



**The Reliability and Markets (R&M) Committee
is expected to consider
R&M Committee Agenda Item 4.3:**

***Recommendation regarding Phase 2 Market
Redesign – Bridging Solutions: Committee
Recommendation to Board***

at its meeting on April 17, 2023.

**The Board of Directors is expected to hear
the R&M Committee's recommendation on
this matter at the Board meeting on
April 18, 2023.**

**Attached are the Board materials in relation
to these agenda items.**



Date: April 11, 2023
To: Board of Directors
From: Bob Flexon, Reliability and Markets (R&M) Committee Chair
Subject: Phase 2 Market Design – Bridging Solutions

Issue for the ERCOT Board of Directors

ERCOT Board of Directors Meeting Date: April 18, 2023

Item No.: 10.1

Issue:

Whether the Board of Directors (Board) of Electric Reliability Council of Texas, Inc. (ERCOT) should approve ERCOT staff's proposal to recommend to the Public Utility Commission of Texas (PUCT) certain enhancements to the Operating Reserve Demand Curve (ORDC), as described further herein, as ERCOT's preferred bridge option until longer-term changes to the wholesale market design can be implemented.

Background/History:

On January 19, 2023, the PUCT issued an [order](#) in PUCT Project No. 53298 that instructs ERCOT "to evaluate bridging options to retain existing assets and build new dispatchable generation until the [Performance Credit Mechanism (PCM)] can be fully implemented." During the open meeting discussion of that order, the PUCT conveyed its preference that ERCOT recommend a preferred bridge solution approved by the Board.

Following the PUCT's directive, ERCOT endeavored to develop bridge recommendations that meet the following two basic criteria:

- (1) Advance the ERCOT market to meet the PUCT's long-term goals with minimal distortions and adverse consequences; and
- (2) Allow quick implementation timelines that do not interfere with a long-term solution.

At the February 27, 2023 R&M Committee meeting, ERCOT staff presented several bridge concepts for consideration, including identification of pros and cons for each of the concepts. Those concepts were also later discussed with ERCOT stakeholders during meetings in March and April.

During the February meeting discussion of those concepts, the R&M Committee expressed interest in focusing ERCOT's evaluation efforts on mechanisms that could also help reduce the frequency of Reliability Unit Commitments (RUCs) for system capacity.

Accordingly, ERCOT staff has endeavored to identify bridge options that address the three related goals of: (1) retaining existing generation, (2) attracting the construction of new generation, and (3) reducing the frequency of RUCs.

In order to identify and evaluate these and other possible bridge solutions, ERCOT staff held multiple discussions with stakeholders to solicit feedback, including workshops on March 3 and March 15, the regularly scheduled Technical Advisory Committee (TAC) meeting on March 21, and special TAC meetings on March 31 and April 10.

Based on stakeholder feedback received at the workshops and in written comments, ERCOT staff has narrowed its focus to Concept 3, which involves enhancements to the ORDC. The considerations leading to this focus on Concept 3 are further described below and in the presentation attached hereto as **Attachment A**. ERCOT's analysis of Concept 3 evaluated levels of Operating Reserves in the years 2020 and 2022, which were selected in order to compare a year with mild pricing to a year with relatively higher pricing.

- This analysis targets potential On-Line ORDC price adder increases in Operating Reserve ranges that are above emergency levels while avoiding ORDC price adder increases at times of substantial Operating Reserve surpluses, with the objective of enhancing price signals that would have positive effects on:
 - retaining existing assets;
 - incenting new dispatchable generation; and
 - reducing the frequency of RUCs for system capacity.
- Additionally, this ORDC enhancement bridging option would:
 - entail relatively minimal system changes that could be quickly implemented (within the 8 to 12 months targeted for any proposed bridging solution);
 - fit within the existing market framework, from day-ahead through settlement, including credit; and
 - continue to be hedgeable by Market Participants through energy positions.

As a result of this analysis, ERCOT staff's recommendation for a preferred bridge solution is a multi-step floor to On-Line ORDC price adders. At the first step, when Operating Reserve levels are equal to or less than 6,500 megawatts (MW), the price would be \$20 per megawatt hour (MWh). At the second step, when Operating Reserve levels are equal to or less than 7,000 MW and greater than 6,500 MW, the price would

be \$10 per MWh. ERCOT staff's analysis demonstrates that this solution has the following benefits:

1. Aligns with the PUCT's long-term proposal: The back-cast analysis for 2020 and 2022 indicates that, by applying these floors, the total revenue increase would be in the \$500 million range. While the analysis does not account for behavioral changes by Market Participants, this level of increase aligns with the additional average revenue that PCM would provide (as calculated by Energy+Environmental Economics (E3)).
2. Targeted to the right Resources at the right time: The back-cast analysis for 2022 confirms that, when these floors are applied, the increase in revenue would be largely directed to dispatchable Resources. Under this preferred scenario, approximately 80% of the revenue increase would be directed to dispatchable Resources. The floor prices are also having an impact during intervals with the greatest need for increased generator commitment.
3. Helps address RUC: A floor that begins to apply in the 6,500-7,000 MW range provides a self-commitment incentive that is better aligned with conservative operations. Adding multiple steps to the floor incorporates Market Participant feedback, provides for tiering in the strength of the self-commitment signal, and provides some mitigation of risk for Generation Resources that self-commit.

Any approved bridge option will subsequently need to be implemented via an Other Binding Document Revision Request (OBDRR) that would be drafted and sponsored by ERCOT staff after PUCT instruction to move forward.

Key Factors Influencing Issue:

- The PUCT directed ERCOT to evaluate bridging options and recommend a preferred solution.
- The bridge should address three related goals: (1) retaining existing generation, (2) incentivizing development of new dispatchable generation, and (3) decreasing the need to RUC.
- The bridge should be suitable for prompt implementation to facilitate development of a long-term market design solution.
- The bridge option to enhance the ORDC using a multi-step floor to On-Line ORDC price adders is preferable because it: (1) aligns with the level of revenue increases targeted by the PCM, (2) achieves the goals of retaining existing generation and incentivizing new dispatchable generation by predominantly directing such revenue to these Resources during times with the greatest need, and (3) reduces RUC by providing incentives for generation to self-commit.
- Following Board and PUCT approval of a bridge solution, ERCOT staff will work with stakeholders to sponsor an OBDRR and implement the necessary software changes.

Conclusion/Recommendation:

ERCOT staff recommends that the Board approve enhancements to the ORDC with a multi-step floor to On-Line ORDC price adders, with multi-step price floors of \$20 per MWh when Operating Reserve levels are equal to or less than 6,500 MW and \$10 per MWh when Operating Reserve levels are equal to or less than 7,000 MW and greater than 6,500 MW, as ERCOT's preferred bridge solution to recommend to the PUCT.



ELECTRIC RELIABILITY COUNCIL OF TEXAS, INC.
BOARD OF DIRECTORS RESOLUTION

WHEREAS, by order of the Public Utility Commission of Texas (PUCT) issued in PUCT Project No. 53298 on January 19, 2023 (Order), Electric Reliability Council of Texas, Inc. (ERCOT) is required to evaluate bridging options to retain existing assets and build new dispatchable generation until longer-term changes to the wholesale market design can be fully implemented, and furthermore recommend a preferred bridge solution;

WHEREAS, the ERCOT Board of Directors (Board) finds that ERCOT staff has evaluated a range of bridge options based on stakeholder feedback and that ERCOT staff has identified an enhancement to the Operating Reserve Demand Curve (ORDC) using a multi-step floor to On-Line ORDC price adders, with multi-step price floors of \$20 per MWh when Operating Reserve levels are equal to or less than 6,500 MW and \$10 per MWh when Operating Reserve levels are equal to or less than 7,000 MW and greater than 6,500 MW, as the option that best meets the goals established in the PUCT's Order for a bridge solution;

WHEREAS, the Reliability and Markets (R&M) Committee has considered and recommended that the Board approve the Concept 3 bridge solution recommended by ERCOT staff as the preferred bridge solution to recommend to the PUCT; and

WHEREAS, after due consideration of the bridge option alternatives, the Board deems it desirable and in accordance with the PUCT's order to select Concept 3, the option recommended by ERCOT staff and the R&M Committee, as the preferred bridge solution to recommend to the PUCT;

THEREFORE, BE IT RESOLVED, that ERCOT hereby approves Concept 3, an enhancement to the ORDC using a multi-step floor to On-Line ORDC price adders, with multi-step On-Line ORDC price adder floors of \$20 per MWh when Operating Reserve levels are equal to or less than 6,500 MW and \$10 per MWh when Operating Reserve levels are equal to or less than 7,000 MW and greater than 6,500 MW, as the preferred bridge option for recommendation to the PUCT.



CORPORATE SECRETARY'S CERTIFICATE

I, Jonathan M. Levine, Assistant Corporate Secretary of ERCOT, do hereby certify that, at its April 18, 2023 meeting, the Board passed a motion approving the above Resolution by _____.

IN WITNESS WHEREOF, I have hereunto set my hand this ____ day of April, 2023.

Jonathan M. Levine
Assistant Corporate Secretary