



Item 8: Proposed Change to the Boundary Threshold for the Far West Weather Zone

Calvin Opheim

Manager Load Forecasting & Analysis

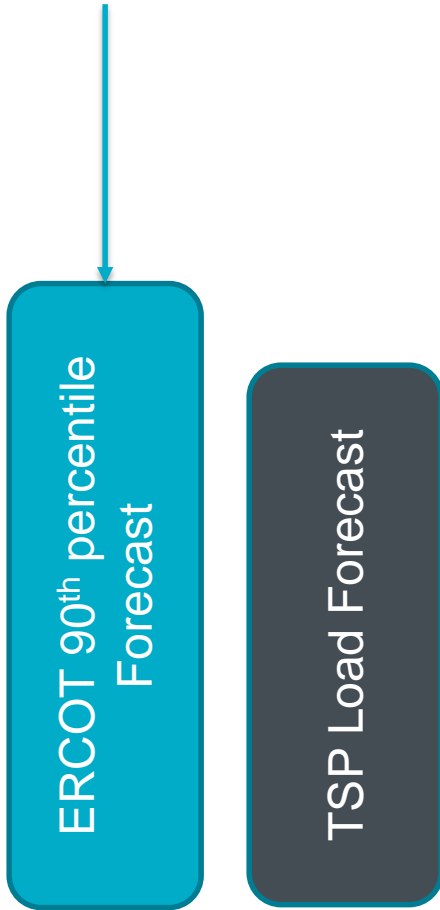
Board of Directors Meeting

ERCOT Public

December 11, 2018

Load Forecast Review Process

RTP Load Level



RTP Load Level



Justified?



Regional Transmission Plan (RTP)

See slides 7 & 8 for Planning Guide reference

Culberson Loop Projected Load Growth



	2018	2019	2020	2021	2022
Jan 2018	484 MW	647 MW	734 MW	762 MW	790 MW
Feb 2018	580 MW	775 MW	893 MW	964 MW	1,013 MW
Potential	670 MW	984 MW	1,163 MW	1,292 MW	1,340 MW

Transmission Planning Load Forecast

Boundary Percentage Increase to 7.5%

- Oil and Gas load growth is not easily modeled using econometric measures.
- The size of the load additions is significant when compared to the overall load for the Far West Weather Zone.
- Increasing the boundary to 7.5% would support 500 MW of growth per year for 2019 through 2021 without requiring supporting documentation.

3.1.7 Steady State Transmission Planning Load Forecast

- (f) ERCOT-proposed **revisions** to the boundary threshold used to implement the requirements of this section will be **recommended** by the Technical Advisory Committee (TAC) and **approved** by the ERCOT Board.

ERCOT staff recommends that the boundary threshold be increased to 7.5% for the Far West Weather Zone.

At its November 29, 2018 meeting, TAC unanimously voted to recommend approval of the boundary threshold increase for the Far West Weather Zone as proposed by ERCOT staff.

Questions?



Planning Guide Reference

3.1.7 Steady State Transmission Planning Load Forecast

- (1) ERCOT shall use the following process for determining the Load level to be used in the starting base cases for the Regional Transmission Plan and in the steady-state evaluation of a Tier 1 project pursuant to Protocol Section 3.11.4, Regional Planning Group Project Review Process:
 - (a) ERCOT will compare the ERCOT 90/10 Load forecast with the summed SSWG bus-level Load forecast for each Weather Zone.
 - (b) If the ERCOT 90/10 Load forecast is higher, ERCOT will use this forecast for the Weather Zone.
 - (c) If the SSWG Load forecast is higher than or equal to the ERCOT 90/10 Load forecast, but below the ERCOT 90/10 Load forecast plus a boundary threshold determined in accordance with paragraph (f) below, ERCOT will use the SSWG Load forecast for the Weather Zone.
 - (d) If the SSWG Load forecast is higher than or equal to the ERCOT 90/10 Load forecast plus the boundary threshold, ERCOT will use the ERCOT 90/10 Load forecast plus the boundary threshold for the Weather Zone.

Planning Guide Reference

3.1.7 Steady State Transmission Planning Load Forecast (continued)

- (e) If a TSP(s) believes that the ERCOT 90/10 Load forecast plus the boundary threshold does not adequately represent the Weather Zone or an area within the Weather Zone, the TSP(s) may present ERCOT with additional information to justify using a higher Load forecast, including the SSWG Load forecast, for that Weather Zone. ERCOT, in its sole discretion, may choose to use a higher Load forecast than indicated in paragraph (d) above if it reasonably determines that the Load forecast indicated in paragraph (d) above does not adequately represent the Weather Zone or an area within the Weather Zone. If ERCOT uses a Load forecast higher than the ERCOT 90/10 Load forecast plus the boundary threshold in the evaluation of a Tier 1 project, ERCOT must explain and document the basis for that choice, using aggregated information as needed to shield Protected Information, in its independent review.
- (f) ERCOT-proposed revisions to the boundary threshold used to implement the requirements of this section will be recommended by the Technical Advisory Committee (TAC) and approved by the ERCOT Board.



Date: December 4, 2018
To: Board of Directors
From: Bob Helton, Technical Advisory Committee (TAC) Chair
Subject: Proposed Change to the Boundary Threshold for the Far West Weather Zone

Issue for the ERCOT Board of Directors

ERCOT Board of Directors Meeting Date: December 11, 2018

Item No.: 8

Issue:

Whether the Board of Directors (Board) of Electric Reliability Council of Texas, Inc. (ERCOT) should approve an increase to the boundary threshold for the Far West Weather Zone for the Load review process specified in Planning Guide Section 3.1.7, Steady State Transmission Planning Load Forecast, from 5.0% to 7.5%, as unanimously recommended by the Technical Advisory Committee (TAC).

Background/History:

Planning Guide Section 3.1.7 defines the process for comparing Transmission Service Provider (TSP) Load forecasts with ERCOT's Load forecast in transmission planning. If ERCOT's Load forecast is higher, then ERCOT's Load forecast is used. If the TSP's Load forecast is higher but within the boundary threshold as applied to ERCOT's Load forecast, the TSP's Load forecast is used. If the TSP's Load forecast is greater than ERCOT's Load forecast plus the boundary threshold, then ERCOT's Load forecast is used. If the TSP believes that ERCOT's forecast plus the boundary threshold does not adequately represent the area's future Load, the TSP can submit additional information to ERCOT (signed financial agreements), which will be used to increase the forecast. The current boundary threshold is 5% for all Weather Zones.

Paragraph (1)(f) of Planning Guide Section 3.1.7 requires that TAC recommend and the Board approve revisions to the boundary threshold described above.

Based on Load growth in the Far West Weather Zone, ERCOT staff proposed that the boundary threshold for the Far West Weather Zone be increased to 7.5%, effective January 1, 2019. At its November 29, 2018 meeting, TAC unanimously voted to recommend approval of the boundary threshold increase for the Far West Weather Zone as proposed by ERCOT staff.

Key Factors Influencing Issue:

- There has been tremendous growth in Load in the Far West Weather Zone. For example, the summer peak in 2018 was approximately 500 MW greater than in 2017. Seeing that the Far West Weather Zone has a smaller amount of Load (approximately 3,600 MW), this rate of growth is challenging to both TSPs and ERCOT. While ERCOT's updated Load forecast has increased significantly, it

appears to be prudent to also increase the boundary threshold in order to improve the forecasts used in transmission planning studies.

- ERCOT staff and TAC have recommended that the boundary threshold be increased to 7.5% for the Far West Weather Zone, for the processes specified in Planning Guide Section 3.1.7.

Conclusion/Recommendation:

TAC recommends that the ERCOT Board approve a boundary threshold of 7.5% for the Far West Weather Zone, for the Load review process specified in Planning Guide Section 3.1.7.



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

WHEREAS, paragraph (1)lf) of Planning Guide Section 3.1.7, Steady State Transmission Planning Load Forecast, requires that the boundary threshold used to implement the requirements of Section 3.1.7 will be recommended by the Technical Advisory Committee (TAC) and approved by the Board of Directors (Board) of Electric Reliability Council of Texas, Inc. (ERCOT);

WHEREAS, TAC has recommended that the Board approve a boundary threshold of 7.5% for the Far West Weather Zone for the Load review process specified in Planning Guide Section 3.1.7; and

WHEREAS, after due consideration of the alternatives, the Board deems it desirable and in the best interest of ERCOT to approve a boundary threshold of 7.5% for the Far West Weather Zone for the Load review process specified in Planning Guide Section 3.1.7;

THEREFORE, BE IT RESOLVED that a boundary threshold of 7.5% for the Far West Weather Zone for the Load review process specified in Planning Guide Section 3.1.7 is hereby approved, effective January 1, 2019.

CORPORATE SECRETARY'S CERTIFICATE

I, Vickie G. Leady, Assistant Corporate Secretary of ERCOT, do hereby certify that, at its December 11, 2018 meeting, the ERCOT Board passed a motion approving the above Resolution by _____.

IN WITNESS WHEREOF, I have hereunto set my hand this ____ day of December, 2018.

Vickie G. Leady
Assistant Corporate Secretary