American Geosciences Institute
Critical Issues Forum
Forth Worth, Texas
November 19-20, 2014

America’s Increasing Reliance on Natural Gas: Benefits and Risks of a Methane Economy

Session 4 – Drivers of and Barriers to Natural Gas Development in North America
Figure 1. U.S. Natural Gas Production by Source (Historic and Projected)


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480,000 Miles of Existing Natural Gas and HL Pipelines In-Place Facilitating Shale Production
Most U.S. Unconventional Shale Resources Occurred in States With Existing Conventional Oil and Gas Regulatory Frameworks In-Place
Key Points: State Oil and Gas Regulation

- Diversity of geology, topography, work force, culture make states logical oil and gas regulators.
- States have historically been the primary regulators of oil and gas development.
- States are innovative, flexible, can rapidly respond to changes in technology.
- States work collaboratively as oil and gas resources cross state boundaries.
Primary Barriers to and Drivers of Natural Gas Development Challenge States

- Public Policy
- Regulatory
- Technology
- Environment
- Economic
States are rising to these challenges as laboratories for creative solutions and regulatory innovation ……
Governors’ letter of support

<table>
<thead>
<tr>
<th>Governor of Alabama</th>
<th>Governor of Utah</th>
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<tr>
<td>Robert Bentley</td>
<td>Gary R. Herbert</td>
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<td>Governor of Alaska</td>
<td>Governor of Montana</td>
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<td>Sean Parnell</td>
<td>John Hickenlooper</td>
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<td>Governor of Alaska</td>
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<td>Mary Fallin</td>
<td>Phil Bryant</td>
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<td>Governor of Oklahoma</td>
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<td>Tom Corbett</td>
<td>Steve Bullock</td>
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Partnership between IOGCC and GWPC

States First Initiative

Shaping the STATE of our energy future together.

Collaboration, Solutions,

Regulatory Leadership
Established by Congress in 1935

Governors of oil and gas producing states

Collectively representing the States

State led, Chaired by governors

- Governor Robert Bentley (Alabama) 2013
- Governor Phil Bryant (Mississippi) 2014
- Governor Gary Herbert (Utah) 2015

Promote conservation and efficient production of oil & gas while protecting health, safety and the environment
IOGCC 38 Member States

Note: Six Canadian Provinces are Affiliate Members
The national association of state groundwater protection programs
What is States First?

- Partnership between IOGCC and GWPC
- Platform demonstrating states continuing regulatory improvements
- Initiated by 14 IOGCC member Governors
- Announced by 2013 IOGCC Chairman
  Alabama Governor Bentley
PURPOSES OF THE INITIATIVE

1. Recognition of the state’s continuing regulatory improvements.
2. Provide a platform for open communication and sharing between state’s.
3. Develop best practices.
4. Assist states efficiently develop and implement regulatory solutions.
5. Contribute to Nation’s economic growth, national security and energy independence.
STATES FIRST INITIATIVE

Promoting and Documenting Continuous Regulatory Improvement

- Underground Injection Control
- Hydraulic Fracturing
- Inspector Training & Certification
- Effective Regulation through SOGRE
- Science, Technology and Information Transfer
STATES FIRST INITIATIVE

UNDERGROUND INJECTION CONTROL

• Peer Reviews of State Class II Regulatory Programs
• Consultation with States on Regulatory Improvements

EFFECTIVE REGULATION THROUGH SOGRE

• Peer Reviews and Consultations of Oil and Gas Regulatory Programs
• State to State Issue Focused Workshops and
  Utah Horizontal Well Spacing Workshop
STATES FIRST INITIATIVE

INSPECTOR TRAINING AND CERTIFICATION

- State Oil and Gas Inspector Training Program (Affiliated With Universities‘)
- State Oil and Gas Inspector Certification Program

INFORMATION, TECHNOLOGY AND SCIENCE TRANSFER

- Recently created Seismicity Task Force
- New report on state regulations to protect groundwater.
STATES FIRST INITIATIVE

HYDRAULIC FRACTURING

• Chemical Disclosure through Frac Focus
STATES FIRST INITIATIVE

GOALS

• Continuous Improvement
• Build Public Confidence
• Open Communications For States and Federal Agencies

• Empower states
• Educate Congress
• Inform Industry
Questions