R.15.01.008 ARB/CPUC Workshop: Targets, Compliance and Enforcement
ISP Presentation

April 12, 2016

Independent Storage Providers – ISPs:

Central Valley Gas Storage, LLC
Gill Ranch Storage, LLC
Lodi Gas Storage, LLC
Wild Goose Storage, LLC
Initial design and build out of our facilities focused on eliminating potential emission sources:

- No high-bleed gas pneumatic devices; generally instrument air systems installed instead of gas pneumatics
- Instead of natural gas starters, most compressors use pneumatic air or electric motors
- Ultrasonic meters at the compressor station and at each wellhead in place of orifice meters
- Gas from dehydration is routed to the reboiler firebox for fuel
- Electric motor-driven triethylene glycol pumps rather than natural gas-driven pumps
**ISPs support methane emission reduction**

- Operations are actively managed to prevent and address leaks:
  - Daily facility walk-through of compressor stations & well sites
  - Facilities are staffed or monitored 24 hours per day
  - Robust SCADA system helps identify/isolate/minimize leaks

- Identified leaks are repaired in a timely manner based on size, hazard and effect on operations

- ISPs believe it is appropriate to consider additional, reasonable, cost-effective best practices that result in meaningful methane emission reduction
ISPs have an excellent track record of low emission levels

Total California Emissions (Mscf)

3,880,652

30,660

Total Emissions

ISPs
Non-Graded Leak and Emission Sources

- Compressor station - leaks from valves, connections, vents, meters, packing, blowdowns, etc.
- Customer Meters & PHMSA "Minor" Releases
- Distribution Above grade M&R Station Leaks (assume > 300 psi)
- Distribution Below grade M&R Station Leaks (> 300 psi)
- Distribution Below grade M&R Station Leaks (100 - 300 psi)
- M&R Stations - Farm Taps & Direct Industrial Sales
- M&R Stations - Transmission-to-Transmission Company Interconnect
- Storage - control vents, leaks, blowdowns, storage compressors
- Transmission M&R Station Leaks
- Dehydrator Vents - Storage
- Distribution M&R Station Blowdowns
- Distribution Main & Service Pipeline Blowdowns
- Pressure Relief Valve Releases - Distribution Mains and Regulator emissions
- Transmission Blowdowns and M&R Station Blowdowns
ISP Emission Composition

2015 Mcf

Total for all ISPs = 30,660 Mcf

65% of all emissions from blowdowns as required for reliability and safety
ISPs have limited opportunities to further reduce emissions

- Storage only operations mean ISPs do not have opportunities to reduce emissions by fixing leaking mains, services or meter sets.

- ISPs remain focused on maintaining existing success in keeping emissions to a minimum and further meaningful methane reductions that can be implemented cost-effectively.

- Unlike others, ISPs cannot recover costs for leak reduction implementation from customers.
ISPs believe overall target structure must reflect reduction opportunities

- Targets should be industry wide and by emission source/equipment type and not by company, with most cost effective measures taken first

- Overall industry objective is to reduce by 40% – this cannot equate to 40% for every company or facility because remaining opportunities to reduce are different, as some companies have already taken steps to reduce emissions

- Some industry players with better reduction opportunities may need to reduce by more than 40% to yield the best chance of meeting the overall state objective
Small utilities reduction targets should balance cost to implement & ability to achieve reductions

- Consider existing emissions levels
- Potential actual (vs. percentage) reductions
- Economies of scale
- Synergies with other activities
- Unintended consequences
- Impact on reliability
- Cost–effectiveness
Disproportionate Impact on Small Utilities

- The cost of mandatory compliance and enforcement may unfairly impact small companies:
  - Cost of training
  - Structure of enforcement mechanisms
  - Limited opportunities for economies of scale
  - Mandatory equipment
Like Small Utilities, ISP targets should be based on balance of cost & opportunity for reductions

- Within reason, ISPs want to use best practices/policies/procedures to maintain their low emission levels and improve upon them if possible
- ISPs support reporting emissions so they can be tracked
- Primary ISP concern is being handed a ‘one size fits all’ percentage reduction target that would entail unreasonable expenditures to meet and would make negligible contributions to state goals
ISPs have few emission sources & design focus on low emissions makes reaching a 40% reduction difficult

- 40% reduction from 2015 emission level total for all ISPs is 12,000 Mcf
- 65% of all 2015 ISP emissions, 20,477 Mcf, were from blowdowns that were necessitated by mandatory repairs and maintenance activities
- Compressor fitting leaks and valve leaks made up the majority of the non-blowdown emissions
- Three of our facilities had less than total 12,000 Mcf in emissions for the entire year
- Proposed best practices are not a clear path to avoid blowdowns or prevent mechanical wear and tear that result in emissions
Recommend establishing an effectiveness metric for small emitters

- Below a certain total emission threshold the cost to achieve a meaningful level of reduction can be very expensive

- Below the threshold, a company should be exempt from enforcement if they are employing best practices in controlling emissions

- The threshold for ISPs should be established at a reasonable level taking into account their operational considerations, not simply by applying an arbitrary percentage to current levels
Prioritization

- How does your company plan to prioritize emission reductions in disproportionally impacted communities?

- ISPs do not:
  - Operate in multiple communities
  - Have long line transmission
  - Distribute
Concentrating reduction targets on the best opportunities statewide to achieve meaningful emission reductions provide the best chance of meeting and exceeding the 40% statewide objective.