



## **Filing Receipt**

**Filing Date - 2025-04-22 11:46:40 AM**

**Control Number - 55718**

**Item Number - 108**

PUC PROJECT NO. 55718

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

**Google's Comments on the Siemens PTI Cost-Benefit Analysis of 765kV Facilities in ERCOT**

Google appreciates the opportunity to provide comments on the "Siemens PTI study 765 345 kV ERCOT Transmission," a study Google sponsored through the Texas Energy Buyers Alliance (TEBA).<sup>1</sup> As a significant and growing load within ERCOT, Google commissioned this analysis with a view towards actionable insights to further enrich the policy discussion surrounding critical transmission investments in the state, considering current energy trends and the state's long-term infrastructure needs.

Recognizing that Google and other customers will bear the costs of this transmission buildout, our primary goal in sponsoring this study was to identify "no regrets" investment scenarios that deliver lasting value to the entire ERCOT system, even under conservative load growth. Consequently, this study offers a holistic cost-benefit analysis of the proposed 765-kV and 345-kV transmission by analyzing additional load scenarios to ensure the identified benefits hold true across a range of potential futures, ultimately evaluating its effectiveness in meeting Permian Reliability Plan requirements and accommodating additional future load integration.

Based on our review of the study's findings, we would like to highlight the following key insights for the Commission's consideration.

- **The Evaluation of Multiple Load Scenarios Demonstrates the Substantial, Consistent System Value Offered by the 765-kV System:** The Siemens PTI study builds upon ERCOT's analysis by evaluating a range of load forecasts, including both a more conservative "Current Trends" and a more aggressive "High Large Load Adoption" scenario. Ultimately, these analyses demonstrate the substantial and consistent system value provided by the 765-kV system across various potential load futures.

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<sup>1</sup> Siemens PTI. *Cost Benefit Analysis of 765-kV Transmission Facilities in ERCOT*. Prepared for Google and CEBA, 18 Apr. 2025, [https://interchange.puc.texas.gov/Documents/55718\\_1071490838.PDF](https://interchange.puc.texas.gov/Documents/55718_1071490838.PDF)

- The 765-kV System Delivers Substantial West-to-East Transfer Capacity Gains:** The study highlights that, for a relatively small incremental cost, the 765-kV option demonstrates substantially (nearly 1.5 GWs) greater West-to-East (WTE) transfer capacity compared to the 345-kV option. This increased capacity improves grid efficiency and facilitates the flow of power from resource-rich areas to demand centers across the state.
- The 765-kV System Significantly Mitigates Energy Curtailment Under High-Load Growth:** The 765-kV transmission system is shown to significantly reduce energy curtailment. This is a crucial consideration as Texas prepares to enter a high-load growth environment where every additional MWh is needed, ensuring that valuable energy resources are utilized effectively and minimizing potential waste.
- The 765-kV System Provides Nearly \$1 Billion in Annual Consumer Savings Through Congestion Relief:** Under a 345-kV scenario, significant system congestion persists, while the 765-kV option largely addresses these congestion issues, creating nearly \$1 billion in consumer savings annually from reduced congestion rents. This congestion relief provides substantial economic benefits and improves market efficiency within ERCOT.

In conclusion, the compelling findings of the Siemens PTI study strongly suggest that the 765-kV infrastructure delivers lower production costs, lower consumer energy costs, and reduced congestion rents under a variety of load forecasts, presenting a robust value proposition for the development of the 765-kV Permian import lines. Based on these significant findings, it is Google's recommendation that the Commission move forward with ERCOT's 765kV proposal for the Permian Reliability Plan.