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| **NPRR Number** | [**1308**](https://www.ercot.com/mktrules/issues/NPRR1308) | **NPRR Title** | **Large Electronic Load Voltage Ride Through** |
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| **Date** | | December 4, 2025 | |
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| **Submitter’s Information** | | | |
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| **Market Segment** | | Industrial Consumer | |

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| **Comments** |

Google submits these comments relating to Nodal Protocol Revision Request (NPRR) 1308 and relating to system operating limit (“SOL”) at the request of the Large Load Working Group (LLWG).

At its November 20, 2025 meeting, ERCOT proposed both a voltage ride-through (“VRT”) standard as well as a SOL of 2,600 MWs for loads- existing or future- who cannot meet the proposed VRT standard. ERCOT further iterated that it will not approve load studies after November 14th, 2025 for loads that cannot meet these proposed VRT requirements.

Concurrently, ERCOT, with the support of Large Loads, has approved a 765kV backbone, at an estimated $23B of capital investment, to address the reliable interconnection of continued load growth, including many Large Load customers. Oncor has separately proposed nearly $5B in separate and additional transmission projects to support forecasted load growth in its territory. Consequently, Google estimates there is at least $28B in total capital investment in pending and approved transmission upgrades. These upgrades are premised on 50 GWs of load forecasted in the 2024 Regional Transmission Plan and the expectation that more than 50 GWs will seek interconnection. This prediction has seemingly played out as ERCOT estimated there are now 130 GWs of Large Load requests according to ERCOT’s latest presentation on the Large Load interconnection queue.

Stakeholders have no insight as to how much, if any, of the new loads can meet these proposed VRT capabilities. Since ERCOT has indicated it will not be approving new loads until they do exhibit these proposed VRT standards, then stakeholders will have to assume gigawatts of planned load are unable to energize and pay for the transmission being constructed to integrate them.

Furthermore, the Large Loads with approved studies are now at risk of being operationally curtailed. This has two negative economic consequences. First, it risks bankrupting the project finance of these loads because they will be subject to curtailment that was not forecasted based on the rules in which they energized. Second, if a substantial amount of these loads are curtailed during 4-Coincident Peak (4-CP) intervals, they will not be accounted for the purpose of transmission cost allocation. This creates a scenario where transmission costs are shifted to other consumers, risking significant rate shock to those consumers who will absorb the costs.

While ERCOT’s primary purview is operational reliability, its current proposals will also have profound economic and cost-allocation ramifications. Under these standards, there appears to be fundamental disconnect between planning and operations: ERCOT has $28 billion in planned transmission upgrades predicated on at least 50 GW of near-term load growth, yet ERCOT’s proposed VRT and SOL operational standards risk preventing that load from materializing in the appropriate time, if at all.

Google requests ERCOT take the following steps to address these concerns:

1. **Notify loads regarding compliance status.** ERCOT seeks to enforce substantial requirements on new and existing loads without approved rules. Many of these loads comply with current rules and have submitted required studies in a timely manner. ERCOT should notify all Large Loads that have sent planning studies and possess a Large Load Interconnection Study (LLIS) number as to whether or not they meet the drafted requirements. ERCOT must clearly communicate its intent to enforce these proposed standards retroactively.
2. **Provide a compliance forecast update.** In addition to notifying individual loads, ERCOT should inform stakeholders regarding the aggregate volume of load it expects will not meet the VRT standard, based on submitted LLIS studies.
3. **Clarify the scope of SOL enforcement.** ERCOT has yet to make clear which existing loads, and what quantities of those loads, will be subject to the SOL. ERCOT must provide notice to loads that will become subject to the SOL criteria, specifying: 1) the affected regions, 2) the amount of load subject to the standard in those regions, and 3) whether specific loads should expect curtailment.
4. **Reconsider system upgrades for grid hardening**. At the October 24th LLWG meeting, ERCOT presented a study of transmission reinforcements that would strengthen grid stability in the event of a large load outage. ERCOT deemed these upgrades "sub-optimal" because they do not guarantee grid support equivalent reliability to a VRT standard. Google posits that ERCOT should reconsider these grid reinforcements as an alternative to a SOL. While these upgrades may not fully resolve ERCOT’s concerns, they may be justified when weighed against the potential economic costs of load curtailment under the proposed SOL.

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| **Revised Cover Page Language** |

None

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| **Revised Proposed Protocol Language** |

None