



Control Number: 51812



Item Number: 34

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March 1, 2021

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PUBLIC UTILITY COMMISSION
REGISTRY CLERK

Public Utility Commission of Texas
Chairman DeAnn T. Walker
Commissioner Arthur C. D'Andrea
Commissioner Shelly Botkin
1701 N. Congress Avenue
Austin, Texas 78711

Re: PUC Project No. 51812, Issues Related to the State of Disaster for the February 2021 Winter Weather Event

Dear Chairman and Commissioners:

As the Independent Market Monitor (IMM) of the Electric Reliability Council of Texas (ERCOT) wholesale electricity market for the Public Utility Commission of Texas (Commission), Potomac Economics closely monitored real-time market performance throughout the recent winter weather event and provides the following recommendations related to ancillary services in light of certain market outcomes.

Recommendation 1: For operating days February 15 through February 20, 2021, reprice all day-ahead ancillary services (AS) clearing prices to cap them at the System-Wide Offer Cap (SWCAP) of \$9,000 per MWh.

When there are insufficient offers to clear the entire AS Plan (Section 4.2.1.1 of the ERCOT Nodal Protocols), ERCOT uses very high penalty costs to ensure that the day-ahead market algorithm can clear as much of the AS Plan as possible. A pricing run is then used to remove those penalty costs prior to publishing the prices in accordance with the Other Binding Document (OBD) Methodology for Setting Maximum Shadow Prices for Network and Power Balance Constraints. Between February 15 and February 20, the scarcity of offers, generator constraints, and opportunity costs applied during this pricing run resulted in unexpected clearing prices higher than the SWCAP in effect on those days. The IMM recommends that these prices be capped at the SWCAP of \$9,000 per MWh.

Capping the AS Market Clearing Prices for Capacity (MCPC) for each AS for those days will produce outcomes more consistent with economic market design principles. Since reserves are procured to reduce the probability of losing load, such principles dictate that the value of reserves cannot not exceed the value of lost load (VOLL), which is equal to the SWCAP of \$9,000.

Further, to avoid this unintended outcome in the future, the IMM recommends that the language on page 32 of Appendix 2 of the OBD cited above be changed to include the following:

Notably however, the AS penalty factors are not used to set the MCPC for each Ancillary Service. Instead, the infeasible AS requirement amounts are reduced to the feasible level and the DAM clearing is rerun so that the price of the last AS awarded MW sets the MCPC for the each Ancillary Service. In no case shall the MCPC for each Ancillary Service exceed the System-Wide Offer Cap (SWCAP) in effect for the relevant Operating Day.

Recommendation 2: For operating days February 14 through February 19, 2021, invoke the “failure to provide” settlement treatment for all AS that were not provided in real time.

There were a number of instances during the operating days outlined above in which AS was not provided in real time because of forced outages or derations. For market participants that are not able to meet their AS responsibility, typically the ERCOT operator marks the short amount in the software. This causes the AS responsibility to be effectively removed and the day-ahead AS payment to be clawed back in settlement. However, the ERCOT operators did not complete this task during the winter event, and therefore the “failure to provide” settlements were not invoked in real time.

Removing the operator intervention step and automating the “failure to provide” settlement was contemplated in NPRR947: Clarification to Ancillary Service Supply Responsibility Definition and Improvements to Determining and Charging for Ancillary Service Failed Quantities; however, the NPRR was withdrawn in August 2020 because of the system cost, some complexities related to AS trades, and the implementation of real-time co-optimization.

Invoking the “failure to provide” settlement for all AS that market participants failed to provide during the operating days outlined above will produce market outcomes and settlements consistent with underlying market principles. In this case, the principle is that market participants should not be paid for services that they do not provide. Whether ERCOT marked the short amount in real-time or not should not affect the settlement of these ancillary services.

In the short term, the IMM recommends that the language in Section 6 of the ERCOT Nodal Protocols below be modified to allow ERCOT to determine these quantities after-the-fact. The IMM further recommends that the “failure to provide” settlement treatment for AS be automated.

6.4.9.1.3 Replacement of Ancillary Service Due to Failure to Provide

(1) ERCOT may procure Ancillary Services to replace those of a QSE that has failed on its Ancillary Services Supply Responsibility through a Supplemental Ancillary Services Market, as described below in Section 6.4.9.2, Supplemental Ancillary Services Market. A QSE is considered to have failed on its Ancillary Services Supply Responsibility when ERCOT determines, in its sole discretion, that some or all of the QSE’s Resource-specific Ancillary Service capacity either will not be available in Real

Time, or was not provided in Real Time. This Section does not apply to a failure to provide caused by events described in Section 6.4.9.1.2, Replacement of Infeasible Ancillary Service Due to Transmission Constraints.

In the event the Commission adopts both of the recommendations contained in this letter, ERCOT should complete them in order: resettle the day-ahead market to cap the AS prices first, then initiate the “failure to provide” settlement.

As always, the IMM stands ready to address any questions the Commission may have regarding these recommendations or the outcomes in the ERCOT wholesale market.

Sincerely,

Carrie Bivens

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