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PROJECT NO. 55718

RELIABILITY PLAN FOR THE PERMIAN BASIN REGION UNDER PURA § 39.167	**§ § §**	**PUBLIC UTILITY COMMISSION OF TEXAS**

ERCOT'S FEBRUARY 2024 STATUS REPORT

Pursuant to the *Order Directing ERCOT to Develop a Reliability Plan for the Permian Basin Region* issued by the Commission in this Project on December 14, 2023, Electric Reliability Council of Texas, Inc. (ERCOT) hereby submits the attached monthly status report regarding its development of the reliability plan for the Permian Basin.

Respectfully submitted,

/s/ Anna Berlin

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ATTORNEYS FOR ELECTRIC RELIABILITY COUNCIL OF TEXAS, INC.

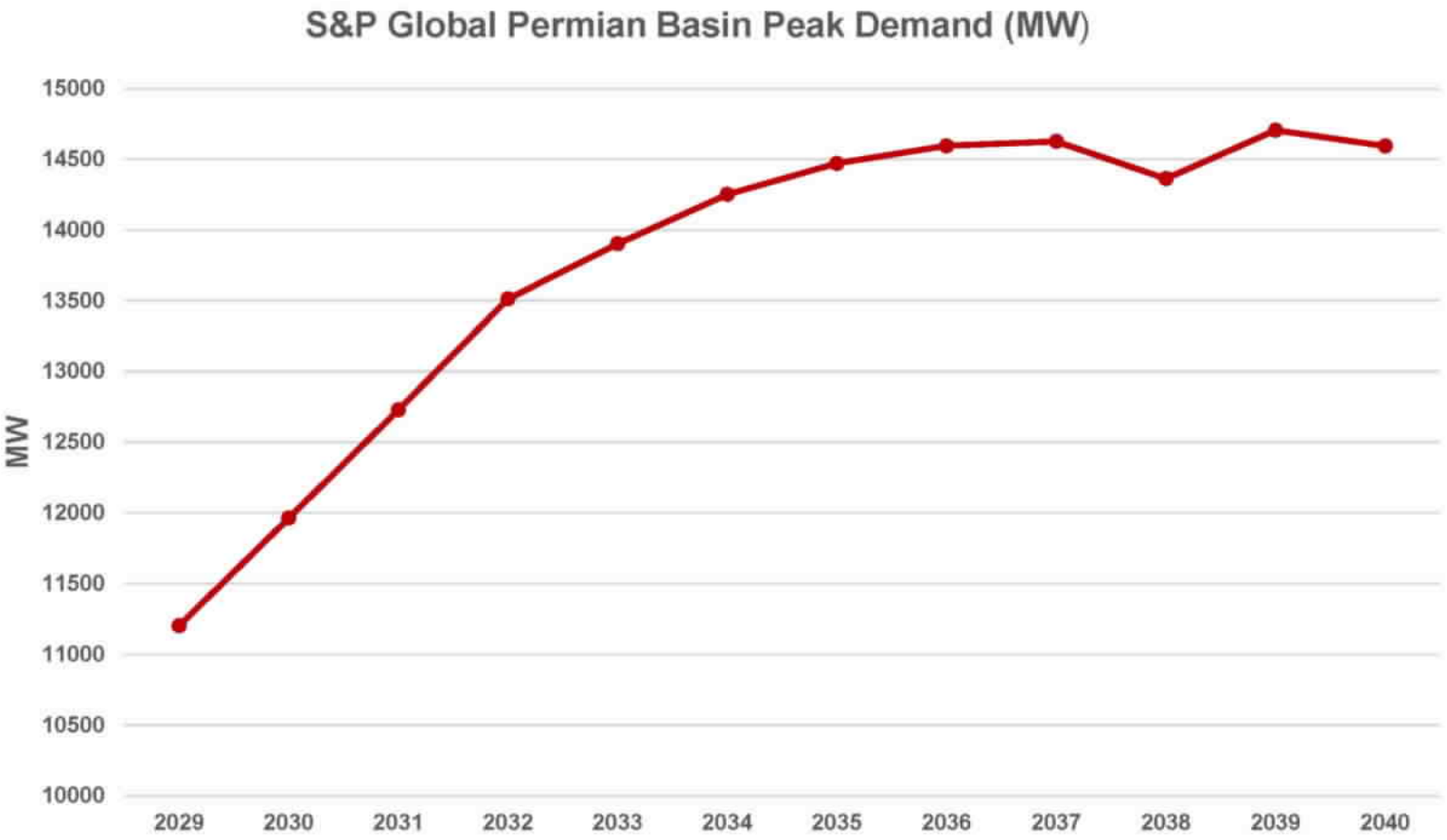
Permian Basin Reliability Plan Study - Monthly Update

Public Utility Commission of Texas
February 1, 2024

Status Update

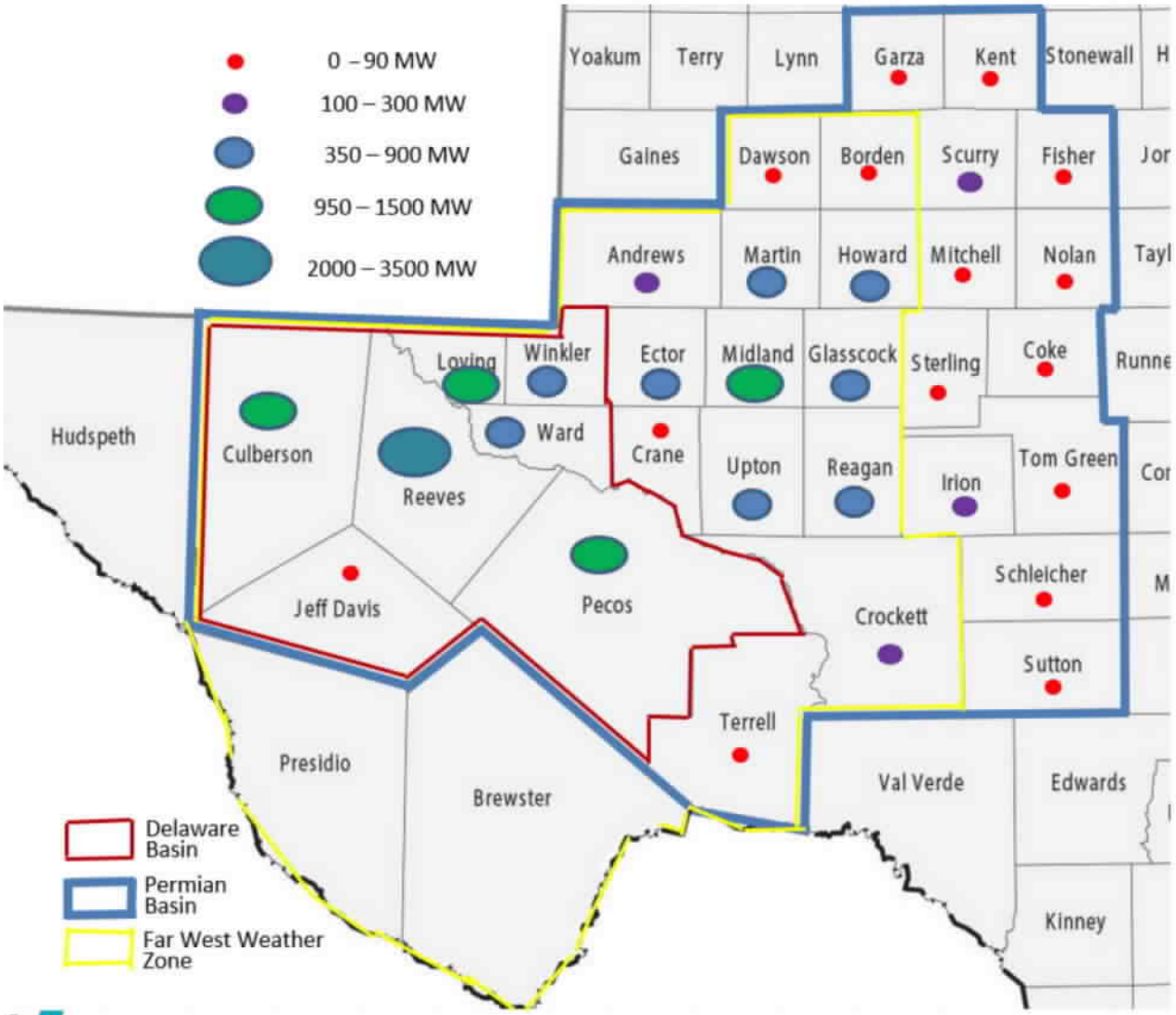
- ERCOT has had weekly meetings with Transmission Service Providers (TSP) to coordinate S&P Global Permian Basin load forecast data in the format required to conduct the study
  - December 6, December 14, December 21, 2023, and January 4, 2024
- ERCOT received bus-level S&P Global Permian Basin load forecast data from Oncor on January 10, 2024
- ERCOT received additional non-oil & gas load data from TSPs
  - From AEP on January 10, 2024
  - From TNMP on January 11, 2024
  - From LCRA on January 12, 2024
  - From Oncor on January 16, 2024
  - From AEP on January 26, 2024
- ERCOT presented the study scope to the Regional Planning Group (RPG) on January 17, 2024
- ERCOT reviewed the S&P Global load data and additional load data received by January 16, 2024 and provided feedback to TSPs on January 18, 2024
- ERCOT expects to conduct a final review of the load forecast data with TSPs in early February
- ERCOT has summarized the load forecast data received as of January 31, 2024 in this presentation

S&P Global Permian Basin Load Forecast by Year



The S&P Global Permian Basin load is forecasted to peak in 2039 at 14,705 MW. The 2030 (11,964 MW) and 2039 (14,705 MW) load levels will be evaluated in this study.

County-Level S&P Global Permian Basin Load Forecast in 2030 and 2039



Load Forecast Comparison

Permian Basin Load Comparison (MW)

	2019 Delaware Basin Study	2021 Permian Basin Study 2030 Case	2023 RTP Study 2029 Case	Permian Basin Reliability Plan Study 2030 Case	Permian Basin Reliability Plan Study 2038 Case
Permian Basin Total Load	9,771	10,527	16,577	23,958	26,700
Permian Basin Oil & Gas Load	9,771	10,527	12,341	11,964	14,705
Additional Load	0	0	4,236	11,995	11,995

Delaware Basin Load Comparison (MW)*

	2019 Delaware Basin Study	2021 Permian Basin Study 2030 Case	2023 RTP Study 2029 Case	Permian Basin Reliability Plan Study 2030 Case	Permian Basin Reliability Plan Study 2038 Case
Delaware Basin Total Load	5,260	4,960	7,933	11,230	13,483
Delaware Basin Oil & Gas Load	5,260	4,960	4,884	6,439	8,692
Additional Load	0	0	3,049	4,791	4,791

* The Delaware Basin load is a subset of the Permian Basin load and is included as part of the Permian Basin Reliability Plan Study.

Observations and Challenges

- The total load in the Permian Basin is extremely high, even for 2030. For reference, the total non-coincident peak load for the Coast Weather Zone modeled in the 2023 RTP case for 2029 was 29.8 GW, and the total non-coincident peak load for the North Central Weather Zone was 32.5 GW.
- The total amount of additional non-oil & gas load is almost the same as the oil & gas load.
- Within the Permian Basin, oil & gas load is shifting to the Delaware Basin area where transmission is relatively sparse. Especially for 2038, the load in the Delaware Basin area (8,692 MW) is significantly higher than what we have previously studied (5,260 MW).
- The Permian Basin lacks local conventional generation compared to the Coast and North Central Weather Zones.
- Considering the high level of load growth to be evaluated, identifying a reliability plan to meet this extremely high load level will require extraordinary effort to complete on the directed timeline and will be much more complex compared to previous special studies ERCOT has conducted.

Next Steps

- ERCOT will present the updated study scope, including the load forecast and generation dispatch assumptions, to the RPG on February 12, 2024.
- ERCOT will implement the S&P Global load forecast data, additional load data, and related transmission topology update into the power flow model to build the study base case in February and will provide TSPs an opportunity to review before finalizing.
- In the first quarter of 2024, ERCOT expects to identify the reliability need in the Permian Basin and to begin the identification of transmission projects that would address that need.