HOUSE COMMITTEE ON ENERGY RESOURCES
TEXAS HOUSE OF REPRESENTATIVES
INTERIM REPORT 2004

A REPORT TO THE
HOUSE OF REPRESENTATIVES
79TH TEXAS LEGISLATURE

REPRESENTATIVE BUDDY WEST
CHAIRMAN

COMMITTEE CLERK
LISA POWERS

Committee On
Energy Resources

January 10, 2005

Representative Buddy West
Chairman

P.O. Box 2910
Austin, Texas 78768-2910

The Honorable Tom Craddick
Speaker, Texas House of Representatives
Members of the Texas House of Representatives
Texas State Capitol, Rm. 2W.13
Austin, Texas 78701

Dear Mr. Speaker and Fellow Members:

The Committee on Energy Resources of the Seventy-Eighth Legislature hereby submits its interim report including recommendations and drafted legislation for consideration by the Seventy-ninth Legislature.

Respectfully submitted,

Representative Buddy West, Chairman

Rep. David Farabee

Rep. Gabi Canales

Rep. Joe Crabb

Rep. Dianne White Delisi

Rep. Elizabeth Ames Jones

Rep. Bill Keffer

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HOUSE COMMITTEE ON ENERGY RESOURCES

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2. Examine the benefits and challenges associated with alternative forms of energy generation technologies, such as wind and hydrogen fuel cells, and what if any state government involvement should be considered. (Joint Interim Charge with Regulated Industries Committee)

3. Evaluate current bonding requirements for oil and gas operators and explore alternative methods of financial security that would balance the economic interests of small oil and gas producers with environmental concerns.

4. Monitor the agencies under the committee's jurisdiction.

CHARGE: (LNG infrastructure and imports)

Assess the development of new exploration activities and maintenance of current production of natural gas. Evaluate opportunities to expand infrastructure for liquified natural gas (LNG) in Texas and explore the feasibility of LNG imports into Texas.

DISCOVERY AND DETERMINATION OF THE COMMITTEE:

Natural gas continues to be the economic and environmental fuel choice of the U.S., which has a demand that cannot be met solely by North American production. Currently 96% of the world's proven reserves are outside of North America, while the U.S. is consuming about 25% of the world's annual natural gas production.

In Texas, natural gas production is peaking. Development of additional natural gas supplies to meet current demands are needed.

In the past, liquified natural gas (LNG) imports have contributed less than 1% to the U.S. supply, primarily due to low gas prices and the relatively high cost of LNG. Both of the circumstances have changed. Natural gas prices have risen and are expected to continue to rise. Also, the cost of producing and transporting LNG has significantly decreased due to new technology.

These two factors now make LNG an excellent stabilizer for the price of natural gas. The Natural Petroleum Council has projected that LNG imports will grow to become 14-17% of the U.S. natural gas supply by 2025.

Texas could serve as an excellent host to LNG terminals, because it has a sophisticated pipeline infrastructure and adequate port access. Currently, Texas has seven proposed LNG terminal facilities in some phase of the permitting process.

Safety of these facilities creates the greatest concern. Currently, various agencies assume jurisdiction over sectors of the LNG industry. The Federal Energy Regulatory Commission (FERC) primarily has authority over the permitting process for onshore terminals. FERC, in conjunction with the U.S. Department of Transportation, performs safety inspections and enforces federal safety standards. The U. S. Coast Guard has jurisdiction over all marine operations on LNG ships in the U. S. waters and at LNG offshore terminals. The Environmental Protection Agency (EPA), the U.S. Fish and Wildlife Service, and the Army Corps of Engineers all share regulatory responsibilities for onshore terminals in their respective areas of regulation. The Occupation Safety and Health Administration oversees workplace safety for LNG facilities.

RECOMMENDATIONS:

1. **Encourage continued production of marginal low pressure wells (defined by a measured threshold) by exempting those wells from the 7.5% severance tax.**

The majority of Texas' low pressure and marginal well bear the full burden of the 7.5% severance tax. Removing this financial burden could well prevent producers from shutting in these wells.

2. **Assure coordination of agency LNG permitting activities.**

To reduce permitting lead time, the Committee recommends streamlining the permitting process by sharing data and findings, holding concurrent reviews, and setting review deadlines.

3. **Encourage expeditious LNG permitting.**

Expediting the project approval process through all agencies with jurisdiction is critical. So far, the FERC approval process is working. Adding additional bureaucratic layers would be burdensome to an already complicated process. Safety and security should never be compromised.

4. **Establish LNG public education initiative.**

There has been no organized education initiatives for Texas communities where LNG terminals and facilities may be located. This has resulted in some misperceptions which could result in public opposition delaying and/or jeopardizing the construction of terminals. Education should emphasize understanding of safety, historical performance, and the critical role that LNG can play in the future of energy supply and Texas economic development.

CHARGE: Examine the benefits and challenges associated with alternative forms of energy generation technologies, such as wind and hydrogen fuel cells, and what if any state government involvement should be considered. (Joint Interim Charge with Regulated Industries Committee)

DISCOVERY AND DETERMINATION OF THE COMMITTEE:

Currently, oil and natural gas is and will continue to be the leading energy resource for Texas. However, diversification of energy resources in the form of renewable and alternative fuel utilization is important for conservation, emission reduction, and economic development.

Alternative and renewable energy generation makes up less than 3% of the current energy mix in Texas.

Technology	**Total MWH 2003 Generation**	**Percent of Alternative/ Renewable Market**
Wind	2,515,482.2	85.30%
Hydro	239,683.7	8.13%
Landfill gas	193,701.4	6.56%
Solar	219.9	.001%
Biomass	0	0%

Wind Energy
Wind power is a clean source of energy and is a promising alternative to the use of fossil fuels. In the past, wind power costs were almost 10 times the price of natural gas. Recent federal tax credits, regulatory incentives, technological improvements, and rising prices of oil and gas have contributed to make wind energy economically competitive.

The Production Tax Credit (PTC) is a 1999 federal incentive that rewards production of wind energy. It has been set at 1.5 cents per kilowatt-hour (kWh) but is indexed for inflation. The current PTC is 1.8 cent/kWh. The goal for renewable energy enacted by SB7; Renewable Portfolio Standards (RPS) specified that 2,000 Megawatts of new renewable capacity would be built by 2009. Texas is currently five years ahead of this goal.

Wind energy presents both benefits and challenges.

Benefits of wind power:

1. Emission free
2. Uses no water

3. Provides jobs, school district property taxes, and landowner royalties
4. Stable price
5. No fuel cost
6. Federal Tax Credits (FTC) of 1.8 cents per kWh allow wind energy to be competitively priced

Wind Energy Challenges:

1. Lack of transmission capabilities
2. Wind is intermittent
3. Wind energy presents operational difficulties for ERCOT
4. Source is often located in remote areas distanced from the largest consuming load centers

By far the greatest challenge for increases in wind energy is lack of transmission capabilities from the area of generation (mostly rural West Texas) to areas needing energy (urban Texas cities.) Investors have difficulty finding financing for projects due to the uncertainty of timely recovery of their costs.

Ethanol and Biodiesel
Biodiesel is a clean burning alternative, domestically produced renewable energy resource. It is produced by separating glycerin from fat or vegetable oil, creating two products; biodiesel and glycerin. Biodiesel can be used in compressed-ignition (diesel) engines with little or no modifications and is a simple to use, biodegradable, nontoxic, and essentially free of sulfur and aromatics.

Hydrogen Fuel Cells
Hydrogen fuel cells use chemical energy of hydrogen to generate electricity without combustion or pollution. The by-products produced are only water and useful heat. Hydrogen fuel cells have the inherent capability to power cars, trucks, and buses, along with, providing energy for businesses, homes, and factories by using clean energy.

RECOMMENDATIONS :

1. FTCs have made wind energy economical. The market should be allowed to balance supply and demand. Further study, including a cost analysis should be performed to determine if the RPS for wind energy should be increased.

2. To overcome transmission obstacles, the State should become proactive in the following ways:

a. Request the PUC to designate the planning, route, and permitting process as "prudent expenditures"to ensure timely cost recovery.
b. Request the PUC to identify "competitive wind zones."
c. Move the requirement for interconnection agreements to just prior to the construction phase.
d. Lower the standard of full utilization of transmission until just prior to construction commences.

CHARGE: Evaluate current bonding requirements for oil and gas operators and explore alternative methods of financial security that would balance the economic interests of small oil and gas producers with environmental concerns.

DISCOVERY AND DETERMINATION OF THE COMMITTEE:

Background Information:
Oil and gas operator financial assurance requirements and options were mandated by Senate Bill 310 of the 77th Legislature and put into effect March 2002. Those options included:

1. A bond, letter of credit, or cash deposit based on cumulative footage of the wells operated,
2. A bond, letter of credit, or cash deposit based on the number of wells operated,
3. A $1000 annual fee if an operator had 48 months of consecutive compliant operation,
4. A fee equal to 12.5 % of the otherwise applicable bond, letter of credit, or cash deposit.

Effective September 1, 2004, Options 3 and 4 were no longer available, and operators who currently practice these options are required to practice options 1 or 2 as their P-5 renewals become due. At the end of August, there were 503 active oil and gas operators who had not transitioned to one of the "bonded" options. Of these operators, 77 were exercising Option 3 and 426 were using Option 4. The renewals for these operators is spread evenly over the next 12 months. There is no data to suggest these operators will be able to transition to the alternative options. Common sense would suggest that if they could have exercised Option 1 or 2 that they would have, unless they could not readily supply a bond or letter of credit.

Universal Bonding
The unbonded operators only comprise about 8% of the total number of operators and less than 1% of the State's oil and gas production. They hold 3,425 wells, of this number 13.93% or 477 are inactive wells.

While the number of wells may seem insignificant, if these operators cannot provide financial assurance under options 1 or 2, the following possibilities exists:

1. they could plug their inactive wells
2. they could transfer production to a bonded operator
3. they could transfer their well to an aggregator
4. they could abandon their wells

If only a portion of these unbonded wells were abandoned, the burden of plugging would fall to the Oil Field Clean-up Fund which already has 15,000 wells in its abandoned well inventory. Since this fund is expected to see a decrease of $1.7 million in fees due to universal bonding, attempts should be made to prevent this possibility.

The current bonding program, even in its implemented universal capacity does not completely protect the state from the possibility of financial liability for abandoned wells. Currently a gap exists between money collected on bond or letters of credit versus the cost of plugging abandoned wells. For the fiscal year ending August 31, 2003 the Texas Railroad Commission (TRC) collected on 2 bonds and 6 letters of credit for a total of $535,575 with an estimated $2,296,757 plugging liability for 240 abandoned wells (based on $2.50/foot). For the current fiscal year, collections have been made on 12 letters of credit and 1 bond for a total of $571,929 with an estimated plugging liability of $1,759,505 for 225 wells (based on $2.50/foot). The TRC continues to pursue the responsible party for the additional cost of the plugging and clean-up.

Surety bonds have proven difficult to obtain by operators. The bond market has not lent itself to well plugging financial assurance; most primary bond writers are only writing bonds for large amounts or as an incidental. They are not seeking new business. In fact, 1/5 of companies are no longer writing bonds. As a result, some 2/3 of operators are choosing to furnish a letter of credit to provide financial security. That has resulted in $185.5 million being held by Texas financial institutions. This "captive capital" produces no revenue, but must considered a contingent liability by banks, and does sometimes inhibit an operator's loan capacity.
(addendums 1 and 2) This capital would better serve the financial industry and the oil and gas industry if it were used for industry projects rather than benign collateral.

RECOMMENDATIONS:

1. Continue the bonding program put in place by SB 310 insisting that all operators be financially accountable for wells and facilities.

2. Provide a legislative statute to accept well plugging insurance as an additional means of financial assurance.

3. Develop a plan providing incentives for voluntary well plugging.

4. Monitor well transfers, assessing transfer approval on the basis of average daily oil and gas production from the total of all active and inactive well. If the transfer would cause an operator's daily average to fall below an established threshold, the transfer would be disapproved and would necessitate additional financial assurance.

5. Identify precursors for well abandonment. Considerations could include compliance history, low average well production, and number of inactive wells. Early identification could alert the TRC and allow them to intervene before the well is abandoned.