|  |  |  |  |
| --- | --- | --- | --- |
| NPRR Number | [1219](https://www.ercot.com/mktrules/issues/NPRR1219) | NPRR Title | Methodology Revisions and New Definitions for the Report on Capacity, Demand and Reserves in the ERCOT Region (CDR) |
|  | |  | |
| Date | | August 12, 2024 | |
|  | |  | |
| Submitter’s Information | | | |
| Name | | Pete Warnken | |
| E-mail Address | | [Pete.Warnken@ercot.com](mailto:Pete.Warnken@ercot.com) | |
| Company | | ERCOT | |
| Phone Number | | 512-248-6705 | |
| Cell Number | |  | |
| Market Segment | | Not applicable | |

|  |
| --- |
| Comments |

ERCOT submits these comments to provide additional data for the Reliability & Markets (R&M) Committee and ERCOT Board of Directors consideration of Nodal Protocol Revision Request (NPRR) 1219. The NPRR was recommended for approval by the Technical Advisory Committee (TAC) on July 31, 2024. As indicated at TAC, ERCOT supports NPRR1219.

The methodologies used to develop Planning Reserve Margins (PRMs) and other elements of the Report on Capacity, Demand and Reserves in the ERCOT Region (CDR) are outlined in the ERCOT Nodal Protocols. The main purpose of the CDR is to provide forecasted PRMs. The PRM represents the percentage of Resource capacity, in excess of firm electricity Demand, available to cover uncertainty in future Demand, generator availability and new Resource supply. As the grid continues to evolve, so must our accounting and reporting of the Resources available, expected Demand and resulting reserves for multiple time periods.

Below are key proposed changes and related benefits intended to provide additional information on the capacity, Demand, and reserves for the ERCOT region.

|  |  |
| --- | --- |
| **Proposed CDR Change** | **Benefits** |
| Adopt Effective Load Carrying Capabilities (ELCCs) for reporting Inverter-Based Resource (IBR) capacity contributions. | For wind and solar Resources, current reporting utilizes peak average capacity contributions (or what ERCOT expects to be available on an average basis during seasonal peak Demand hours). As there is not a prescribed Protocol methodology for determining the peak average capacity contribution of battery storage, battery contribution in recent CDRs has been reported as zero. Replacing peak average capacity contribution with ELCCs will provide capacity contributions that align with those realized in the probabilistic simulations that support reliability standard assessment and reserve margin studies. Meeting a given reliability target is the basis for ELCC estimation. The CDR’s PRMs will thus be directly comparable with those produced by the probabilistic studies. |
| Report Resource adequacy information for all seasons. | Current Protocols require reporting only for Summer and Winter seasons which does not communicate varying operating characteristics of the shoulder months. Expanding the CDR’s reporting seasons provides more granular information on the Resource adequacy for each period which allows risks that are present during the Spring and Fall (such as the impact of significantly more planned outages during these seasons) to be represented. |
| Report Resource adequacy information for the seasonal net peak Load hours. | As additional IBRs such as solar continue to be added to the grid, it is important to not only report on forecasted peak Demand hours, but also net peak Load hours to communicate Resource adequacy needs at the most critical periods of the day. Net peak Load is the Load minus the solar and wind generation for the same period. |
| Include two additional Resource eligibility criteria for CDR reserve margin inclusion. | For future Resources to be included in planned capacity calculations, they must meet certain eligibility criteria. The following additional criteria have been included to provide added certainty in planned Resource forecasts:   * A written notice from the Transmission Service Provider (TSP) that the Interconnecting Entity (IE) has provided a notice to proceed with interconnection construction; and * A notice from the TSP that financial security to fund the interconnection facilities has been provided by the IE. |
| Include Energy Storage Resources (ESRs) in the CDR along with associated ELCCs. | ESRs are currently not a recognized Resource for CDR capacity accounting and PRM calculation purposes. As ESRs continues to increase on the system, including their capacity contribution provides a more accurate assessment of the Resources available to meet Demand. |
| Change the Energy Response Service (ERS) forecast method from a three-year historical average of seasonal procurement amounts to the most current seasonal procurement amount with ERCOT adjustment to reflect ERS program changes. | The current method can produce unrealistic forecasts given a significant change in ERS program specification during one of the historical years used in the calculations. Allowing ERCOT to adjust the forecast based on expected program changes produces more accurate ERS forecasts. |
| Specification of a CDR release schedule and a requirement to issue a Market Notice if a CDR release is expected to be late. | Provides Market Participants and other stakeholders certainty regarding CDR availability timing. |
| Include Distribution Voltage Control as a Load forecast adjustment. | Aligns the CDR with a previous Protocol changes resulting from NPRR1105, Option to Deploy Distribution Voltage Reduction Measures Prior to Energy Emergency Alert (EEA), which allows ERCOT to instruct Transmission and/or Distribution Service Providers (TDSPs) to deploy available distribution voltage reduction measures prior to ERCOT declaring an EEA. |

|  |
| --- |
| Revised Cover Page Language |

None

|  |
| --- |
| Revised Proposed Protocol Language |

None