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Stakeholder Comments on the EORM/MERM Study Methodologies and Development Process

The following are comments on the EORM/MERM study project received by ERCOT staff outside of EORM workshop forums, along with ERCOT responses. Updates of this document will be posted to the Resource Adequacy Web page on at least a monthly basis. New comments and responses since the last update are indicated with red font.

1. At the workshop today we talked about a sensitivity or scenario around solar as the marginal unit and for use in determining CONE. [I] think it is very worthwhile in today's environment so should be considered.

<u>ERCOT Response</u>: Several Workshop participants expressed their desire to have these studies conducted. At the April 14 EORM Workshop, ERCOT proposed a separate joint ERCOT-stakeholder process to consider, endorse, define, and vet these types of scenario/sensitivity studies. This process would start with the presentation of a study proposal and preliminary timeline at a future SAWG meeting, followed by review and approvals at WMS and TAC meetings. ERCOT anticipates completing the basic EORM study and a limited set of sensitivity analyses for the inaugural study cycle in 2018 before tackling other studies.

2. The following informational filing with the PUCT outlines key market items that need to be modeled in the EORM and MERM to ensure we are accurate. <u>http://interchange.puc.texas.gov/WebApp/Interchange/application/dbapps/filings/pgSearch_Res</u> <u>ults.asp?TXT_CNTR_NO=45572&TXT_ITEM_NO=25</u>

<u>ERCOT Response</u>: For the inaugural EORM study in 2018, ERCOT will model a market design based on the PUCT and ERCOT rules in place at that time unless the PUCT directs ERCOT to do otherwise. The price formation reforms described in this report could be modeled as a set of sensitivities or a single scenario. Any such analyses would need to go through the stakeholder scenario/sensitivity review process outlined in the previous ERCOT response.

3. A "risk-averse" EORM was specifically considered and subject to several rounds of comments from stakeholders in Project No. 42302. The Commission did not adopt this "risk-averse" approach in directing ERCOT to move forward in identifying the economically optimal reserve margin, so no risk weighting or similar adjustments should be made in the EORM model runs.

<u>ERCOT Response</u>: ERCOT agrees that the development and reporting of risk-adjusted Reserve Margin values is not within the scope of the EORM/MERM study process. Output results of the Monte Carlo simulations, such as the distribution of production costs and energy margins, can be used by stakeholders to assess the risk attributes associated with different reserve margin levels.

4. I was looking at the presentation link below. Using the top 20 load hours for assessing ERCOT wind/solar capacity contribution is not valid given the size of wind. ERCOT needs to look at how much wind reduces the top 20 "Net Demand" (raw demand less wind generation) hours relative to the top 20 "raw demand" hours. The Net Demand peak hours may occur on different days/hours than the top 20 raw demand hours. You'll find that the average reduction divided by wind nameplate capacity yields a lower capacity contribution % if you use the Net Demand method. http://www.ercot.com/content/wcm/lists/114801/ERCOT_EORMWorkshop_4-14-2017_Revised.pptx

<u>ERCOT Response</u>: Loss-of-Load modeling conducted for ERCOT reserve margin studies uses hourly wind output profiles rather than the capacity contribution percentages, so Net Load versus Total Load is not an issue for the EORM study. ERCOT is planning to revisit wind and solar capacity contribution methodologies for the CDR later this year. The use of Net Load is expected to be considered.

5. Will there be coordination on the use of natural gas price assumptions for the 2018 Long Term System Assessment (LTRA) and EORM/MERM study? [From the Regional Planning Group Meeting, 5/16/17]

<u>ERCOT Response</u>: ERCOT has not yet officially decided on what natural gas forecast assumptions to use for the EORM/MERM study. However, like the 2018 LTSA, we anticipate using NYMEX futures prices. Based on tentative schedules for the 2018 LTSA and 2018 EORM/MERM study, model updates are expected to occur about eight to nine months apart (LTSA in Fall 2017; EORM/MERM in summer 2018.)