OKLAHOMA’S ENERGY FUTURE

Securing Demand and Effectively Marketing our Domestic Natural Resources

Robert Wegener
Oklahoma Secretary of Energy
January 20, 2010
energy states such as Oklahoma, Texas and Louisiana “enjoyed much faster job growth prior to the recession, entered the recession much later and have posted better overall job growth in the current cycle. These states have also dominated the state job growth rankings since the start of the recession.”

Dr. Mark Snead, former Oklahoma State University economist, now with the Federal Reserve
“We need more from **all sources of domestic energy** to get America’s **economy on track** and growing again and to increase our energy security…Thus, **we need a multi-pronged approach that along with current sources includes renewable energy and increased energy efficiency.”

-J. Larry Nichols
Chairman, American Petroleum Institute and
Chairman and CEO Devon Energy Corporation
September 10, 2009 Testimony before Senate Finance Committee

“**Renewable energy and clean burning natural gas** are the **basis of a new strategy the world needs to create a cleaner and more secure future.”

- T. Boone Pickens and Ted Turner
CEO of BP Capital and Chairman of Turner Enterprises Inc.
August 16, 2009
If we want to protect the safety and economic security of our citizens, no city, no state, no nation will ever arrive at an alternative energy future without relying on domestic oil and natural gas.
Energy Consumption by End Use Sector

Source: Energy Information Administration:
2008 Annual Energy Review
Securing Demand for our Natural Resources

OK Power Supply No-brainers

• Natural Gas – the foundation; the baseload
• Wind
• Geothermal
• Demand-side Management/Efficiency

What about coal and nuclear???
Clean  Domestic  Abundant

Underutilized
U.S. End Uses of Natural Gas

- Electric Power Generation: 29%
- Industrial: 28%
- Residential: 21%
- Vehicle Fuel: 8%
- Commercial: 13%
- Operations Consumption: 1%

Source: EIA
Why Natural Gas?

• Abundant domestic supply supports increased utilization
• Cleanest Fossil Fuel Generation– 50% less CO2 than coal
• **Addresses scalability issue**: Only available backup for renewable generation
• **Challenges**
  – Price Volatility Requires Hedges
  – Policy challenges in DC
42% of all new generation capacity
Policy Support for Wind

• Public Policy has been a strong driver for wind development
• PTC extended through 2012
• Zero Water Use
• Primary driver - Renewable Portfolio Standard (RPS)
  – Mandate requiring utilities purchase a minimum level of electricity from renewable sources
  – Majority of states have adopted
  – KS is newest addition to the family
    • Lead to locating of Siemens manufacturing plant
Oklahoma – Economic Impacts
from 1000 MW of new wind development

Wind energy’s economic “ripple effect”

Direct Impacts
- Payments to Landowners: • $2.7 Million/yr
- Local Property Tax Revenue: • $6.4 Million/yr
- Construction Phase: • 1,800 new jobs
  • $189 M to local economies
- Operational Phase: • 250 new long-term jobs
  • $21 M/yr to local economies

Indirect & Induced Impacts
- Construction Phase: • 1,650 new jobs
  • $141 M to local economies
- Operational Phase: • 250 local jobs
  • $20 M/yr to local economies

Totals (construction + 20yrs)
- Total economic benefit = $1.16 billion
- New local jobs during construction = 3,500
- New local long-term jobs = 500

All jobs rounded to the nearest 50 jobs; All values greater than $10 million are rounded to the nearest million

Construction Phase = 1-2 years
Operational Phase = 20+ years
Renewable Portfolio Standards

29 states & DC have an RPS
6 states have goals
What should Oklahoma do??

- Consider RPS and Clean Energy Standards

- Look to Texas for an example
  - Adopted a “natural gas goal” AND a RPS in 1999.
    - 50 percent of new generation from natural gas
    - 10,000 MW of wind by 2015
Supply alone is not a sustainable solution to increased electric sector demand
Why DSM and Efficiency?

- Hedge to natgas price volatility
- Cost of additional supply
  - 1000 mw nuclear: $6 - 8 billion
  - 1000 mw coal: $2.5 billion…and rising
  - Renewables are important, but they are intermittent

Policy must address the utility disincentive
Diversity is critical, but we must keep the foundation strong
What's happening in DC?

• IDC and Percentage Depletion

• EPA endangerment decision

• Hydraulic Fracturing Debate re-ignited
  – NY Times Editorial
  – September 2009 EPA Report

• Natgas Act
  – Important provisions need to be protected
  – Stand-alone legislation needs a home
Helping DC

• Natgas Act
  – Preserve transferable tax credits – draw parallels to the wind industry
  – Support inclusion in new jobs legislation

• Hydraulic Fracturing
  – Empathize with groups concerned about water quality
  – Emphasize importance of state regulators and their increasing involvement
  – Consider disclosing fluid mixture to state regulators
How should we promote natgas?

• Address the misconception that natural gas is scarce
• Agree that carbon emissions need to be reduced
• Encourage alternative energy development
• Embrace energy efficiency and demand programs
• Address scale issue without criticizing alternatives
  – Focus message on utilizing gas as baseload
  – Criticism jeopardizes public perception
Summary

- Develop a multi-pronged approach with a natural gas foundation

- Embrace renewables and efficiency as hedges to price volatility and significant statewide economic development potential

- Address scale issues without criticizing alternatives
  - Focus message on utilizing gas as baseload
  - Criticism jeopardizes public perception

- Efficiency and Demand-management must be considered with traditional supply-side options
Natural Gas Wins the Policy War and Rigs Stay Active...