Item 4: TAC Report regarding R&M Committee Charter Revision Requests Recommended for Board Approval

Caitlin Smith
2024 Technical Advisory Committee (TAC) Chair

Reliability and Markets Committee Meeting

ERCOT Public
April 22, 2024

Committee Request

Why this is being presented today:

NPRR1197 and NOGRR245 were considered at the March 27, 2024 TAC meeting.

This is the resulting Technical Advisory Committee (TAC) recommendation on the following Revision Requests that were recommended by TAC for Board approval, for which the R&M Committee is expected to vote on a recommendation to the Board:

- NPRR1197, Optional Exclusion of Load from Netting at ERCOT-Polled Settlement (EPS) Metering Facilities which Include Resources
  - Recommended for approval by TAC with one opposing vote
- NOGRR245, Inverter-Based Resource (IBR) Ride-Through Requirements
  - Recommended for approval by TAC with eight opposing votes

NPRR1197, Optional Exclusion of Load from Netting at ERCOT-Polled Settlement (EPS) Metering Facilities which Include Resources

Revision Description (ENGIE)	This Nodal Protocol Revision Request (NPRR) adds the ability for Resources to separately meter and settle Load(s) located behind the ERCOT-Polled Settlement (EPS) metering point at the Resource's Point of Interconnection (POI).
Reason for Revision	General system and/or process improvement(s)
Justification of Reason for Revision and Market Impacts	These revisions to Section 10.3.2.3 create a process for Resources to net Loads and generation behind a single EPS Meter. For projects with auxiliary Loads, netting of these Loads can impact the expected performance of the project as measured at the POI. The proposed language allows for a Resource Entity to meter Loads and exclude it from a netting arrangement and settle this Load with a separate TDSP Electric Service Identifier (ESI ID) with a Load Serving Entity (LSE).
ERCOT Impact / Effective Date	No impact / The first of the month following Public Utility Commission of Texas (PUCT) approval
ERCOT Market Impact Statement	ERCOT Staff has reviewed NPRR1197 and believes the market impact for NPRR1197 provides an acceptable path for Resources to separately meter Loads otherwise subject to a netting arrangement behind the Resource's POI.
TAC Vote	On 3/27/24, TAC voted to recommend approval of NPRR1197 as recommended by PRS in the 3/20/24 PRS Report. There was one opposing vote from the Cooperative (STEC) Market Segment.
Explanation of Opposing TAC Votes	Cooperative/STEC – STEC opposes NPRR1197 as it codifies into Protocols the metering situation they'd attempted to prohibit in the recently rejected NPRR1194.

NOGRR245, Inverter-Based Resource (IBR) Ride-Through Requirements

Revision Description (ERCOT)	This Nodal Operating Guide Revision Request (NOGRR) replaces the current voltage ride-through requirements for Intermittent Renewable Resources (IRRs) with voltage ride-through requirements for Inverter-Based Resources (IBRs) and Type 1 and Type 2 Wind-powered Generation Resources (WGRs) and provides new frequency ride-through requirements for IBRs and Type 1 and 2 WGRs consistent with or beyond requirements identified in the new 2800-2022 - Institute of Electrical and Electronics Engineers (IEEE) Standard for Interconnection and Interoperability of Inverter-Based Resources (IBRs) Interconnecting with Associated Transmission Electric Power Systems ("IEEE 2800-2022 standard").
Reason for Revision	Strategic Plan Objective 1 - Be an industry leader for grid reliability and resilience
Justification of Reason for Revision and Market Impacts	This NOGRR was submitted based on reliability issues associated with the inability of some IBRs to ride-through system disturbances, and in light of the IEEE 2800-2022 standard. This NOGRR proposes ride-through requirements for IBRs and Type 1 and Type 2 WGRs with specificity consistent with or beyond the IEEE 2800-2022 standard where appropriate (e.g., applying to the Point of Interconnection Bus (POIB) instead of the "Resource Point of Applicability"). The revisions specify the ride-through requirements for IBRs rather than IRRs or Energy Storage Resources (ESRs) because some ESRs may not be IBRs and the IBR attributes create unique ride-through requirements. Additionally, due to Type 1 and 2 WGRs failing to ride through normal system disturbances, ERCOT proposes to apply several of the new requirements to these Resources. Some clarifications included from the IEEE 2800-2022 standard may not require additional "capability" but provide additional specificity for settings that can prevent failures rather than adjustments being made after a failure occurs.
ERCOT Impact / Effective Date	Between $720K - $880K (Annual Recuring O&M) / The first of the month following Public Utility Commission of Texas (PUCT) approval
ERCOT Opinion / Market Impact Statement	ERCOT does not support approval of NOGRR245 as recommended for approval by TAC in the 3/27/24 TAC Report as it does not address the critical reliability risk NOGRR245 intends to address / ERCOT has reviewed NOGRR245 as recommended for approval by TAC in the 3/27/24 TAC Report and does not believe it materially enhances reliability of the ERCOT System. Customers will likely continue to face exposure to the current high risk of instability and uncontrolled Outages up to potential system-wide Blackouts as the language does not provide strong ride-through performance requirements for Resource Entities of IBRs and Type 1 and Type 2 WGRs. ERCOT believes that ride-through events (like the Odessa events) may continue and lead to higher prices due to system Outages and state/federal regulatory scrutiny for ERCOT and Market Participants.

NOGRR245, Inverter-Based Resource (IBR) Ride-Through Requirements

TAC Vote	On 3/27/24, TAC voted to recommend approval of NOGRR245 as recommended by ROS in the 9/14/23 ROS Report as amended by the 3/22/24 Joint Commenters 2 comments as revised by TAC. There were eight opposing votes from the Cooperative (4) (GSEC, LCRA, PEC, STEC) and IOU (4) (TNMP, CNP, Oncor, AEPSC) Market Segments and three abstentions from the Consumer (2) (OPUC, Residential Consumer) and Independent Generator (Calpine) Market Segments.
Explanation of Opposing TAC Votes	**Cooperative/GSEC** – The reason GSEC opposes NOGRR245 as recommended for approval by TAC in the 3/27/24 TAC Report is that ERCOT alone has the responsibility and is accountable for maintaining grid reliability. ERCOT's concerns must have priority over Market Participants' desires in these areas of disagreement. **Cooperative/LCRA** – LCRA could not, in good conscience, ignore the reliability risks communicated in the 3/20/24 ERCOT comments and 3/26/24 ERCOT comments on NOGRR245. We appreciate the extensive collaboration between ERCOT and the Joint Commenters 2 which involved concessions on both sides; however, ERCOT communicated it could go no further in negotiations without significant risks to reliability. Ultimately, our decision to support the version of NOGRR245 reflected in the 3/20/24 ERCOT comments was made with this thought in mind: LCRA desires to ensure the most reliable grid for the State of Texas while limiting the cost borne by our customers. LCRA did have concerns about backdating the effective date for new requirements. Investors in new projects make their decisions based on the rules of the game at the time. Changing those rules for in-flight projects can create regulatory uncertainty for future investment. In the 3/20/24 ERCOT comments, IBRs with an SGIA effective date of 6/1/2023 will fall under the new requirements and might potentially have to explore retrofitting an in-flight project. For justification, ERCOT states that moving the 6/1/2023 date any further out will cause at least 20-30 GW of projects to avoid the new requirements. However, ERCOT has created a path for these projects to be granted temporary exemptions out to 12/1/2028. We view this as a reasonable path to compliance while also ensuring system security. **Cooperative/PEC** – The opposing vote on NOGRR245 was due to ERCOT's strong concern that NOGRR245 as recommended for approval by TAC in the 3/27/24 TAC Report incorporates the 3/22/24 Joint Commenter's 2 revised proposal which does not meet reliability expectations, and could lead to major outages. **Cooperative/STEC** – STEC opposes NOGRR245 as recommended for approval by TAC in the 3/27/24 TAC Report because of the potentially significant and negative reliability risks that ERCOT has articulated, if implemented, would pose. **IOU/TNMP** – TNMP opposes NOGRR245 as recommended for approval by TAC in the 3/27/24 TAC Report because of the potentially significant and negative reliability risks that ERCOT has articulated, if implemented, would pose. **IOU/CNP** – CNP shares the same concern as others have expressed in the IOU Market Segment and opposes NOGRR245 as recommended for approval by TAC in the 3/27/24 TAC Report because of the potentially significant and negative reliability risks that ERCOT has articulated, if implemented, would pose. **IOU/Oncor** – Oncor opposes NOGRR245 as recommended for approval by TAC in the 3/27/24 TAC Report because of the potentially significant and negative reliability risks that ERCOT has articulated, if implemented, would pose. **IOU/AEPSC** – AEPSC opposes NOGRR245 as recommended for approval by TAC in the 3/27/24 TAC Report because of the potentially significant and negative reliability risks that ERCOT has articulated, if implemented, would pose.