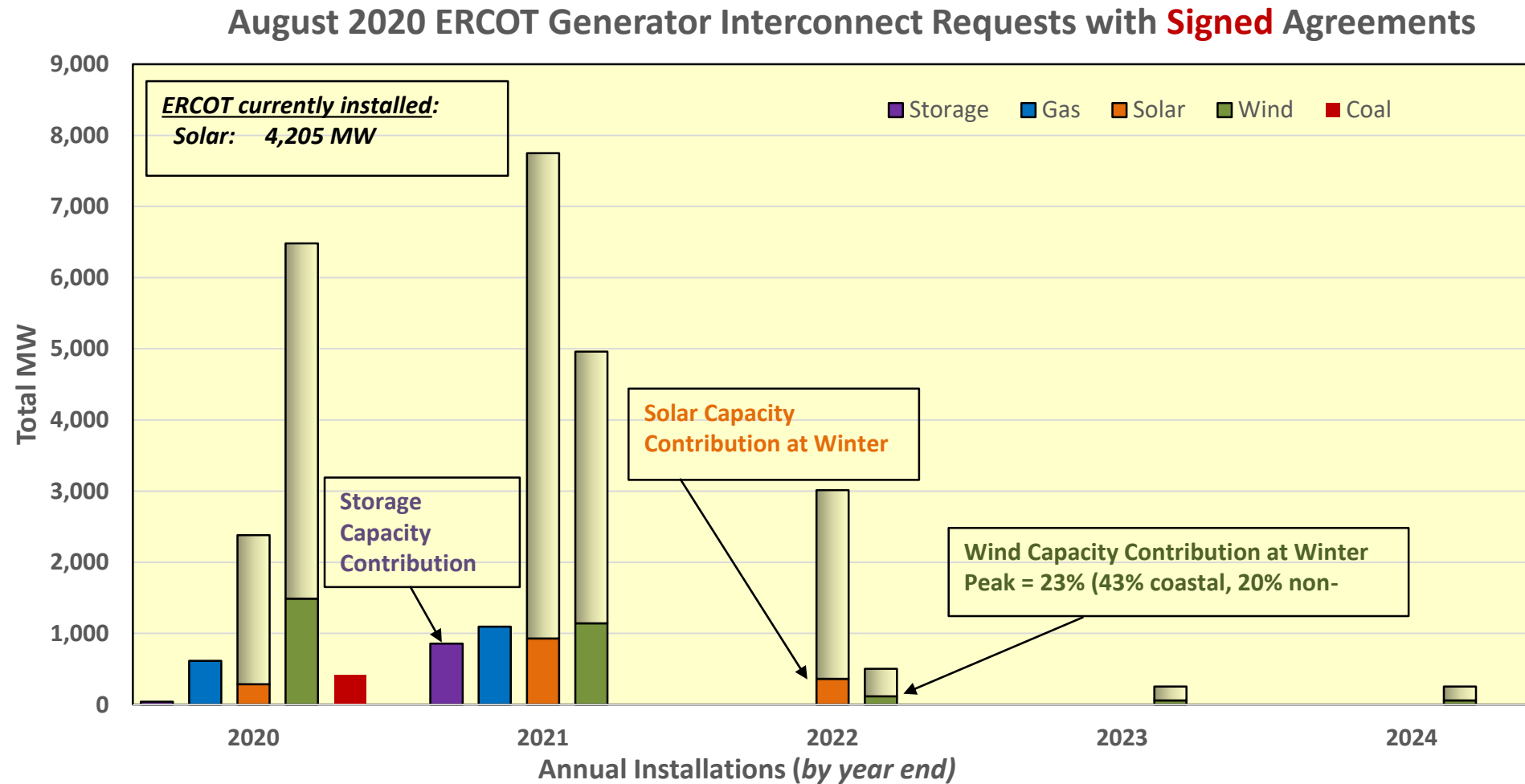
- How does Human Performance impact winter preparedness?
 - Design
 - Equipment selection
 - Installation
 - Maintenance
- Rule-based errors?
 - Inadequate work practices, procedures, and checklists
- Knowledge and skill-based errors?
 - As-left personnel errors
- Change management?
 - Work plans not accounting for field conditions
 - Project schedules too compressed
 - Scope changes



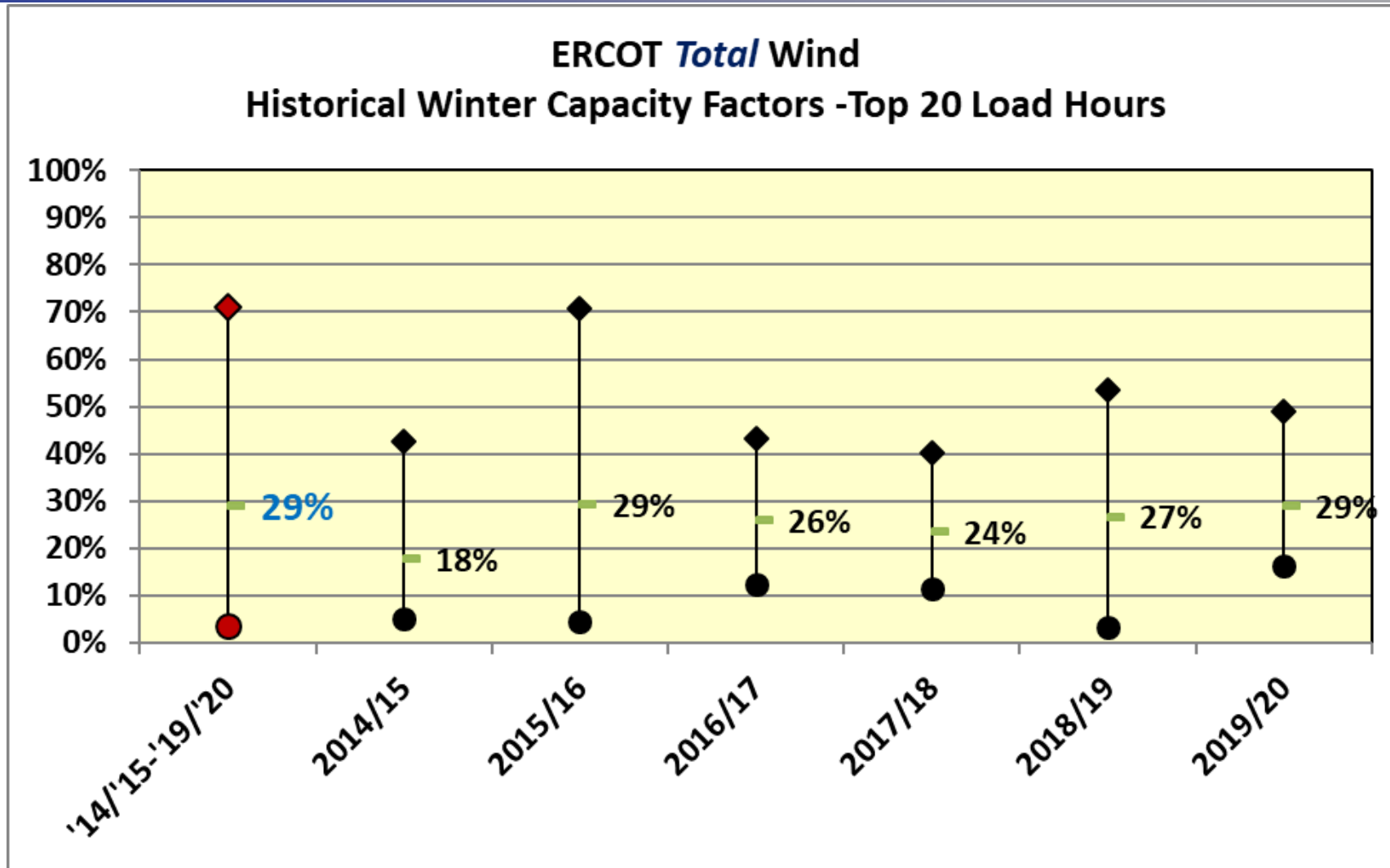
Meeting Winter Peak as Generation Mix Changes



Meeting Winter Peak as Generation Mix Changes



Wind Power *Winter* Capacity Contribution in Texas RE Region



TCEQ Enforcement Discretion ... Power Emergency

NOTICE DATE: Some Future Winter Day

NOTICE TYPE: M-AMMDDYY-NN Operations ...

INTENDED AUDIENCE: QSEs with Resources and Resource Entities...

LONG DESCRIPTION: The ERCOT Region is expecting a power emergency. The Texas Commission on Environmental Quality (TCEQ) has communicated to ERCOT that, effective immediately, ...TCEQ will exercise its enforcement discretion for exceedances of emission and operational limits of power generating facilities for generators that exceed air permit limits.

Any generating facility that expects to exceed its air permit limits to assist during these extreme temperatures shall provide a notice of this action to Kelly Cook (kelly.cook@tceq.texas.gov), Director of Critical Infrastructure Division for TCEQ.

See “Procedure for Requesting TCEQ Enforcement Discretion Relating to a Power Emergency in Texas for ERCOT, MISO, or SPP Regions”, available at

<https://www.tceq.texas.gov/assets/public/response/power-emergency/enforcement-discretion.pdf>.

Contacts

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Questions?

