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| NPRR Number | [975](http://www.ercot.com/mktrules/issues/NPRR975) | NPRR Title | Load Forecast Model Transparency |
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| Date | November 11, 2019 |
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| Submitter’s Information |
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| Market Segment | Not applicable |

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| Comments |

ERCOT constantly evaluates its Load forecasts and the Load forecasting process and incorporates updates as a part of its continual process improvement. While the A3 and A6 models are constantly retraining the forecast parameters, the A6 model was last tuned in 2016. Based on feedback associated with this Nodal Protocol Revision Request (NPRR), ERCOT will evaluate a more-frequent retuning schedule for the A3 and A6 models. Beyond this, ERCOT is opposed to this NPRR for the reasons stated below.

It is appropriate for ERCOT to exercise its expertise and discretion in determining which specific models should be used to forecast Load in the operating horizon. ERCOT, as a Transmission Operator and as the Balancing Authority and Reliability Coordinator for the ERCOT Region, has multiple responsibilities that are dependent on the Load forecast. Imposing restrictions on ERCOT’s process of choosing the Load forecast that could be expected to be the most accurate for a particular time period, based on all available information, would impede its ability to perform its responsibilities.

Part of the impetus of this NPRR is an apparent perception that the A3 and A6 models are inaccurate. The historic accuracy of the A3 and A6 models has not been as negative as has been portrayed, relative to the other forecast models, when looking more than one day into the future and looking at more hours than just the peak hour of the day (see, e.g., ERCOT’s [presentation](http://www.ercot.com/content/wcm/key_documents_lists/169179/Load_forecast_20191014_v1.3.pptx) to WMWG on October 21, 2019). Occasionally, these models do produce results which are outliers, relative to the other Load forecast models. When these models produce results that appear obviously incorrect, based on all available information, ERCOT does not select these models.

The “A3 and A6” forecast Mid-Term Load Forecast (MTLF) models, which this NPRR proposes to prohibit ERCOT from using, are not clearly defined in the Protocols. To the extent stakeholders are inclined to approve this NPRR, further Protocol revisions would need to be made to clearly define what ERCOT would be prohibited from selecting in building the Load forecast. Because the models used to build the Load forecast are constantly retraining, as described in paragraph (1) of Protocol Section 3.12.1, Seven-Day Load Forecast, it may be difficult to clearly define exactly what information ERCOT would be prohibited from using.

Further, restricting ERCOT’s ability to use the A3 and A6 models “for any purpose” in ERCOT “operations,” as currently proposed, would negatively impact ERCOT’s efforts to provide alternative means of performing critical reliability tasks in cases where ERCOT’s primary systems fail. For example, because these models are internally generated by the Energy Management System (EMS), rather than the Itron system where the E forecasts are produced, they serve as a valuable backup to the Itron forecasting system.

Finally, the requirement to post an explanation of why each Load forecast model is selected is not feasible to implement. ERCOT operators choose Load forecasts for different time periods based on a large combination of factors, such as the models’ design parameters, their recent tracking versus actual demands, qualitative meteorological analysis of the major numeric weather prediction models, and historic experience with similar weather patterns. It would not be possible to distill this expertise and complex decision-making into something that could be easily generated into a daily report.

Finally, to the extent this NPRR is titled “Load Forecast Model Transparency,” ERCOT notes that all operational Load forecasts produced by any of the MTLF models are already posted on the Market Information System (MIS) Public Area, along with an indicator for which forecast was in use by ERCOT at the time of publication, pursuant to Section 6.3.2, Activities for Real-Time Operations. Accordingly, the revisions proposed would not result in increased transparency of what Load forecasts are used by ERCOT.

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| Revised Cover Page Language |

None

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| Revised Proposed Protocol Language |

None