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REVIEW OF MARKET REFORM	§	PUBLIC UTILITY COMMISSION
ASSESSMENT PRODUCED BY	§	
ENERGY AND ENVIRONMENTAL	§	OF TEXAS
ECONOMICS, INC. (E3)	§	

**COMMENTS OF THE
TEXAS GEOTHERMAL ENERGY ALLIANCE**

The Texas Geothermal Energy Alliance (TxGEA) appreciates the opportunity to provide these comments on the report Energy + Environmental Economics (E3) filed in Project No. 52373, *Review of Wholesale Electric Market Design*, on November 10, 2022. On November 15, 2022, the Commission requested comments regarding the Report and questions asked by the Commission be filed by noon on December 15, 2022. Accordingly, these comments are timely filed.

COMMENTS

TxGEA is a Texas-led advocacy group created to advance geothermal energy in Texas. TxGEA is a broad and interdisciplinary group of entities engaged in geothermal resource exploration, well drilling, plant construction, resource production, and markets creation. TxGEA includes representatives from the oilfield service sector, oil & gas operators, utilities, start-up companies working to advance geothermal relevant technologies, scientists and engineers from several Texas universities, and leading environmental organizations advocating Texas public policy solutions.

The Texas energy sector has benefitted tremendously from a diversified energy portfolio that has included oil, natural gas, wind, solar, coal, and nuclear power. In addition to these resources, Texas has the opportunity to explore previously undeveloped geothermal resources in the near-term to decarbonize residential and industrial heating and cooling and produce reliable

and secure baseload electricity. Technology advancements within the oil and gas industry over the past decade, along with a significant increase in the number of oil and gas professionals engaged in geothermal ventures today, have enabled a new realm of possibilities to advance scalable geothermal concepts.

Besides providing heating and cooling directly to industrial and residential consumers, geothermal power is a renewable energy source that offers firm and flexible solutions to a changing power system. Geothermal technologies, often known as enhanced geothermal systems or closed-loop systems, inject water thousands of feet below the surface where temperatures reach hundreds of degrees, then capture the steam that rises back up to power turbines. Geothermal technologies can provide a range of services to the electric grid, including baseload, regulation, load following or energy imbalance, spinning reserve, non-spinning reserve, and replacement or supplemental reserve. Geothermal plants can operate 24 hours a day with a steady output, regardless of environmental conditions, and are not subject to the unpredictability and voltage swings that variable energy resources face. Geothermal plants can also ramp up or down quickly, allowing them to adjust to the changing needs of the power system and act as a flexible power source in addition to baseload.

As the Commission considers changes to the ERCOT market design, TxGEA recommends the Commission embrace new technologies and ensure they are not intentionally (or unintentionally) deterred from participating in the Texas energy market. A technology neutral market design will deliver better service more efficiently to customers, will save lives in emergencies, and will allow Texas to continue to move to a modern energy system. Texas should be proud of its robust competitive electricity market and should avoid undermining a market structure that has brought innovation and significant investment to the state.

TxGEA is not taking a position on the various market design proposals in the E3 Report at this time.

CONCLUSION

TxGEA appreciates the opportunity to provide these Comments and looks forward to working with the Commission and other interested parties on these issues.

Respectfully submitted,

A handwritten signature in black ink, reading "Barry Smitherman" with a stylized flourish at the end.

Barry Smitherman
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