



NOGRR 245 Overview

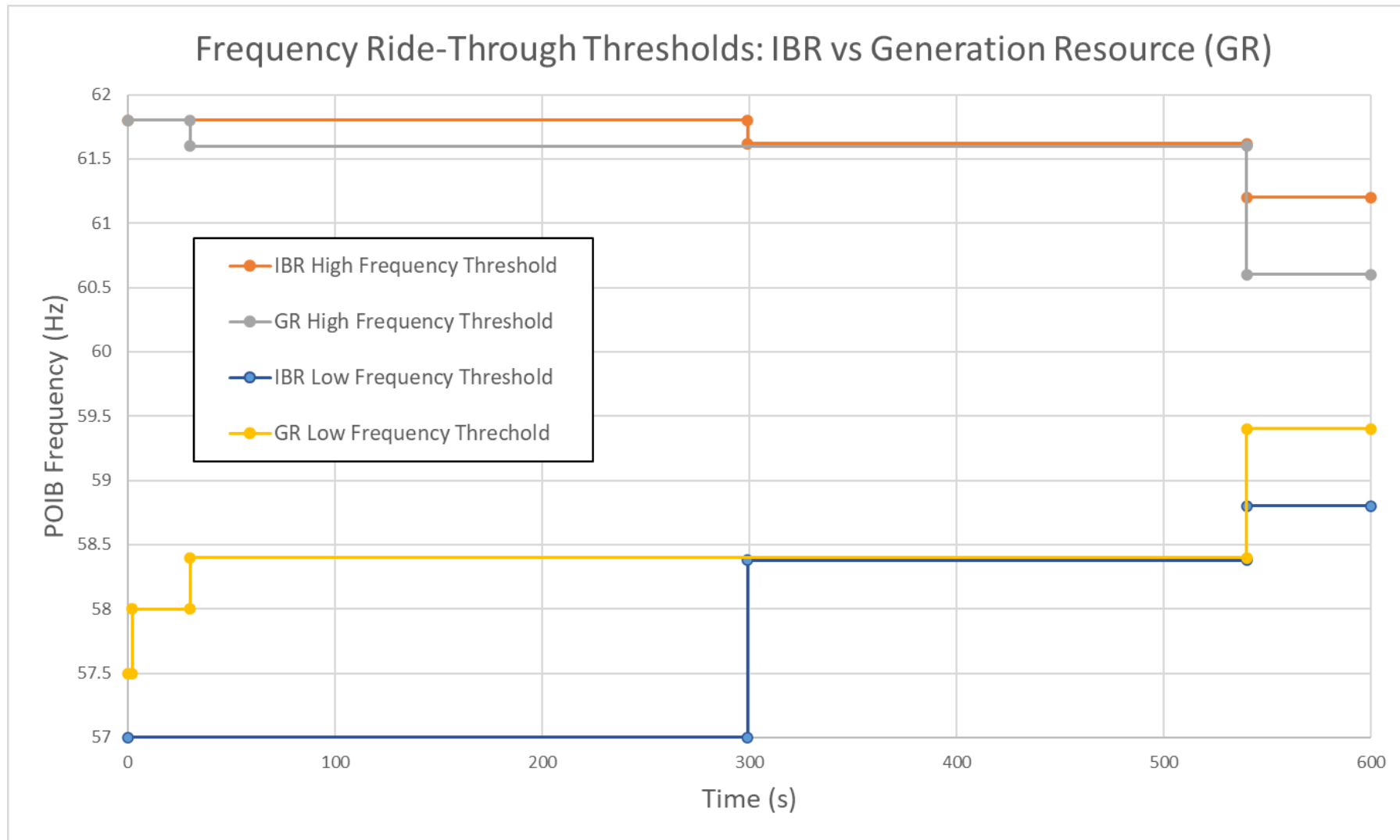
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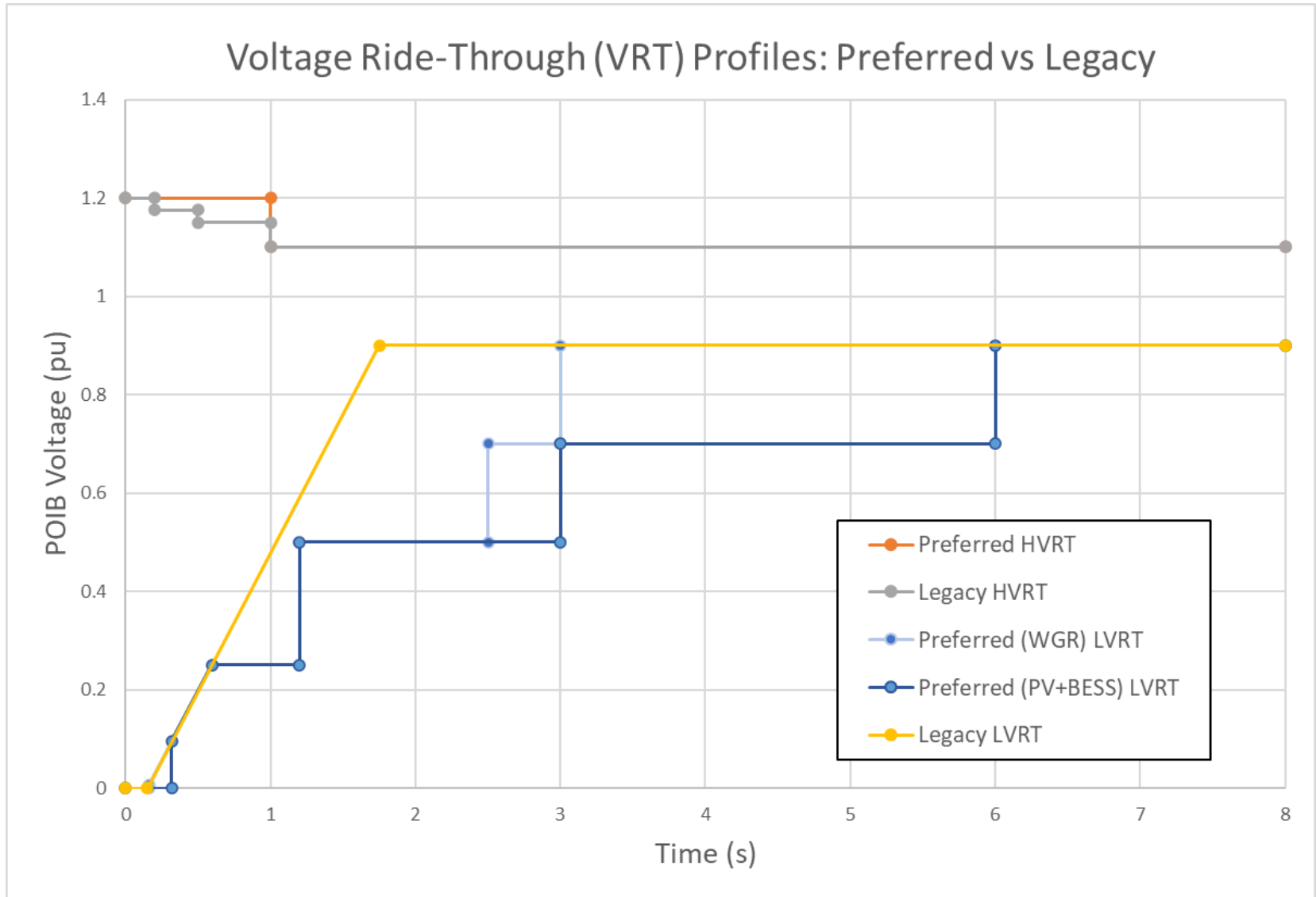
NOGRR 245

- NOGRR 245 changes to the Nodal Operating Guides (NOG) became effective 10/1/24.
- The Board/PUCT-approved version of NOGRR 245 bifurcated the language around an exemption process for limitations which is to be addressed by a subsequent NOGRR and - potentially - PUCT rulemaking.
- Some parts of NOGRR 245 become immediately effective as of 10/1/24 (e.g. Section 2.13).
- Other parts of NOGRR 245 have performance requirements that become effective after changes to maximize ride-through capability have been implemented.
- ROS approved version 21 of the DWG Procedure Manual including updates related to NOGRR 245 on 10/03/24.

Frequency Ride-Through: NOG 2.6.2 & 2.6.2.1



Voltage Ride-Through – NOG 2.9.1.1 & 2.9.1.2



Maximizing Capabilities

- "Maximizing" means making software, settings, firmware and parameterization changes (including memory upgrades) that do not involve modifying other equipment or components
- All IBRs, Type 1 WGRs and Type 2 WGRs must maximize performance capability:
 - NOG 2.6.2.1(6) for Frequency Ride-Through Capability
 - NOG 2.9.1(8) for IEEE 2800-2022 Sections 5, 7, and 9
 - NOG 2.9.1.1(8) & 2.9.1.2(8) for Voltage Ride-Through Capability
 - NOG 2.6.2.1(3), 2.9.1.1(3) & 2.9.1.2(3) for Protection Systems

Timelines

- **8/1/24:** SGIA (or GIM initiation) date where preferred VRT and IEEE 2800-2022 sections 5, 7, and 9 apply
 - Limited exception for GIM fully implemented by 1/1/28
- **4/1/25:** Deadline for IBR/Type 1 WGR/Type 2 WGR that cannot meet or exceed ride-through requirements by 12/31/25 to submit IFRTCR/IVRTCR
 - NOG 2.6.2.1(7), 2.9.1.2(9), 2.11
 - Timely submittal of IFRTCR/IVRTCR required for extension or exemption consideration
- **12/31/25:** Latest date to meet (or exceed) ride-through requirements and complete maximization of capabilities
- **12/31/28:** Limit for any extensions granted to meet IEEE 2900-2022 or preferred VRT requirements
 - NOG 2.9.1(6), 2.9.1.1(8-10)

Key Takeaways Related to Performance Failures

- Ride-through performance failures must be investigated, reported on and have model validation performed.
 - NOG 2.13(3)
- Ride-through performance failures must be mitigated to meet the applicable ride-through requirements (including documented maximized capability) within pre-defined timelines.
 - NOG 2.13(5)

Ride-Through Requirements Applicability

- The same frequency ride-through requirements (NOG 2.6.2.1) apply to all IBRs, Type 1 WGRs and Type 2 WGRs
 - If SGIA prior to 8/1/24, an extension/exemption may be requested per NOG 2.6.2.1(7)
- IBRs, Type 1 WGRs and Type 2 WGRs with an SGIA prior to 8/1/24 must:
 - Achieve, as close as reasonably possible, the capability and performance requirements specified in IEEE 2800-2022 sections 5, 7, and 9 (if unable to meet/exceed) per NOG 2.9.1(8)
 - Meet or exceed the voltage ride-through requirements in Section 2.9.1.2
 - An extension/exemption may be requested per NOG 2.9.1.2(9)
- IBRs with an SGIA on or after 8/1/24 must:
 - Meet or exceed the capability and performance requirements specified in IEEE 2800-2022 sections 5, 7, and 9
 - Meet or exceed the voltage ride-through requirements in Section 2.9.1.1
 - An extension may be requested per NOG 2.9.1(6) and/or 2.9.1.2(8-10)

Questions



Disclaimer: This presentation is intended to summarize key requirements included in NOGRR 245. In case of any discrepancies, the posted NOG language prevails.