Pacific Gas and Electric Company
Pipeline Safety Workshops - Alamo

May 29, 2018
MULTIPLE LAYERS OF PROTECTION

Leak Surveys
Pipeline Patrol
Corrosion Prevention

Integrity Assessments
Valve Automation and Replacement
Community Pipeline Safety Initiative
## Pipeline Safety Initiatives – Contra Costa County

<table>
<thead>
<tr>
<th>Progress Since 2011</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission pipeline Maximum Allowable Operating Pressure (MAOP) validation complete</td>
<td>100%</td>
</tr>
<tr>
<td>Transmission miles surveyed using high-precision GPS</td>
<td>100%</td>
</tr>
<tr>
<td>Transmission pipeline strength tested</td>
<td>46 miles</td>
</tr>
<tr>
<td>Transmission pipeline replaced (includes pipeline upgraded for in-line inspection)</td>
<td>33 miles</td>
</tr>
<tr>
<td>Valves automated on transmission pipelines</td>
<td>43 valves</td>
</tr>
<tr>
<td>PG&amp;E emergency exercises conducted</td>
<td>71 exercises</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Planned Initiatives</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission miles to strength test</td>
<td>2.7 miles</td>
</tr>
<tr>
<td>Transmission miles to replace</td>
<td>3.1 miles</td>
</tr>
<tr>
<td>Valves to automate</td>
<td>2 valves</td>
</tr>
</tbody>
</table>

\(^1\) Data valid as of 05/23/2018, unless stated otherwise. Numbers in this table are approximate.
• **Line:** Distribution Feeder Main (DFM) 3017-01

• **Maximum Allowable Operating Pressure (MAOP):** 365 pounds per square gage (psig)

• **Diameter:** 8 inches

• **Material:** Steel


• **Miles of Pipeline:** approx. 2 miles

• **Miles of HCA:** approx. 4,000 feet

• **Integrity Assessments:** 2012 Strength Test, Direct Assessment in progress (2018)
• **Committed to emergency preparedness** and continuous improvement of our emergency response and recovery capabilities

• Emergency Preparedness team develops and maintains **annual emergency response plans, training, exercises, and evaluation activities** in accordance with:
  - Incident Command System (ICS)
  - National Incident Management System (NIMS)
  - Standardized Emergency Management System (SEMS)
  - Homeland Security Exercise and Evaluation Program (HSEEP) April 2013 principles

• **Work closely with first responders** to share information on gas pipelines and develop gas emergency response plans to protect community safety
  - Coordinate annually to conduct scenario-based table top and field exercises
  - Attend monthly meetings with fire chiefs across the county to discuss PG&E gas safety and emergency response efforts
January 2014 - April 2018
(Excavation Damages / 1,000 Excavation Tickets Received)

January 2014 - April 2018
(Excavation Damages / 1,000 Excavation Tickets Received)