

# **Geothermal Energy in Texas - Important Factors to ERCOT Market Participants**

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# Geothermal Energy in Texas Deregulated Electric Market

## Important Factors to Wholesale & Retail Market Participants

1. **Scale** – Wholesale power marketers prefer large enough scale to make it worth their time, effort and risk to market power to other marketers and retail electric provider's (REP's). Aggregated geothermal generation fields in excess of 25 MW shorter term. Longer term in excess of 50 MW.
2. **Transmission/Accessibility to Grid** – Geothermal energy supply will require access to power Transmission lines and the ERCOT grid. Lack of transmission infrastructure in parts of west Texas has delayed some wind power from access to the grid.
3. **Reliability** – Base load (7x24) generation with over 95% reliability will be advantageous compared to wind power which is significantly less reliable generation.
4. **Pricing** – Long term (10-year +) power purchase agreements (PPA) priced in the \$0.050 to \$0.065 per kWh range.
5. **Incentives** - What incentives (tax credits, REC's, etc.) are available, and for what period of time to create incentives for investment and growth?
6. **Renewable Energy Credits & Carbon Credits** – The volume of renewable energy credits has increased significantly since the Texas electric market deregulated in 2002. SB-7 requires REP's to have at least 1% renewable energy generation by volume of supplier's portfolio. In addition, the trend of renewable energy purchases by large end-users has increased dramatically in the past couple years.
7. **Location** – The current ERCOT “zonal” market

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## Important Factors to End-Users

1. **Pricing** – Long term (5+ year term) retail electric pricing (including margin) in the \$0.060/kWh (without REC's) to \$0.080/kWh (incl REC's).
2. **Renewable Energy** – The trend of renewable energy purchases by medium and large end-user

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