|  |  |  |  |
| --- | --- | --- | --- |
| NPRR Number | [975](http://www.ercot.com/mktrules/issues/NPRR975) | NPRR Title | Load Forecast Model Transparency |
| Date of Decision | | April 20, 2020 | |
| Action | | Recommended Approval | |
| Timeline | | Normal | |
| Proposed Effective Date | | Upon system implementation | |
| Priority and Rank Assigned | | Priority – 2020; Rank – 3000 | |
| Nodal Protocol Sections Requiring Revision | | 3.12.1, Seven-Day Load Forecast | |
| Related Documents Requiring Revision/Related Revision Requests | | None | |
| Revision Description | | This Nodal Protocol Revision Request (NPRR):  1) Clarifies that Load forecast models will be used to select the Seven-Day Load Forecast based on expected weather; and  2) Requires ERCOT Operations to explain why they selected a certain model to improve transparency for Market Participants. | |
| Reason for Revision | | Addresses current operational issues.  Meets Strategic goals (tied to the [ERCOT Strategic Plan](http://www.ercot.com/content/news/presentations/2013/ERCOT%20Strat%20Plan%20FINAL%20112213.pdf) or directed by the ERCOT Board).  Market efficiencies or enhancements  Administrative  Regulatory requirements  Other: (explain)  *(please select all that apply)* | |
| Business Case | | The Seven-Day Load Forecast is used extensively by Market Participants to evaluate the fundamentals of the ERCOT market and make hedging decisions. It is important for Market Participants to understand the decisions for selecting Load forecast models to better inform commercial activity. | |
| Credit Work Group Review | | ERCOT Credit Staff and the Credit Work Group (Credit WG) have reviewed NPRR975 and do not believe that it requires changes to credit monitoring activity or the calculation of liability. | |
| PRS Decision | | On 11/13/19, PRS voted unanimously to table NPRR975 for one month. The Independent Power Marketer (IPM) Market Segment was not present for the vote.  On 12/12/19, PRS voted unanimously to table NPRR975 and refer the issue to WMS. All Market Segments were present for the vote.  On 2/13/20, PRS voted unanimously to recommend approval of NPRR975 as amended by the 2/6/20 WMS comments. All Market Segments were present for the vote.  On 4/20/20, PRS voted unanimously via email to endorse and forward to TAC the 2/13/20 PRS Report, as amended by the 2/27/20 ERCOT comments, and the Impact Analysis for NPRR975 with a recommended priority of 2020 and rank of 3000. All Market Segments participated in the email vote. | |
| Summary of PRS Discussion | | On 11/13/19, participants reviewed the 11/11/19 ERCOT comments and discussed a desire to return with compromise language that is sensitive to both the market’s priorities and ERCOT’s practicalities.  On 12/12/19, participants reviewed the 12/11/19 TCPA comments and discussed the need for deliberation at the Wholesale Market Working Group (WMWG).  On 2/13/20, there was no discussion.  On 4/20/20, there was no discussion. | |

|  |  |
| --- | --- |
| Sponsor | |
| Name | Michele Gregg |
| E-mail Address | [michele@competitivepower.org](mailto:michele@competitivepower.org) |
| Company | Texas Competitive Power Advocates (TCPA) |
| Phone Number |  |
| Cell Number | 512-653-7447 |
| Market Segment | Not applicable |

|  |  |
| --- | --- |
| **Market Rules Staff Contact** | |
| **Name** | Jordan Troublefield |
| **E-Mail Address** | [jordan.troublefield@ercot.com](mailto:jordan.troublefield@ercot.com) |
| **Phone Number** | 512-248-6521 |

|  |  |
| --- | --- |
| **Comments Received** | |
| **Comment Author** | **Comment Summary** |
| ERCOT 111119 | Recommended rejection of NPRR975 |
| TCPA 121119 | Recommended narrowing the scope of NPRR975 to refer exclusively to outlier events |
| WMS 011020 | Requested PRS continue to table NPRR975 for further review by WMWG |
| ERCOT 013020 | Proposed an alternative triggering mechanism that would provide an indication as to why a particular outlier forecast model was selected for that day, while reducing the number of explanations required to a level manageable within ERCOT’s current operations |
| WMS 020620 | Endorsed NPRR975 as amended by the 1/30/20 ERCOT comments as revised by WMS |
| ERCOT 022720 | Proposed edits that align NPRR975’s original Revision Description and Business Case language with Protocol language that was recently amended at the 2/13/20 PRS meeting |
| ERCOT 032420 | Proposed an alternative schedule for the development of an Impact Analysis for NPRR975 stating that ERCOT intended to complete the Impact Analysis prior to the April PRS meeting |

|  |
| --- |
| Market Rules Notes |

None

|  |
| --- |
| Proposed Protocol Language Revision |

3.12.1 Seven-Day Load Forecast

(1) ERCOT shall use the Seven-Day Load Forecast to predict hourly Loads for the next 168 hours based on current weather forecast parameters within each Weather Zone. Preparation for Day-Ahead Operations requires an accurate forecast of the Loads for which generation capacity must be secured. The Seven-Day Load Forecast must have a “self-training” mode that allows ERCOT to review historic Load data and provide the ability to retrain the Seven-Day Load Forecast algorithm.

(a) ERCOT will use a variety of Load forecast models and will select the Load forecast model that best fits the expected conditions for each hour of the next 168 hours as the Seven-Day Load Forecast for that hour and may update this selection as expected conditions change.

(b) If the selected forecast used at the time of the Day-Ahead Reliability Unit Commitment (DRUC) for the peak Demand hour of any of the next seven days is above or below the average of the forecast models for that hour by the greater of 2000 MW or 4% of the average of the forecast models for that hour, ERCOT shall produce and post to the MIS Public Area an explanation of why the outlier Load forecast model was selected for that hour.

(2) The inputs for the Seven-Day Load Forecast are as follows:

(a) Hourly forecasted weather parameters for the weather stations within the Weather Zones, which are updated at least once per hour; and

(b) Training information based on historic hourly integrated Weather Zone Loads.

(3) ERCOT shall review the forecast suggested by Seven-Day Load Forecast and shall use its judgment, if necessary, to modify the result prior to implementation in the Ancillary Service Capacity Monitor, DRUC, Hour-Ahead Reliability Unit Commitment (HRUC), and Resource adequacy reporting.