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| **NOGRR Number** | [**245**](https://www.ercot.com/mktrules/issues/NOGRR245) | **NOGRR Title** | **Inverter-Based Resource (IBR) Ride-Through Requirements** |

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| **Date** | June 16, 2024 |

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| **Submitter’s Information** | |
| **Name** | Woody Rickerson and Chad V. Seely |
| **E-mail Address** | [woody.rickerson@ercot.com](mailto:woody.rickerson@ercot.com;) / [chad.seely@ercot.com](mailto:chad.seely@ercot.com) |
| **Company** | ERCOT |
| **Phone Number** | 512-248-6501 / 512-225-7035 |
| **Cell Number** | 512-517-5652 / 512-825-0288 |
| **Market Segment** | Not applicable |

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| **Comments** |

Electric Reliability Council of Texas, Inc. (ERCOT) respectfully requests that the Reliability & Markets (R&M) Committee recommend to the ERCOT Board of Directors (Board), and that the Board take the following tabling action on Nodal Operating Guide Revision Request (NOGRR) 245, Inverter-Based Resource (IBR) Ride-Through Requirements, at their respective meetings on June 17 and June 18 and express support for the other two key concepts noted below.

* Table NOGRR245 to no later than the earlier of Special Meetings of the R&M Committee and Board in July or the regularly scheduled meetings in August to allow ERCOT and Joint Commenters time to work on additional changes to the NOGRR that would bifurcate or decouple parts of the Exemptions and Extensions Process in Section 2.12.1.
* Support not delaying the preferred ride-through requirements on which new IBRs must meet Institute of Electrical and Electronics Engineers (IEEE) 2800-2200 requirements with a Standard Generation Interconnection Agreement (SGIA) executed on or after August 1, 2024.
* Support for a Board Priority Revision Request to be available for R&M Committee and Board consideration targeted for the December 2024 meetings. This Board Priority Revision Request would implement a reliability assessment process and criteria that would be used to determine if Type 1 and Type 2 Wind-powered Generation Resources (WGRs) and IBRs would be required to make some level of hardware upgrades to meet the relevant ride-through performance requirements for their vintage of Resource or whether that Resource would be granted an exemption. This Revision Request would basically provide a replacement for the portion of NOGRR245 that will be bifurcated or decoupled because of the tabling.

Joint Commenters have raised objections to the current version of NOGRR245 which would likely be raised to the Public Utility Commission of Texas (PUCT) if recommended by the Board on June 18. Although there is no guarantee that an agreement can be reached on the specific language to bifurcate or decouple this Section with Joint Commenters, ERCOT believes one more opportunity to work with Joint Commenters is appropriate to potentially give regulatory certainty on the ride-through performance requirement framework for existing Type 1 and Type 2 WGRs and IBRs and to get the best models possible from these Resource Entities.

Since January 2023, there has been a tremendous amount of work done by ERCOT and stakeholders on this critically important reliability policy that will enhance reliability on ride-through performance over time. Further, the Technical Advisory Committee (TAC) has responded to the Board’s April 2024 remand and instructions of NOGRR245 by hosting workshops and two Special TAC meetings to dig deeper into ERCOT’s significant reliability concerns on the original TAC-recommended version of NOGRR245 to the Board in April. This effort should be complimented, and the Board should look to save the pieces of NOGRR245 that everyone agrees provide long-term reliability benefit to the Texas power grid.

Some of these critical pieces of the June 7, 2024 TAC-recommended version of NOGRR245 are as follows:

1. SGIA date for new IBR requirements moved from **6/1/23** to **8/1/24**
   1. This revision allows ~25 GW of new, more capable IBRs to not have to perform to IEEE 2800-2022 requirements.
   2. The TAC-recommended version provides for maximizing IBR performance to try to meet/exceed IEEE 2800-2022 requirements up to equipment limitations; and, for performance failures below the modeled maximum Resource capability (but above minimum performance requirements), IBRs must mitigate back to modeled maximum performance capability.
2. Starting with SGIAs executed on or after August 1, 2024, new IBRs must be designed to and use capabilities of modern IBRs to improve reliability – meaning providing IEEE 2800-2022 performance. Additionally, ensure voltage ride-through performance requirements below 0.25 per unit for new IBRs match current requirements.
3. Require mitigation of all performance failures [Section 2.13 (5)]

If achievable with the Joint Commenters, bifurcation or decoupling of the Exemptions and Extensions Process could work as follows:

* For NOGRR245, still require IBRs, Type 1 and Type 2 WGRs with a SGIA executed prior to August 1, 2024 the ability to seek an exemption from meeting the applicable legacy ride-through requirements, or extension to meet such requirements, by April 1, 2025. This is a one-time request.
  + Benefit is that ERCOT will know the full universe of IBRs and Type 1 and Type 2 WGRs not able to meet applicable legacy ride-through requirements or seeking an extension to do so.
* For NOGRR245, still maintain language that ERCOT shall not refer to the Reliability Monitor any Requesting Entity’s request for an exemption or extension.
  + Benefit is that the Resource Entity will work in good faith with Original Equipment Manufacturer (OEM) to give ERCOT most accurate modeling information.
* For NOGRR245, still require Requesting Entity of IBRs and Type 1 and Type 2 WGRs to give ERCOT an accurate model representing expected performance.
  + Benefit is that ERCOT will be able to perform a more informed reliability risk assessment of whether an exemption is appropriate or not.
* For future Board Priority Revision Request, work on remaining framework of the Exemptions and Extensions Process (Phase 2) – including criteria for the reliability risk assessment and supplemental information a Requesting Entity may submit to ERCOT for final determination of exemption.

Bifurcating or decoupling the Exemptions and Extensions Process into two phases – NOGRR245 (which includes Phase 1 of the process noted above) and a future Board Priority Revision Request (Phase 2) will not slow down the work required of the Resource Entities to maximize performance ride-through capability through software-related modifications nor ERCOT’s continued efforts on working with Resource Entities for more accurate models and validation of those models. ERCOT would recommend that the future Board Priority Revision Request be targeted to be available for R&M Committee and Board consideration at their December 2024 meetings.

Lastly, tabling NOGRR245 allows ERCOT staff to further review the TAC-recommended version language to the Board and propose any necessary clean-up language before being submitted to the PUCT. ERCOT has noticed at least one error in the formulae in Tables A and B in Section 2.9.1.1(1) in the June 7, 2024 TAC Report. The error apparently occurred as part of making multiple revisions to NOGRR245 drafts over the last several months. The formulae appear correctly in the comments ERCOT filed on 4/15/24 but, subsequently, were incorrectly revised through the arduous redlining process for such a long Revision Request. There may be other minor corrections warranted as well after a more extensive review. This would also allow time for additional consideration of technical concerns raised in the Joint Commenters comments.

If the R&M Committee and Board support tabling NOGRR245 and consensus language is achieved by ERCOT and the Joint Commenters, ERCOT would encourage Special Meetings of the R&M Committee and Board before the regularly scheduled meetings on August 19 and 20. The benefit would be to give regulatory certainty on the executed on or after August 1, 2024 SGIA date for IEEE requirements for new IBRs.

The Joint Commenters have represented to ERCOT the following:

* Support tabling NOGRR245 at the June 17 and 18 meetings;
* Support working with ERCOT on language to bifurcate or decouple the Exemptions and Extensions Process; and
* If consensus language is reached and ultimately approved by the Board, will not appeal NOGRR245 to the PUCT.

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| **Revised Cover Page Language** |

None at this time.

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| **Revised Proposed Guide Language** |

None at this time.