

# Getting to the Core Rules and Regulations for Geothermal Development

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Geothermal Energy Utilization

Oil & Gas Development Conference

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**HANDLE WITH EXTREME CARE:**

**This Product Contains Minute Electrically Charged  
Particles Moving at Velocities in Excess of Five  
Hundred Million Miles Per Hour.**

**THIS IS A 100% MATTER PRODUCT:**

**In the Unlikely Event That This Merchandise Should  
Contact Antimatter in Any Form, a Catastrophic  
Explosion Will Result.**

# Texas Geothermal Policy

§ "It is declared to be the policy of the State of Texas that: (1) 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 Resources Act of 1975

# History of Geothermal Energy Interest

- § 1960s/1970s energy crisis
  - § Geothermal Steam Act of 1970
  - § state laws encouraging geothermal exploitation
- § increased environmental interest/Mid East tension
  - § Department of Energy initiatives starting in 2000
- § increased cost of oil and gas

# **Geothermal Rights**

# Geothermal Rights – Federal

- § Geothermal Steam Act of 1970

  - § Department of the Interior

- § Outer Continental Shelf Lands Act

- § Department of Defense Lands

# **Geothermal Rights – State**





# Leasing – Other Issues

§ Term

# Leasing – Other Issues

§ Migration

§ Oil & Gas versus Geothermal Rights

§ Environmental Liability

# **Environmental Laws**

# Environmental Laws – Federal

- § Coastal Zone Management Act
- § Endangered Species Act
- § National Environmental Policy Act (NEPA)
  - § requires an environmental impact statement

# Environmental Laws – State

§ State environmental laws

# Environmental Laws – Local

§ Water conservation districts

§ Other county and municipal laws

# Environmental Challenges to Renewables

## § Parties

- § American Bird Conservancy
- § Armstrong Ranch
- § Audubon Outdoor Club of Corpus Christi
- § Coastal Bend Audubon Society
- § Frontera Audubon Society
- § Galveston Bay Conservation and Preservation Association
- § Houston Audubon Society
- § King Ranch, Inc.
- § Lower Laguna Madre Foundation
- § Matagorda Bay Foundation
- § Travis Audubon Society



# Environmental Challenges to Renewables

## § Agencies

- § Texas Coastal Coordination Council
- § Public Utility Commission of Texas
- § US Fish & Wildlife

## § Courts

- § Travis County, Texas state court
- § United States federal court

# Development

# Development – Federal

§ Geothermal Steam Act of 1970

§

# Development – State

- § Surface owners

- § Classification

  - § Mineral

    - § Texas, California, Alaska, Arizona, Hawaii

  - § Water

    - § Wyoming, Utah

  - § Neither

    - § Idaho, Washington, Montana

# Development – State

- § Drilling permits/regulations
  - § On or off school fund land
- § Reporting requirements
- § Safety requirements
  - § Blowout prevention standards

# Development – State

- § Power line easements

- § State (and possibly federal) approvals for transmission lines

# Ryan's Ideas

# **Legislative Initiatives**



# Things to think about...

§ Governor's business initiative

§ Legislative session

# **Wind-Related Initiatives**

# The Next Texas Tea Is Clear

## § 1999

§ Installed Wind Generation Capacity: 880 MW

§ Texas Legislature Mandate: +2,000 MW by 2009

## § 2005

§ Installed Wind Generation Capacity: ~2,000 MW

§ Texas Legislature: +3,000 MW by 2015 / 10,000 MW by 2025

## **28. GEQ We Get There?**

# Competitive Renewable Energy Zones

**CREZ:** Zone in which **renewable energy** resources and **suitable land areas** are sufficient to develop generating capacity from renewable energy technologies.

# Financial Commitment

**PUCT considers developers' financial commitment in deciding whether to designate an area a CREZ **and** whether to issue a certificate of convenience and necessity.**



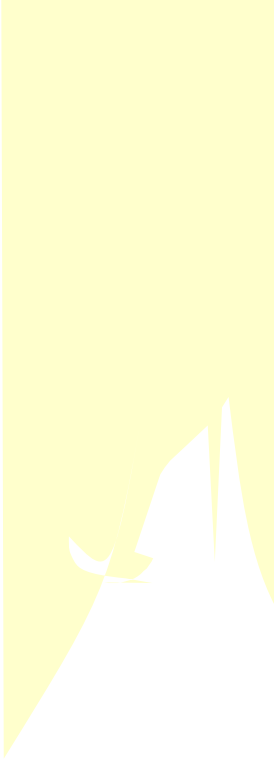
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# So What?

§ Dispatch priority proceeding

§ Nesting??