Committee On Gas
NARUC
Summer Committee Meetings

Committee On Gas

PHMSA NUTS & BOLTS – PART I
PHMSA Serious Pipeline Incidents

PHMSA Pipeline Incidents: Multi-Year Averages (1996-2015)
Incident Type: Serious  System Type: ALL  State: ALL

<table>
<thead>
<tr>
<th>Incident Count</th>
<th>3 Year Average</th>
<th>5 Year Average</th>
<th>10 Year Average</th>
<th>20 Year Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Year Average - (2013-2015)</td>
<td>27</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Year Average - (2011-2015)</td>
<td>28</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 Year Average - (2006-2015)</td>
<td>33</td>
<td>13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 Year Average - (1996-2015)</td>
<td>43</td>
<td>17</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fatalities</th>
<th>3 Year Average</th>
<th>5 Year Average</th>
<th>10 Year Average</th>
<th>20 Year Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Year Average</td>
<td>12</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Year Average</td>
<td>58</td>
<td>10 Year Average</td>
<td>59</td>
<td></td>
</tr>
<tr>
<td>10 Year Average</td>
<td>13</td>
<td>20 Year Average</td>
<td>67</td>
<td></td>
</tr>
</tbody>
</table>

PHMSA Pipeline Incidents: Count (1996-2015)
Incident Type: Serious  System Type: ALL  State: ALL

<table>
<thead>
<tr>
<th>2016 Year-To-Date</th>
<th>Incidents</th>
<th>Fatalities</th>
<th>Injuries</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8</td>
<td>2</td>
<td>9</td>
</tr>
</tbody>
</table>

Incident Count

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>65</td>
<td>59</td>
<td>68</td>
<td>63</td>
<td>61</td>
<td>62</td>
<td>60</td>
<td>70</td>
<td>63</td>
<td>61</td>
<td>59</td>
<td>60</td>
<td>62</td>
<td>63</td>
<td>61</td>
<td>59</td>
<td>60</td>
<td>62</td>
<td>63</td>
<td>61</td>
</tr>
</tbody>
</table>
PHMSA Serious Transmission Incidents

PHMSA Pipeline Incidents: Count (1996-2015)
Incident Type: Serious  System Type: GAS TRANSMISSION  State: ALL  Offshore Flag: ALL
PHMSA Serious **LDC** Incidents

PHMSA Pipeline Incidents: Count (1996-2015)  
Incident Type: Serious  System Type: GAS DISTRIBUTION  State: ALL
PHMSA Serious **Gathering** Incidents

**PHMSA Pipeline Incidents: Count (1996-2015)**
- **Incident Type:** Serious
- **System Type:** GAS GATHERING
- **State:** ALL
- **Offshore Flag:** ONSHORE

The graph shows the incident count from 1996 to 2015 for serious gathering incidents. The highest incident count was observed in 2000, 2002, 2004, 2005, and 2006, with a peak of 1.0.
PST Indicators of Interest

Which one of the following best describes why you are interested in pipeline safety?

<table>
<thead>
<tr>
<th>Reason</th>
<th>All Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am a landowner with a pipeline on my land, or proposed to be on my land</td>
<td>21 (9%)</td>
</tr>
<tr>
<td>I live or work very near a pipeline</td>
<td>18 (8%)</td>
</tr>
<tr>
<td>I think greater pipeline safety is key to being able to expand energy production, which is important to the economy</td>
<td>5 (2%)</td>
</tr>
<tr>
<td>I work for a local government that needs to ensure the safety of our citizens</td>
<td>13 (5%)</td>
</tr>
<tr>
<td>I have concerns that pipelines enable greater production of fossil fuels, and that such production can have serious impacts on our health, waters and climate</td>
<td>41 (17%)</td>
</tr>
<tr>
<td>I have concerns about the materials pipelines carry and the potential effects on the public and environment should they be released</td>
<td>54 (23%)</td>
</tr>
<tr>
<td>There is a new pipeline proposed nearby, and many concerns have been raised</td>
<td>46 (19%)</td>
</tr>
<tr>
<td>I am concerned about effects pipelines may have on First Nations rights and cultural heritage</td>
<td>4 (2%)</td>
</tr>
<tr>
<td>I work in the pipeline industry and safety of our employees and the public is a high priority</td>
<td>12 (5%)</td>
</tr>
<tr>
<td>I am a state or federal pipeline safety regulator and I have made it my career to keep people and the environment safe.</td>
<td>12 (5%)</td>
</tr>
<tr>
<td>Other (Please Specify)</td>
<td>14 (6%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Standard Deviation</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.34</td>
<td>240</td>
</tr>
</tbody>
</table>
Regulatory Impact Perspective

What is expected from new PHMSA regulations?

Tal Centers, Jr.
VP Safety & Gas System Integrity
CenterPoint Energy

July 25, 2016
DISCLAIMER

This presentation is being provided for informational purposes only and does not purport to be comprehensive and is subject to change. Neither CenterPoint Energy, Inc., together with its subsidiaries and affiliates (the “Company”), nor its employees or representatives, make any representation or warranty (express or implied) relating to this information. By reviewing this presentation, you agree that the Company will not have any liability related to this information or any omissions or misstatements contained herein. You are encouraged to perform your own independent evaluation and analysis.
Electric Transmission & Distribution:
- Electric utility operation with ~2.3 million metered customers
- ~12,900 km² service territory in and around Houston
- 18th largest U.S. investor-owned electric utility by customer base\(^1\)
- 81,839,060 MWh delivered in 2014

Gas Operations
- 10 gas distribution jurisdictions in six states with ~3.4 million customers
- 5th largest U.S. gas distribution company by customer base\(^1\)
- Recently ranked 1\(^{st}\) among the largest Midwest Region natural gas utilities in the U.S. for operational satisfaction in a 2014 Cogent energy study
- Gas distribution company and Energy Services company delivered ~1.1 Tcf of natural gas in 2014

\(^1\) As of Dec. 31, 2013 per AGA and EBI
<table>
<thead>
<tr>
<th>Regulation</th>
<th>Areas of Change</th>
<th>CNP Impact</th>
</tr>
</thead>
</table>
| Safety of Gas Transmission & Gathering Line Rules (NPRM) | • New definitions  
• Retroactive requirements *(elimination of grand father clause)*  
• Unintended impacts to distribution portions of the code *(corrosion, cathodic protection, general record requirements)*  
• Material verification  
• Maximum allowable operating pressure (MAOP) verification and determination  
• Spike Tests  
• New and prescriptive assessments and repair criteria for transmission assets  
• New moderate consequence areas (MCA's)  
• Management of Change (MOC)  
• Increased preventative and mitigative measure and inspections  
• MAOP exceedance reporting  
• Prescriptive use of inspection technology | O&M  
*Note: Changes are much more prescriptive and a departure from the congressional mandates and risk based approach.* |
## Additional Regulations

<table>
<thead>
<tr>
<th>Regulation</th>
<th>Primary Impact / Change</th>
<th>CNP Impact</th>
</tr>
</thead>
</table>
| Pipeline Safety Management Systems - API RP 1173          | • Comprehensive 10 element program for enhancing pipeline safety  
• All levels, all departments, “top executives” to the field  
• Periodic meetings with top executives on key metrics, plan execution, direction, etc…  
• Comprehensive review of Management of Change (MOC)                                                            | O&M CapEx  |
| National Pipeline Mapping System Information              | • Data gathering specific to transmission facilities in a geographic format  
• Original request from PHMSA (2004) was broad and only wanted 500’ accuracy; now specific details are requested.                                                                                           | Unknown    |
| Plastic Pipe (NPRM)                                       | • Data accuracy and process changes  
• Tracking and Traceability                                                                                                                                                    | CapEx      |
| Excess Flow Valves beyond Single Family Homes (NPRM)      | • Expands the use of EFVs to a new customer class                                                                                                                                                                  | CapEx      |
| Miscellaneous Final Rule-Construction Advisory Task Group on 192.305 | • Unknown                                                                                                                                                                                                              | Unknown    |
| Operator Qualification, Cost Recovery, Accident & Incident Notification, and Other Pipeline Safety Changes (NPRM) | • Expands Operator Qualification for New Construction  
• Effectiveness of OQ Programs  
• Definition of “Covered Task”  
• Accident and Incident Notification  
• Farm Taps-managing risk on farm taps                                                                                     | O&M        |
| Environmental                                             | • Focuses on reducing methane emissions through replacements and aggressive leak repair                                                                                                                                   | CapEx      |
Expected Consequences

- Pressure on rates and rate case frequency due to:
  - Increased O&M for compliance activities
  - Increased Capital for accelerated replacements
  - Increased transportation costs from suppliers

- Pressure on Customer Service due to:
  - Increased customer interruptions from gas suppliers
  - Increased public inconvenience from accelerated pipe replacements and service interruptions

- Increased competition and access to equity markets
  - Pressure to achieve allowed ROE’s

- Constraints for qualified labor
  - Aging workforce
  - Increased competition for limited resources
Increased Exposure to Regulatory Lag

Regulatory lag is the time period between when a public utility’s cost of service changes and when the regulatory agency adjusts rates to reflect that change.

Regulatory lag hurts the utility’s ability to fully recover its cost of service.
States with Accelerated Infrastructure Cost Recovery
KEYS TO SUCCESS
Supportive Framework

We need a regulatory framework that affords us a reasonable opportunity to fully recover our cost of providing utility service, including the cost of capital, on a timely basis.

We need statutes, rules, and regulations that produce a predictable regulatory environment.

We need our exposure to regulatory risk to be commensurate with the return we receive on our investment.
Positive Relationships

To achieve our goals, we must develop positive relationships with our regulators, both individually and as a company.

We must work collaboratively with our regulators, to the greatest extent possible, to develop win-win solutions that align our interests with the public interest.
Path Forward

- Early recognition of cost recovery to incentivize investment
- Forward looking cost recovery and/or true up mechanisms to account for unknowns
- Reduce customer impacts by smoothing rates
- Supply diversity to avoid interruptions

*Examples of successful approaches:*
- Revenue and Expense Trackers
- Surcharges to Rates
- Deferral Accounts
- Rate Stabilization Plans
Questions
Committee On Gas

PHMSA NUTS & BOLTS – PART I