Pipeline Infrastructure Task Force Meeting

July 22, 2015
1:00 – 4:00 pm

Susquehanna Rooms A & B
DEP Southcentral Regional Office
909 Elmerton Avenue
Harrisburg, PA
Unconventional Gas Wells Drilled, 2007 – 2015
### Marketed natural gas in the top 10 producing states (2011-12)

<table>
<thead>
<tr>
<th>Ranking</th>
<th>2011</th>
<th>2012</th>
<th>State</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>Texas</td>
<td>+5%</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>2</td>
<td>Louisiana</td>
<td>-2%</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
<td>3</td>
<td>Pennsylvania</td>
<td>+72%</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>4</td>
<td>Oklahoma</td>
<td>+7%</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>5</td>
<td>Wyoming</td>
<td>-6%</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
<td>6</td>
<td>Colorado</td>
<td>+4%</td>
</tr>
<tr>
<td>7</td>
<td>5</td>
<td>7</td>
<td>Fed. offshore</td>
<td>-17%</td>
</tr>
<tr>
<td>8</td>
<td>8</td>
<td>8</td>
<td>New Mexico</td>
<td>-2%</td>
</tr>
<tr>
<td>9</td>
<td>9</td>
<td>9</td>
<td>Arkansas</td>
<td>+7%</td>
</tr>
<tr>
<td>10</td>
<td>11</td>
<td>10</td>
<td>W. Virginia</td>
<td>+37%</td>
</tr>
</tbody>
</table>

### Gross withdrawals from shale gas wells in selected states (2007-13)

- **Texas**
- **Pennsylvania**
- **rest of United States**
- **Louisiana**
- **Arkansas**

Gross withdrawals are measured in billion cubic feet per day (BCF/d) and are calculated as the product of flow rates and cumulative days active.
Pipelines

- Upstream (Exploration and Production) - Gathering Lines
- Midstream (Processing, Transportation, Storage) - Midstream and Transmission Lines
- Downstream (Processing and Refining)
Existing Pipelines

Note: Map is generated from ArcGIS Online and the lines are approximations and generalizations.
Proposed Pipelines

Note: Map is generated from ArcGIS Online and the lines are approximations and generalizations.
Existing and Proposed Pipelines

Note: Map is generated from ArcGIS Online and the lines are approximations and generalizations.
Gathering Lines – Bradford County

Note: Map is generated from ArcGIS Online and the lines are approximations and generalizations.
In the next decade, Pennsylvania will undergo a substantial pipeline infrastructure build-out to transport gas and related byproducts from thousands of wells throughout the state. The unprecedented build-out creates an opportunity for the Commonwealth to engage stakeholders in a collaborative process to achieve a world-class pipeline infrastructure system.

A stakeholder-driven effort, the Pipeline Infrastructure Task Force (PITF) will develop policies, guidelines and tools to assist in pipeline development (including planning, permitting and construction) as well as long-term operation and maintenance.

This will be a transparent process, and will entail close coordination with federal agencies, state partners, local governments, industry representatives, landowners and environmental advocates.
### External Stakeholders

Agriculture  
Conservation and Natural Resources  
Conventional Oil and Gas  
County Government  
Emergency Preparedness  
Environmental Protection  
Historical, Cultural and Tribal  
Local Government  
Natural Gas End User  
Pipeline Industry  
Pipeline Safety and Integrity  
Unconventional Oil and Gas  
Workforce and Economic Development

### State Government

Department of Environmental Protection  
(Chair)  
Department of Agriculture  
Department of Community and Economic Development  
Department of Conservation and Natural Resources  
Department of Health  
Department of Transportation  
Emergency Management Agency  
Fish and Boat Commission  
Game Commission  
Governor’s Office of Policy and Planning  
Historical and Museum Commission  
Public Utility Commission  
Turnpike Commission

### Legislative Appointments

President Pro Tempore of the Senate  
Minority Leader of the Senate  
Speaker of the House  
Minority Leader of the House

### Federal Government

Federal Energy Regulatory Commission  
U.S. Army Corps of Engineers  
River Basin Commission

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### Workgroups
Objectives and Responsibilities

The purpose and goals of the Task Force are to define a series of best practices and recommendations to:

• Plan, site and route pipelines in ways that avoid or reduce environmental and community impacts
• Amplify and engage in meaningful public participation
• Maximize opportunities for predictable and efficient permitting
• Employ construction methods that reduce environmental and community impact
• Ensure pipeline safety and integrity during operation of the pipeline

The Task Force will provide a final report detailing its findings to Governor Tom Wolf.
Workgroups

Task Force

- Agriculture
- Conservation and Natural Resources
- County Government
- Emergency Preparedness
- Environmental Protection
- Historical, Cultural and Tribal
- Local Government
- Natural Gas End Use
- Pipeline Safety and Integrity
- Public Participation
- Siting and Routing
- Workforce and Economic Development
Workgroups will:

- Establish the framework of information gathering and productive discussion around best management practices within the workgroup focus area
- Conduct a series of working sessions with workgroup members and other stakeholders to fully understand the issues related to pipeline infrastructure development within the context of the workgroup focus area
- Develop a series of recommended best practices and other recommendations within the workgroup focus area
- Report recommendations to the Task Force for additional discussion, consideration, and assimilation into the final report to the Governor
Workgroup Assignments

**Agriculture:** Recommend best practices related to avoiding, minimizing, and mitigating the impacts of pipeline infrastructure development on the agricultural sector.

**Conservation and Natural Resources:** Recommend best practices related to avoiding, minimizing, and mitigating the impacts of pipeline infrastructure development on species, habitat, and wildlife, scenic vistas and aesthetics, recreational values, and State Forest and State Game Lands.

**County Government:** Recommend best practices to harmonize pipeline infrastructure development with county land use planning.
Emergency Preparedness: Recommend best practices related to on-the-ground first response and develop adequate and appropriate training programs for first responders in communities impacted by pipeline infrastructure development.

Environmental Protection: Recommend best practices related to the protection of land, water and air during pipeline infrastructure development and identify ways to maximize opportunities for predictable and efficient permitting across state and Federal jurisdictions.

Historical, Cultural and Tribal: Recommend best practices related to the protection of historic and cultural resources and identify ways to maximize tribal involvement in pipeline infrastructure development.
Local Government: Identify important issues to local governments across the Commonwealth before, during, and after pipeline infrastructure development, and identify best practices in engaging and communicating with local governments as part of that process.

Natural Gas End Use: Identify potential expansion options in PA for end uses of the gas, including energy technologies such as combined heat and power (CHP) and natural gas fuel cells that can benefit Pennsylvania businesses and spur the creation of microgrids; economic and regulatory obstacles; and methods by which communities that are currently not served by natural gas – particularly those in proximity to the resource – can avail themselves of access to it.
Workgroup Assignments

**Pipeline Safety and Integrity:** Identify best practices for construction (including construction inspection), pipeline testing and inspection, and long term operations and maintenance to ensure long term pipeline safety and integrity. Special consideration should be given to Leak Detection and Repair (LDAR) to minimize methane emissions from pipeline infrastructure.

**Public Participation:** Recommend best practices to amplify and engage in meaningful public participation in the pipeline infrastructure development process.

**Siting and Routing:** Recommend best practices related to planning, siting and routing pipelines in ways that avoid, minimize, or mitigate environmental and community impacts from pipelines across the Commonwealth.
Workforce and Economic Development: Consider the workforce and economic development potential for the Commonwealth related to pipeline infrastructure development. Working collaboratively with the Natural Gas End Use Workgroup, this workgroup will focus on identifying approaches to creating opportunities for existing and new Pennsylvania businesses and manufacturers to utilize natural gas, including but not limited to business recruitment strategies; encouraging the creation of offtake points for local economic development during pipeline planning; policy/regulatory/financial obstacles; developing a skilled workforce.
Workgroup Chairs

- Chair must lead the work
- The number and frequency of workgroup meetings will be based on workgroup preferences but should be at least monthly
- A DEP employee will serve as a liaison to each workgroup, and provide content support
- Workgroup members are responsible for research, note-taking, and report writing
The goal of each workgroup is to deliver to the task force a set of recommendations and recommended best practices, as well as appropriate supporting materials to meet the workgroup’s specific assignment.

Final workgroup recommendations are to be completed and submitted by 12:00 pm on Monday, November 2, 2015.
Operating Rules

- Robert’s Rules of Order
- Strive for Consensus
Task Force Standard Meeting Template

- Welcome and Introductions
- Presentation(s) to inform/educate members
- Workgroup Reports
- Discussion
- Public Comment
  - Individual – 2 minutes
  - Group – 5 minutes
- Next Steps
<table>
<thead>
<tr>
<th>Event</th>
<th>Date/Time</th>
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<tbody>
<tr>
<td>Kick-off meeting of Task Force</td>
<td>Wednesday, July 22: 1:00 pm – 4:00 pm</td>
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<td>Kick-off meetings for each of 12 workgroups completed</td>
<td>Friday, July 31</td>
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<tr>
<td>Meeting of Task Force</td>
<td>Wednesday, August 26: 1:00 pm – 4:00 pm</td>
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<td>Meeting of Task Force</td>
<td>Wednesday, September 23: 1:00 pm – 4:00 pm</td>
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<td>Meeting of Task Force</td>
<td>Wednesday, October 28: 1:00 pm – 4:00 pm</td>
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<td>Deadline for all workgroup reports</td>
<td>Monday, November 2 by 12:00 pm</td>
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<tr>
<td>Meeting of Task Force – Discussion of first draft of report</td>
<td>Wednesday, November 18: 1:00 pm - 4:00 pm</td>
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<td>Public Comment Period</td>
<td>December</td>
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<tr>
<td>Meeting of Task Force – Review of final draft of report</td>
<td>Wednesday, January 13, 2016: 1:00 pm - 4:00 pm</td>
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<tr>
<td>Presentation of final report to Governor Tom Wolf</td>
<td>February 2016</td>
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Questions?
Thank you