



Geothermal Law in Texas

Geothermal Energy and
Waste Heat to Power:
Utilizing Oil and Gas Plays

SMU Geothermal Lab Conference 2013
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Topics Covered

- Geothermal Regulation
- Legal Issues
- Legislative Update
- ERCOT Interactions

Geothermal Regulation

- Texas has a long history of regulation energy production
 - Railroad Commission of Texas Est. 1891
- Pro-development policies and attitudes, generally
- A regulatory system in place, though untested

Geothermal Regulation

- Applicable Statutes
 - Education Code; Government Code; Health and Safety Code; Natural Resources Code; Tax Code; Utilities Code; Water Code
- Applicable Regulations
 - Railroad Commission; Public Utility Commission; Texas Education Agency; Texas Commission on Environmental Quality; General Land Office; Comptroller of Public Accounts

Geothermal Regulation

- Geothermal Resources Act of 1975
 - TEX. NAT. REC. CODE § 141
 - “It is declared to be the policy of the State of Texas that the rapid and orderly development of geothermal energy and associated resources located within the State of Texas is in the interest of the people of the State of Texas”

Geothermal Regulation

- By-product
 - TEX. NAT. REC. CODE § 141.003
 - (4) "Geothermal energy and associated resources" means:
 - (A) products of geothermal processes, embracing indigenous steam, hot water and hot brines, and geopressured water;
 - (B) steam and other gasses, hot water and hot brines resulting from water, gas, or other fluids artificially introduced into geothermal formations;
 - (C) heat or other associated energy found in geothermal formations; and
 - (D) any by-product derived from them.
 - (5) "By-product" means any other element found in a geothermal formation which is brought to the surface, whether or not it is used in geothermal heat or pressure inducing energy generation.

Geothermal Regulation

- Railroad Commission of Texas
 - TEX. NAT. REC. CODE § 141.011
 - RRC is the primary regulatory agency for development of geothermal resources

Geothermal Regulation

- Tax Code – “incidentally produced”
 - TEX. TAX CODE §§ 201.060 & 201.063
 - Oil and gas “incidentally produced” through production of geothermal energy resources are exempt from their Production Taxes
 - But, see Comptroller’s Rules

Geothermal Regulation

- Utilities Code – Goal for Renewable Energy
 - TEX. UTIL. CODE § 39.904
 - Includes 10,000 MW total goal and 500 MW target for non-wind resources

Geothermal Regulation

- Railroad Commission Rules
 - 16 TEX. ADMIN. CODE § 3
 - Organization Report; Retention of Records; Notice Requirements
 - Applications, Disposal Requirements, Surveys, Drilling Requirements, Spacing Rules
 - Geothermal Resource Production Test Forms

Geothermal Regulation

- Railroad Commission Rules
 - 16 TEX. ADMIN. CODE § 5
 - Subchapter B. Geologic Storage and Associated Injection of Anthropogenic Carbon Dioxide (CO₂)
 - Subchapter C. Certification of Geologic Storage of Anthropogenic Carbon Dioxide Incidental to Enhanced Recovery of Oil, Gas, or Geothermal Resources

Geothermal Regulation

- Public Utility Commission of Texas
 - 16 TEX. ADMIN. CODE 25.5.
 - Definition of Renewable Energy
 - 16 TEX. ADMIN. CODE § 25.173.
 - Goal for Renewable Energy
 - Renewable Energy Credits
 - Trading system
 - Certification requirements

Geothermal Regulation

- General Land Office
 - Subchapter C. Exploration and Development of Geothermal Energy and Associated Resources on Permanent School Fund Land
 - 31 TEX. ADMIN. CODE §§ 155.40-49
 - Exploration and Development Guide
 - Application Requirements
 - Lease Requirements

Geothermal Regulation

- Comptroller of Public Accounts
 - 34 TEX. ADMIN. CODE § 3.24.
 - Exemption of Gas Incidentally Produced in Association with the Production of Geothermal Energy
 - 60 mcf per day per lease
 - 34 TEX. ADMIN. CODE § 3.32.
 - Exemption of Oil Incidentally Produced in Association with the Production of Geothermal Energy
 - 10 barrels of oil per day per well.

Legal Issues

- Ownership of Geothermal Resources
 - **The Deed Controls!**
 - Natural Resources Code treats as mineral
 - Treated and produced as mineral, but no change to substantive law of the state
 - Severable Estates
 - *Humphreys – Mexia Co. v. Gammon (1923)*
 - Oil, Gas, and Other Minerals
 - Split Regime on Other Minerals

Legal Issues

- Other Minerals
 - Surface Destruction Test
 - *Acker v. Gwinn* (1971); *Reed v. Wylie* (1980)
 - Severance before June 27, 1984
 - Whether reasonable use of the surface by the mineral owner would substantially harm the surface

Legal Issues

- Other Minerals
 - Ordinary Meaning
 - *Moser v. US Steel (1984)*
 - Severance after June 27, 1984
 - “Severance of minerals in an oil, gas and other minerals clause includes all substances within the ordinary and natural meaning of that word, whether their presence or value is known at the time of severance”

Legal Issues

- Doctrine of Waste
 - A present holder of rights in interest in land is liable to co-owners and vested future interest holders for income or depreciation from use or improvement from the land
 - Not barred by oil and gas regulations
 - *RRC v. Shell Oil Co. (1947)*
 - Two year Statute of Limitations
 - Be prepared, plan ahead, and play nice

Legal Issues

- The Rule of Capture
 - Texas recognizes ownership in place of resources, but Texas also recognizes absolute ownership at the surface of a rightful well
 - If a rightful well drains a neighboring tracts resources, the neighbor has no cause of action. The neighbor's recourse is to drill and produce
 - What about heat?

Legislative Update

- SB 1252 (Patrick) & HB 2047 (Lozano)
 - Tax break for equipment needed to set up system for oil, gas, sulfur, and divergent uses
- SB 59 (Nelson) & HB 1363 (Callegari)
 - Agency reporting requirements
 - Ch. 24 Sec. 141.079 of TNRC
 - Jan. 1 of every odd numbered year
 - Replaces first 30 days of legislative session
 - Commissioners must report to lege on status of exploration, development, and production of geothermal energy and associated resources

Legislative Update

- HB 2026 (Sanford)
 - Would remove RPS and CREZ authorizations from statutes
- HB 723 (Anchia)
 - Would create second tier of renewables, excluding large wind, with a mandatory target of 1500 MW by 2022
- SB 1586 (Rodriguez) & HB 3702 (Rodriguez)
 - Would redefine "distributed renewable generation" to include up to 10 MW on federal or state owned land

Legislative Update

- HB 3583 (Strama)
 - Would restructure our RPS to give incentives to renewables capable of serving peak demand
 - 10,880 by 2022
 - 5,000 from sources capable of serving peak demand
 - 5,880 from other renewable sources
- HB 3701 (Lucio III)
 - Would require cooperatives to allow interconnection of distributed renewable generation

Legislative Update

- SB 1239 (Rodriguez) & HB 2196 (Anchia)
 - Would allow distributed renewable generators to sell surplus power to any REP
- SB 1478 (Rodriguez)
 - Would require WECC areas to meet 50% of renewable requirements with generation or purchases within Texas
- Chapter 313
 - Several bills filed related to reduced tax assessments to encourage development

ERCOT Interactions

- Electric Reliability Council of Texas, Inc.
 - Operates the transmission (>60kv) grid representing 85% of Texas load
 - Operates Wholesale Power Market within ERCOT territory
 - Nonprofit entity authorized by the Texas Natural Resources Code and the PUCT
 - Subject to PUCT supervision

ERCOT Interactions

- Likely interactions
 - Interconnection
 - <10MW = PUCT substantive rule 25.211-212
 - >10MW = ERCOT Planning Guide Section 5
 - Membership
 - Representation on TAC and Board
 - Locational Marginal Price

ERCOT Interactions

- ERCOT does not have a preference for any particular type of generation
 - Our concern is reliability
- ERCOT is available to help developers understand any of our requirements or processes answer questions about options to market output
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Questions?