Public

PGRR144: ERCOT Responses and Additional Revisions

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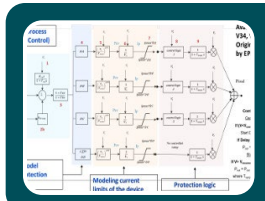
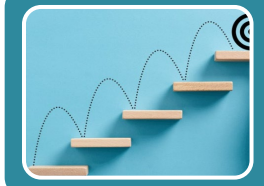
Background and Introduction

- ERCOT submitted PGRR144 (*Dynamic Model Submission and Review Requirements for Large Loads including Large Electronic Loads*) in Feb 2026 and is currently under stakeholder review process

- ERCOT received various stakeholders' comments and submitted a response and further edits to PGRR144 on April 8, 2026



Clarifies dynamic data requirements and require model quality test



Clarifies LL dynamic model data submission milestones for review

Clarifies process for potential material changes to the existing LELs

Comment 1: Voltage Ride-Through Test – PG6.2(6)

Stakeholder Comments:

- Certain stakeholders expressed that the large voltage disturbance test should apply only to Large Electronic Loads (LELs), as the voltage ride-through (VRT) performance and conditions in NOGRR282 are related to LELs, not for non-LELs

ERCOT Response:

- The VRT test in Section 6.2(6) of PGRR144 is intended to assess how a Large Load's dynamic model performs under voltage disturbance conditions.
- It is not intended to impose the VRT requirements on non-LEL or exempt LEL, except to understand voltage ride-through capability
- ERCOT maintains the languages as originally proposed

Comment 2: Review Process for Modifications to Existing LELs – PG9.2.1(1)(d)

Stakeholder Comments:

- Several stakeholders expressed their concerns that requiring operational LELs to re-enter the LLIS process for the changes could affect existing operations

ERCOT Response:

- PG9.2.1(1)(d) requires review of potential modifications by existing LELs that could affect ride-through capability
- It does not restrict current operation as the intent is for the future modifications to be reviewed prior to implementation
- To further clarify the review process, ERCOT updated paragraph (1)(d) and created 9.2.1.1 for more details including review timelines and possible outcomes

Comment 2: ERCOT's Proposed Updates to PG9.2.1

LEL's future modification affecting ride through capability

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LEL submits required materials and ERCOT conducts a review

(10 Business Days, Additional 20 Business Days if necessary)

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Outcomes

1. Approved
2. Approved upon completion of additional assessment
3. Rejected

Comment 3: Concern about Requiring a Restudy Based on Updated Models – PG9.6(1)(f)

Stakeholder Comments:

- Several stakeholders expressed concern that requiring a restudy due to updated model submissions could discourage Large Loads from providing accurate information, and proposed removing the phrase '*including a determination of whether a new stability study is required due to any modifications*' from this section

ERCOT Response:

- This is not intended to automatically trigger a restudy—it's to confirm that the existing stability study remains sufficient
- ILLE is responsible for providing accurate dynamic data, and it is the role of TSPs and ERCOT to review those updates to ensure grid reliability
- For clarity, ERCOT has revised the original language to "*the existing stability study remains sufficient*"

Comment 4: Ambiguity in "Acceptable" Determination Language– PG9.6(1)(f)

Stakeholder Comments:

- Stakeholders commented that the term, "*acceptable*" within the original language "*whether a submission is acceptable*" is vague and recommended replacing it with "*meets the requirements of the ERCOT Planning Guide*"

ERCOT Response:

- ERCOT has revised the original phrase from "*submission is acceptable*" to "*submission is approved*"
- ERCOT also removed references to a specific email address (*dynamicmodels@ercot.com*) and submission instructions, to maintain consistency in submissions and requests throughout the interconnection process

Comment 5: Removing Negative Characterizations of Large Loads from the Cover Page

Stakeholder Comments:

- Certain stakeholder expressed that the revision description and justification sections contain negative characterizations of Large Loads that should be deleted or modified

ERCOT Response:

- ERCOT made the following edit to the Justification section of the cover page to improve clarity
  - *Since October 2022, ERCOT has seen numerous instances where Large Electronic Loads have tripped during voltage disturbances.*

Comment 6: Sequencing of PGRR144 and NOGRR282

Stakeholder Comments:

- Data Center Coalition (DCC) requested that PGRR144 not move forward until NOGRR282 is finalized, as the two are dependent

ERCOT Response:

- ERCOT will appropriately sequence the advancement of PGRR144, recognizing that NOGRR282—designated as an ERCOT Board priority—defines the performance requirements

Comment 7: PSCAD Model Development and Alternate Modeling Approach

Stakeholder Comments:

- DCC requested a 1–2 year transition period to develop PSCAD models, citing vendor unfamiliarity with PSCAD simulation tools and the proprietary nature of some component models. Given these challenges, DCC suggests ERCOT to consider the following addition (or similar) to the proposed Dynamics Working Group Procedure Manual Section 3.1.5.16 Large Load Model Quality Test: "*If specific equipment original equipment manufacturers (OEM) PSCAD models are not available for components within the Large Load facility,* ***measured field or test data*** *that can be incorporated into a model can be provided*."

ERCOT Response:

- ERCOT does not develop PSCAD models for Large Load Entities or accept measured field or test data as a substitute for such models
- Each Large Load Entity remains responsible for developing and maintaining an adequate model of its facility
- ERCOT recommends the use of qualified third-party support where needed and recommends an iterative modeling approach using the best available information, with refinements as additional data becomes available to meet ERCOT's requirements

Comment 8: Clarification for Model Quality Testing Curves

Stakeholder Comments:

- DCC requested ERCOT's confirmation that model quality tests will be evaluated based on NOGRR 282 requirements rather than exact matching of the illustrative example curves shown in the proposed DWG Procedure Manual 3.1.5.16

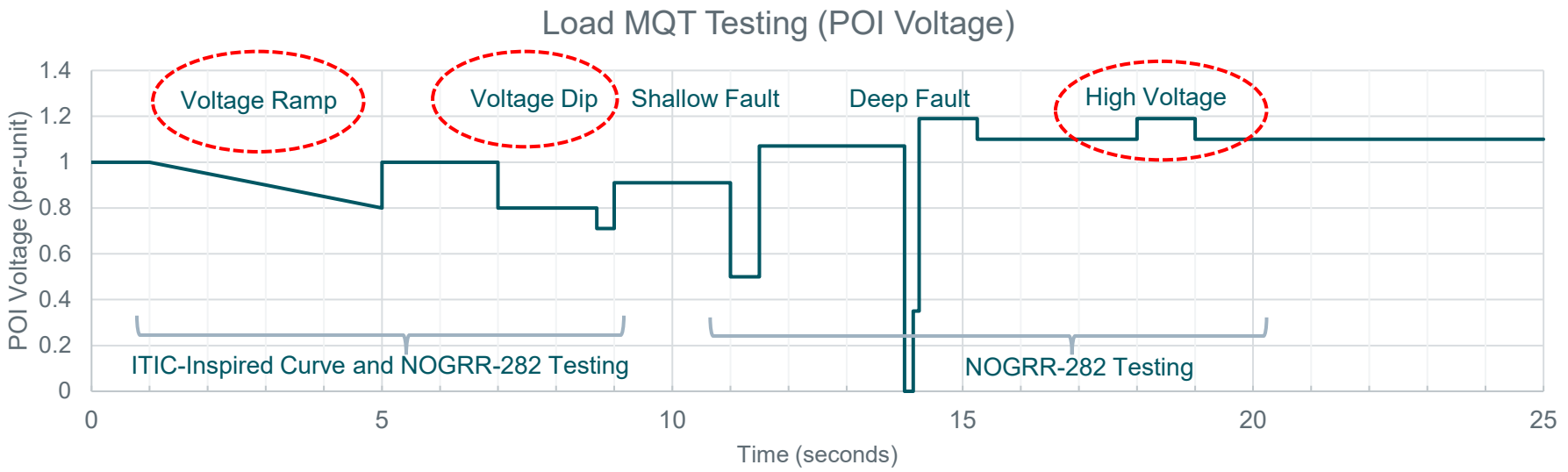
ERCOT Response:

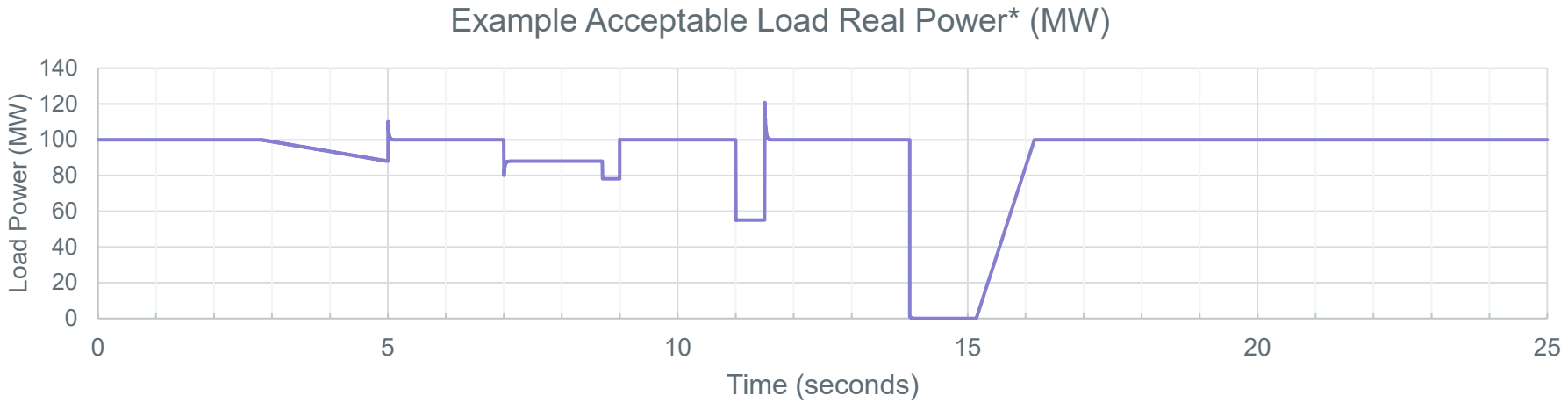
- ERCOT confirms that model review for LELs will be based on the NOG Section 2.15 requirements. The curve introduced in the DWG Procedure Manual is intended as illustrative guidance

Updated Large Load Voltage Ride-Through (VRT) Test Curve

Based on ERCOT internal feedback, minor updates were made to the VRT test curve proposed in the DWG procedure manual:

- Swapped the order of the initial small voltage dip and voltage ramp in the previous test curve that ERCOT shared at the March LLWG meeting
- Added the high voltage ride through test at the end in order to assess the condition after reconnection complete.





*** Note: This is an example of acceptable response**

Next Step

- ERCOT addressed stakeholder comments in the updated PGRR144
- ERCOT appreciates stakeholders' support for the updated PGRR144