



Wind Energy Issues and the Role of the GLO

by

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The General Land Office



- Established on December 22, 1836
- First Commissioner - John P. Borden
- Republic faced debts but had an abundance of land
- Current Commissioner Jerry Patterson

Annexation & Debt

- **The Republic of Texas**

- Large debt but an abundance of land
- Offered the U.S. 175 million acres for \$10 million (the U.S. Congress rejected)

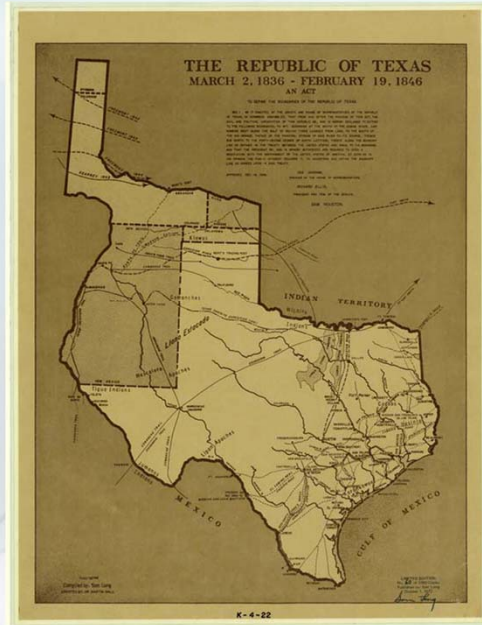
- **The State of Texas**

- Came into the Union with all its debt and public lands
- Continued the Spanish and Mexican practice of granting the public domain to encourage development.

- **The Compromise Act of 1850**

- Texas ceded 67 million acres of land outside its present boundaries to the US for \$10 million in Federal bonds (Map on next slide)
- This left Texas debt free with millions of acres of public lands to serve the public needs

The Republic of Texas



Self Explanatory

Land Grants



- **Early land grants were used to:**
 - Promote development
 - Encourage settlement
 - Pay soldiers
 - Settle debts
 - Encourage industry
 - Finance schools
- **GLO presently manages 20.5 million acres**
 - State lands and mineral rights properties
 - 14.5 million acres dedicated to School Trusts
 - 13.3 million - the Permanent School Fund
 - 2.1 million - the Permanent University Fund
 - Includes “uplands” and submerged lands

Sam Houston Makes It Possible



Beauford Jester



Allan Shivers

- **3 Marine Leagues (10.35 miles)**
- **1836 – Gen. Sam Houston sketches boundary**
- **1845 – Annexation Agreement reserves the land**
- **1940 – Oil in the coast causes controversy**
- **1953 – Eisenhower signs bill for state ownership**

Types of PSF Land

- **Free Royalty Lands (828,000 acres)**
 - The PSF owns nonparticipating royalty interests (1/16th to 1/8th)
- **Relinquishment Act Lands (6.4 million acres)**
 - Surface owner shares in ½ bonus, rentals, and royalties in return for acting as agent for the state
- **Submerged Lands (5.5 million acres)**
 - Gulf Coast region from mean high tide out to 3 Spanish leagues (10.35 miles)
 - Navigable rivers
- **Fee Lands (700,000 acres)**

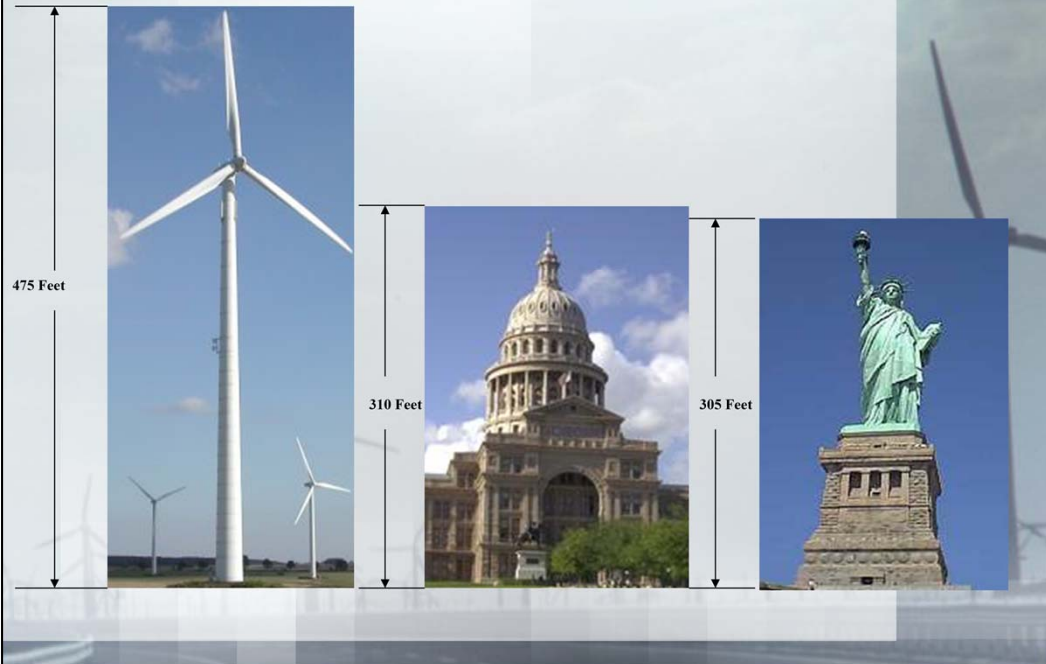
Program Areas – Land Management

- **Asset Management**
 - Acquisition and disposition of surface estates
- **Energy Resources**
 - Oil, gas, and mineral leasing
 - Pooling and unitization agreements
 - Management assistance of other agencies
 - State Energy Marketing Program (SEMP)
- **Professional Services**
 - Surveying services
 - Appraisal services
 - Management of easements, right-of-ways, and surface leases
- **Legal Services**
 - Preserve and protect PSF property rights
- **Coastal Resources**
 - Preserve and protect coastal lands

Energy Resources - Wind

- **Some Of The Factors**
 - You need wind
 - Proximity to a substation (and capacity)
 - Easements
- **Uplands**
 - Wind
 - GLO land is scattered (transmission)
 - GLO land is remote (transmission)
- **Off-Shore**
 - Windy (private companies are betting on this)
 - Proximity
 - GLO owns 10.35 miles of submerged land

A little Perspective



A Little Perspective



Kilowatt Hours

A background image of a wind turbine, showing the tower and nacelle against a light sky. The turbine is positioned on the right side of the slide, with its blades extending towards the left.

- **Average U.S. Household**
 - Uses about 10,655 kilowatt hours (kWh) annually
 - In Texas, it's more than 12,000 kWh
- **1 Megawatt Turbine**
 - 1 megawatt = 1,000 kilowatts
 - Produces 2.4 to 3.0 million kilowatt hours annually
 - Enough electricity for 250 to 300 homes
- **Installed Capacity**
 - U.S.: over 9,000 megawatts (2.7 million homes)
 - Texas: approx. 2,000 megawatts (600,000 homes)
- **Invested**
 - \$9 Billion in the U.S. (\$1 million per MW installed)
 - Offshore farm costs nearly double

Benefits of Wind Power

- **Inflation-Proof**
 - Zero cost of fuel (not affected by fuel prices)
- **Unlimited Domestic Energy Source**
- **No Secondary Threat To Public**
 - Radioactivity, spills, breach of dams
- **Yearly Displacement By A 100 Megawatt Wind Farm**
 - 384,000,000 pounds of CO₂
 - 1,800 pounds of sulfur dioxide
 - 342,000 pounds of NO_x
 - 30,000 pounds of VOCs
 - 225,000,000 gallons of water
- **No Fuel To Mine, Transport, Or Store**
- **No Waste**
- **Royalties For The PSF**



Consideration



- **Challenges**

- **Off-shore projects are time & capital intensive**
- **Wind resources are uncertain**
- **Find the money**
- **Acquire the land**

- **Solution**

- **Progressive consideration provisions**
 - **Annual royalty**
 - **Production royalty**

Force Majeure, Min Royalty & QICP

- **Challenges**
 - Equipment supply and demand issues
 - Weather concerns
- **Solution**
 - Leniency provisions dictated by situations beyond Lessee's control
- **Force Majeure**
 - General provision
 - Extension for natural disasters
- **Minimum Royalty**
 - Pro-rata during Force Majeure
 - Qualified Interruption of Commercial Production
 - Equipment related interruption

Term

- **Challenges**
 - Research wind resources
 - Construct Project
 - Produce wind-generated electricity
- **Solution**
 - A two-phase lease
- **Research Phase**
 - Option to terminate or continue to Phase II
- **Construction and Production Phase**
 - Construction period dependent on Project size
 - Long production period with possible extensions

Retained Acreage



- **Challenges**
 - **Difficult to determine wind easement**
 - **Do not know where the wind is**
 - **Equipment for project has yet to be designed**
- **Solution**
 - **Retained acreage provision that encompasses the wind easement**
 - **Determined prior to construction by reasonable industry standards**

Reservations



- **Challenges**

- Retain exclusive right to wind
- Prevent others from damaging project

- **Solution**

- Reasonable accommodations by Lessees
- **Most troublesome Provision**
 - GLO does not own the wind; only the land
 - Enforcement issue (notification)

Miscellaneous

A large, semi-transparent image of a wind turbine is positioned on the right side of the slide, serving as a background for the text.

- **Removal Provision**
 - Lessee must give a removal deposit to assure removal of improvements (note: ownership)
- **Environmental**
 - Assure that lessee is balancing the bottom line with environmental concerns
- **Public Records**
 - Make lessee aware that the GLO's records are subject to disclosure
- **Reports**
 - Gather all information from lessee, including wind data, while balancing public records requirement
- **Rights of Lender**
 - Giving the Lessee the ability to finance the project without giving away the farm

A little Perspective

