



Item 17: TAC Report

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2021 Technical Advisory Committee (TAC) Chair

Board of Directors Meeting

ERCOT Public

December 9-10, 2021

Summary of TAC Update

Revision Requests Recommended for Approval by TAC – Unopposed:

- NPRR1077, Extension of Self-Limiting Facility Concept to Settlement Only Generators (SOGs) and Telemetry Requirements for SOGs
- NPRR1091, Changes to Address Market Impacts of Additional Non-Spin Procurement - URGENT
- NPRR1094, Allow Under Frequency Relay Load to be Manually Shed During EEA3
- NPRR1101, Create Non-Spin Deployment Groups made up of Generation Resources Providing Off-Line Non-Spinning Reserve and Load Resources that are Not Controllable Load Resources Providing Non-Spinning Reserve - URGENT
- NPRR1103, Securitization – PURA Subchapter M Default Charges - URGENT
- NPRR1104, As-Built Definition of Real Time Liability Extrapolated (RTLE) – URGENT
- NPRR1107, Addition of Weatherization Inspection Fees to the ERCOT Fee Schedule and Clarification of Generation Interconnection Request Fees – URGENT
- NOGRR233, Related to NPRR1094, Allow Under Frequency Relay Load to be Manually Shed During EEA3
- OBDRR035, Related to NPRR1101, Create Non-Spin Deployment Groups made up of Generation Resources Providing Off-Line Non-Spinning Reserve and Load Resources that are Not Controllable Load Resources Providing Non-Spinning Reserve
- PGRR092, Related to NPRR1077, Extension of Self-Limiting Facility Concept to Settlement Only Generators (SOGs) and Telemetry Requirements for SOGs
- RRGRR029, Related to NPRR1077, Extension of Self-Limiting Facility Concept to Settlement Only Generators (SOGs) and Telemetry Requirements for SOGs

Summary of TAC Update

Revision Requests Recommended for Approval by TAC – Non-Unanimous

- NPRR1105, Option to Deploy Distribution Voltage Reduction Measures Prior to Energy Emergency Alert (EEA) – URGENT
- NPRR1106, Deployment of Emergency Response Service (ERS) Prior to Declaration of Energy Emergency Alert (EEA) – URGENT
- NPRR1109, Process for Reinstating Decommissioned Generation Resources – URGENT
- NOGRR236, Related to NPRR1105, Option to Deploy Distribution Voltage Reduction Measures Prior to Energy Emergency Alert (EEA) – URGENT
- NOGRR237, Related to NPRR1106, Deployment of Emergency Response Service (ERS) Prior to Declaration of Energy Emergency Alert (EEA) – URGENT
- OBDRR036, Related to NPRR1106, Deployment of Emergency Response Service (ERS) Prior to Declaration of Energy Emergency Alert (EEA)

Summary of TAC Update

November TAC Highlights

- Emergency Conditions Issues List Review
- Steady-State Voltage Performance Criteria for Geomagnetic Disturbance Vulnerability Assessments
- Lower Rio Grande Valley (LRGV) System Enhancement RPG Project
- 2022 Ancillary Services Methodology

Guide Revisions Recommended for Approval by TAC (*Pending PUCT Approval*)

- RRGRR030, Allow New Voltage Levels in Resource Registration Information
- NOGRR231, Update ERCOT Regional Map

Revision Requests with Opposing Votes (Vote)

NPRR1105, Option to Deploy Distribution Voltage Reduction Measures Prior to Energy Emergency Alert (EEA) – URGENT

Purpose (ERCOT)	<p>This NPRR provides ERCOT the ability to instruct TDSPs to deploy any available distribution voltage reduction measures prior to ERCOT declaring an EEA if ERCOT determines it is possible that the deployment of these measures could avoid the need to declare an EEA and ERCOT does not expect to need these measures to reduce the amount of Load shedding that may be needed in EEA Level 3. These revisions also clarify the role of TDSPs in determining whether distribution voltage reduction should be implemented.</p>
TAC Vote	<p>On 11/29/21, TAC voted via roll call to recommend approval of NPRR1105 as recommended by PRS in the 11/10/21 PRS Report with a recommended effective date of upon PUCT approval for Phase 1 and a recommended priority of 2022 and rank of 3020 for Phase 2. There were two opposing votes from the IPM (Morgan Stanley) and IREP (Demand Control 2) Market Segments; and four abstentions from the Municipal (Garland, Denton, Austin Energy, CPS Energy) Market Segment.</p>
ERCOT Market Impact Statement	<p>ERCOT Staff has reviewed NPRR1105 and believe the market impact for NPRR1105 enhances ERCOT’s operational tools to address potential reliability outcomes by providing ERCOT the additional tool of voltage reduction measures before declaration of an EEA while also taking into consideration whether the earlier implementation of these measures would reduce their effectiveness in mitigating the amount of Load shed during an EEA Level 3 Load-shedding event.</p>
Effective Date/Priority	<p>Phase 1: Upon Public Utility Commission of Texas (PUCT) approval – December 17, 2021; Phase 2: Upon system implementation – Priority 2022; Rank 3020</p>
ERCOT Impact	<p>Between \$80k - \$120k; impacts to Market Operation Systems, Data Management & Analytic Systems, Energy Management Systems (EMS)</p>
Business Case Highlights	<p>This NPRR is proposed based upon PUCT and ERCOT Board direction provided at the October 22, 2021 ERCOT Board of Directors meeting/PUCT Open Meeting. These revisions provide ERCOT the additional tool of voltage reduction measures before declaration of an EEA while also taking into consideration whether the earlier implementation of these measures would reduce their effectiveness in mitigating the amount of Load shed during an EEA Level 3 Load-shedding event.</p>

NPRR1106, Deployment of Emergency Response Service (ERS) Prior to Declaration of Energy Emergency Alert (EEA) – URGENT

Purpose (ERCOT)	This NPRR revises the Protocols to allow for the deployment of ERS prior to the declaration of an EEA when PRC falls below 3,000 MW and is not projected to be recovered above 3,000 MW within 30 minutes following the deployment of Non-Spin.
TAC Vote	On 11/29/21, TAC voted via roll call to recommend approval of NPRR1106 as recommended by PRS in the 11/10/21 PRS Report with a recommended effective date of upon PUCT approval. There was one opposing vote from the IPM (Morgan Stanley) Market Segment; and one abstention from the Municipal (Garland) Market Segment.
ERCOT Market Impact Statement	ERCOT Staff has reviewed NPRR1106 and believe the market impact for NPRR1106 enhances ERCOT’s operational tools to address potential reliability outcomes by granting ERCOT operators the discretion to deploy ERS when PRC falls below 3,000 MW and is not projected to be recovered above 3,000 MW within 30 minutes following the deployment of Non-Spin.
Effective Date/Priority	Upon PUCT approval – December 17, 2021
ERCOT Impact	No impact
Business Case Highlights	In PUCT Docket No. 52373, Review of Wholesale Market Design, PUCT Staff filed a Motion for Good Cause Exception that requested the PUCT grant ERCOT a good cause exception pursuant to the Order Granting Exception to PUC Subst. R, 25.507, Electric Reliability Council of Texas (ERCOT) Emergency Response Service (ERS) “so that ERCOT may procure ERS that may be used prior to the declaration of an EEA, rather than being limited to use of the ERS during an EEA, as allowed by 16 TAC § 25.507(a).” The PUCT voted to grant this exception at its Open Meeting held on October 28, 2021. To effectuate the PUCT’s direction, ERCOT is revising the ERS RFP and ERS Technical Requirements and Scope of Work to make clear that ERS procured on a going forward basis may be deployed prior to EEA. These changes will be effective starting with ERS procured for the December 2021 to March 2022 Standard Contract Term. The revisions proposed in this NPRR are necessary to clarify that, pursuant to the good cause exception granted by the PUCT, ERS may deploy ERS prior to declaration of an EEA. More specifically, the proposed revisions grant ERCOT operators the discretion to deploy ERS when PRC falls below 3,000 MW and is not projected to be recovered above 3,000 MW within 30 minutes following the deployment of Non-Spin.

NPRR1109, Process for Reinstating Decommissioned Generation Resources – URGENT

Purpose (ERCOT)	<p>This NPRR allows a Resource Entity to bring a Decommissioned Generation Resource back to service if it submits a Notification of Change of Generation Resource Designation notifying ERCOT of the intended return to service within three years of the date the Generation Resource was removed from the ERCOT Network Operations Model. This NPRR gives ERCOT and the interconnecting TDSP discretion to require any needed studies testing, metering, or facility upgrades to ensure the reliable interconnection of the Generation Resource.</p>
TAC Vote	<p>On 11/29/21, TAC voted to recommend approval of NPRR1109 as recommended by PRS in the 11/17/21 PRS Report with a recommended effective date of upon PUCT approval. There were two opposing votes from the IPM (Morgan Stanley) and IREP (Demand Control 2) Market Segments; and six abstentions from the Independent Generator (2) (Luminant, Calpine), IPM (Shell), IREP (2) (Reliant Energy Retail Services, Just Energy), and Municipal (CPS Energy) Market Segments.</p>
ERCOT Market Impact Statement	<p>ERCOT Staff has reviewed NPRR1109 and believes the market impact for NPRR1109 enables Generation Resources that have been recently decommissioned and retired to return to service to provide needed generation capacity while also granting ERCOT and the interconnecting TDSP the authority to require any studies, testing, metering, or upgrades deemed necessary, and ERCOT the authority to require the Resource Entity to address any operational concern prior to the operation of the Resource.</p>
Effective Date/Priority	<p>Upon PUCT approval – December 17, 2021</p>
ERCOT Impact	<p>No impact</p>
Business Case Highlights	<p>This NPRR will enable Generation Resources that have been recently decommissioned and retired to return to service to provide needed generation capacity. ERCOT is aware of one Decommissioned Generation Resource that will likely be able to return for part of the winter 2021-22 Peak Load Season. Today, the Protocols would require such a Resource to follow the interconnection process for a new Generation Resource. Because recently retired Resources will not generally present material reliability issues that would need to be studied, ERCOT does not believe it is necessary to require such Resources to follow the usual interconnection process. However, to address any concern that such a Resource could cause any reliability issue, this NPRR would grant ERCOT and the interconnecting TDSP the authority to require any studies, testing, metering, or upgrades they deem necessary. ERCOT would also have authority to require the Resource Entity to address any operational concern prior to the operation of the Resource.</p>

NOGRR236, Related to NPRR1105, Option to Deploy Distribution Voltage Reduction Measures Prior to Energy Emergency Alert (EEA) - URGENT

Purpose (ERCOT)	<p>This NOGRR provides ERCOT the ability to instruct TDSPs to deploy any available distribution voltage reduction measures prior to ERCOT declaring an EEA if ERCOT determines it is possible that the deployment of these measures could avoid the need to declare an EEA and ERCOT does not expect to need these measures to reduce the amount of Load shedding that may be needed in EEA Level 3. These revisions also clarify the role of TDSPs in determining whether distribution voltage reduction should be implemented.</p>
TAC Vote	<p>On 11/29/21, TAC voted via roll call to recommend approval of NOGRR236 as recommended by ROS in the 11/17/21 ROS Report. There were two opposing votes from the Independent Power Marketer (IPM) (Morgan Stanley) and Independent Retail Electric Provider (IREP) (Demand Control 2) Market Segments; and four abstentions from the Municipal (Garland, Denton, Austin Energy, CPS Energy) Market Segment.</p>
ERCOT Market Impact Statement	<p>ERCOT Staff has reviewed NOGRR236 and believe the market impact for NOGRR236 enhances ERCOT's operational tools to address potential reliability outcomes by providing ERCOT the additional tool of voltage reduction measures before declaration of an EEA while also taking into consideration whether the earlier implementation of these measures would reduce their effectiveness in mitigating the amount of Load shed during an EEA Level 3 Load-shedding event.</p>
Effective Date/Priority	<p>Upon implementation of Phase 1 of NPRR1105</p>
ERCOT Impact	<p>No impact (There are no additional impacts to this NOGRR beyond what was captured in the Impact Analysis for NPRR1105.)</p>
Business Case Highlights	<p>This NOGRR is proposed based upon PUCT and ERCOT Board direction provided at the October 22, 2021 ERCOT Board of Directors meeting/PUCT Open Meeting. These revisions provide ERCOT the additional tool of voltage reduction measures before declaration of an EEA while also taking into consideration whether the earlier implementation of these measures would reduce their effectiveness in mitigating the amount of Load shed during an EEA Level 3 Load-shedding event.</p>

NOGRR237, Related to NPRR1106, Deployment of Emergency Response Service (ERS) Prior to Declaration of Energy Emergency Alert (EEA) – URGENT

Purpose (ERCOT)	This NOGRR aligns the Nodal Operating Guide with Protocol changes proposed by NPRR1106, allowing ERCOT to deploy ERS prior to an EEA.
TAC Vote	On 11/29/21, TAC voted via roll call to recommend approval of NOGRR237 as recommended by ROS in the 11/17/21 ROS Report. There was one opposing vote from the IPM (Morgan Stanley) Market Segment; and one abstention from the Municipal (Garland) Market Segment.
ERCOT Market Impact Statement	ERCOT Staff has reviewed NOGRR237 and believe the market impact for NOGRR237 enhances ERCOT's operational tools to address potential reliability outcomes by granting ERCOT operators the discretion to deploy ERS when PRC falls below 3,000 MW and is not projected to be recovered above 3,000 MW within 30 minutes following the deployment of Non-Spin.
Effective Date/Priority	Upon implementation of NPRR1106
ERCOT Impact	No impact (There are no additional impacts to this NOGRR beyond what was captured in the Impact Analysis for NPRR1106.)
Business Case Highlights	In Public Utility Commission of Texas (PUCT) Docket No. 52373, Review of Wholesale Electric Market Design, PUCT Staff filed a Motion for Good Cause Exception that requested the PUCT grant ERCOT a good cause exception pursuant to P.U.C. SUBST. R. 25.507, Electric Reliability Council of Texas (ERCOT) Emergency Response Service (ERS), "so that ERCOT may procure ERS that may be used prior to the declaration of an EEA, rather than being limited to use of the ERS during an EEA, as allowed by 16 TAC § 25.507(a)." The PUCT voted to grant this exception at its October 28, 2021 Open Meeting. To effectuate the PUCT's direction, ERCOT has proposed NPRR1106. This NOGRR aligns the Nodal Operating Guide with Protocol changes proposed by NPRR1106.

OBDRR036, Related to NPRR1106, Deployment of Emergency Response Service (ERS) Prior to Declaration of Energy Emergency Alert (EEA) – URGENT

Purpose (ERCOT)	<p>This OBDRR revises the Emergency Response Service Procurement Methodology document to state that ERCOT will make an initial allocation of the annual expenditure limit to each ERS Time Period in each ERS Standard Contract Term based on the expected risk of deploying ERS in that ERS Time Period, to remove outdated language pertaining to the ERS Offer Cap and its relationship to historical prices paid to the TDSP Load Management Programs, and to include language to clarify that ERCOT has discretion to revise and re-issue Requests for Proposal (RFPs) prior to the offer submission deadline.</p>
TAC Vote	<p>On 11/29/21, TAC voted via roll call to recommend approval of OBDRR036 as submitted; and the Impact Analysis for OBDRR036. There was one opposing vote from the IPM (Morgan Stanley) Market Segment; and one abstention from the Municipal (Garland) Market Segment.</p>
ERCOT Market Impact Statement	<p>ERCOT Staff has reviewed OBDRR036 and believe the market impact for OBDRR036 enhances ERCOT’s operational tools to address potential reliability outcomes by granting ERCOT operators the discretion to deploy ERS when PRC falls below 3,000 MW and is not projected to be recovered above 3,000 MW within 30 minutes following the deployment of Non-Spin.</p>
Effective Date/Priority	<p>Upon implementation of NPRR1106</p>
ERCOT Impact	<p>No impact (There are no additional impacts to this NOGRR beyond what was captured in the Impact Analysis for NPRR1106.)</p>
Business Case Highlights	<p>This OBDRR proposed revisions necessary to implement changes proposed in NPRR1106 pursuant to PUCT Docket No. 52373, Review of Wholesale Electric Market Design, wherein PUCT Staff filed a Motion for Good Cause Exception that requested the PUCT grant ERCOT a good cause exception pursuant to P.U.C. SUBST. R. 25.507, Electric Reliability Council of Texas (ERCOT) Emergency Response Service (ERS), “so that ERCOT may procure ERS that may be used prior to the declaration of an EEA, rather than being limited to use of the ERS during an EEA, as allowed by 16 TAC § 25.507(a).” The PUCT voted to grant this exception at its October 28, 2021 Open Meeting. To effectuate the PUCT’s direction, ERCOT has proposed NPRR1106. This OBDRR aligns the Emergency Response Service Procurement Methodology with Protocol changes proposed by NPRR1106.</p>





November TAC Highlights

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Emergency Conditions Issues List Review. TAC and its subcommittees continue to work through the Emergency Conditions List items. Subcommittees report monthly to TAC on progress, changes, and additions to the items on the list. 22 of the items are currently in progress and 52 have been completed.

Steady-State Voltage Performance Criteria for Geomagnetic Disturbance (GMD) Vulnerability Assessments. On 11/29/21, TAC unanimously voted to approve the recommended steady state voltage performance criteria for benchmark and supplement GMD events as presented.

Lower Rio Grande Valley (LRGV) System Enhancement RPG Project. On 11/29/21, TAC unanimously voted to endorse the LRGV System Enhancement RPG Project Option 2 as presented.

2022 Ancillary Services Methodology. On 11/29/21, TAC unanimously voted to endorse the proposed 2022 Ancillary Service Methodology as presented.

Notice of Guide Revisions Recommended for Approval by TAC (*Pending approval by PUCT*)

RRGRR030, Allow New Voltage Levels in Resource Registration Information. This Resource Registration Glossary Revision Request (RRGRR) removes the hard coding of voltage levels for certain Resource Registration information related to Transformer Data. This will allow Resources connected to other voltage levels to submit their Resource Registration data without receiving validation errors.

NOGRR231, Update ERCOT Regional Map. This Nodal Operating Guide Revision Request (NOGRR) updates the ERCOT Regional Map in Section 1.1 to reflect the current boundaries of the ERCOT Region.